

CHAR-BROIL® TRU-INFRARED™ BARBECUE GUIDE



Char-Broil
Grilling's Juicy Little Secret™

TRU
INFRARED

TRU-INFRARED™ . Grilling's Juicy Little Secret™

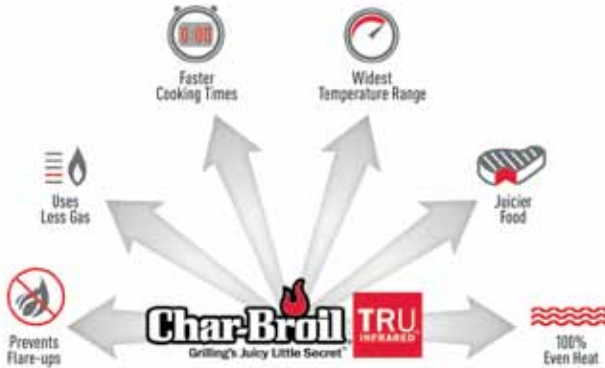
Congratulations and welcome to ownership of your new Char-Broil® TRU-Infrared™ Patio Bistro barbecue. It is our sincere hope that by reading this guide and with a little practice you will come to fully enjoy the tender juiciness and delicious flavor of food you prepare with the advanced TRU-Infrared cooking technology. We suggest you take a few moments to read the product guide to ensure your barbecue is assembled correctly and completely and that you are familiar with both the construction and operation before using your barbecue.

There are no hard and fast rules for cooking with your new Char-Broil TRU-Infrared barbecue - just some basic facts about how the barbecue works. Depending on your level of experience with outdoor cooking on either traditional gas or charcoal barbecues, you will discover we've designed the TRU-Infrared cooking system to be a useful tool for you to prepare great tasting meals the way you like and want.

Happy Barbecuing!

WHAT TRU-INFRARED™ MEANS

A Char-Broil TRU-Infrared barbecue promises outdoor cooks much juicier food and prevents flare-ups and hot spots. These six benefits of TRU-Infrared set the stage for a great barbecuing experience, every time.



HOW TRU-INFRARED™ WORKS

The science behind TRU-Infrared tells a juicy story. Unlike traditional *convective* gas barbecues, Char-Broil TRU-Infrared limits the hot air that comes into contact with the food. Our exclusive emitter generates infrared heat - searing at the highest temperature or cooking slowly at the lowest of lows.

While convective heat destroys the moisture barrier, infrared heat penetrates without drying - locking in natural juices and flavors.

GETTING STARTED

FIRST TIME USE

Read your product guide and ensure the barbecue is put together properly. Remove all advertising material from all barbecue surfaces before first use. We recommend letting your barbecue cook on its highest setting for 15-20 minutes prior to your first use. This aids in removing the oils used during manufacturing. (This is not necessary for the sideburner if your barbecue is so equipped.)

SEASONING YOUR GRATES

Just like a cast iron skillet, the stainless steel cooking grate in the Char-Broil TRU-Infrared barbecue will need to be seasoned prior to use. This is important as it will optimize cooking performance, making cleaning easier and inhibit rusting. While the barbecue is cold, coat both the topside and bottom surfaces with a high heat cooking oil (such as peanut oil). It is recommended that you use an oil filled spray bottle, however you should wipe down the smooth surfaces with a cloth or paper towel after spraying to ensure an even coat.

Ignite your barbecue following the lighting instructions. Close the lid and allow your barbecue to heat up for 15 minutes or until the oil burns off and stops smoking. The shiny finish on your stainless steel grate should now have a dark brown or bronze color. Your barbecue is now seasoned and you are ready to cook. In addition to improving performance, this process also aids in removing any oils used during manufacturing.

The more you use your TRU-Infrared barbecue and follow these seasoning steps, the better it will cook. A light coat of cooking oil after each use (once the barbecue has cooled) will keep the surfaces seasoned and help inhibit any rusting – again, just like a cast iron skillet. The next time you barbecue, before you pre-heat, go ahead and wipe the surface with a well oiled cloth. This should remove any debris that may have accumulated and will help prevent your barbecued foods from sticking to the cooking surface. You are now ready to pre-heat your barbecue and start barbecuing.

Electric Patio Bistro Barbecue owners should also follow the steps above to properly season the stainless steel infrared emitter - underneath the cast iron grate. The cast iron cooking grates are porcelain coated and do not require seasoning. As long as the porcelain coating remains intact your cooking grates should remain rust proof and worry free.

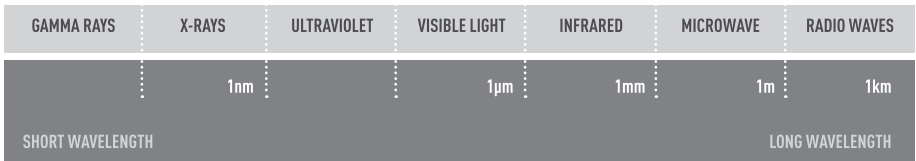
PREHEATING YOUR BARBECUE

Just like your home oven, the Char-Broil TRU-Infrared barbecue should be preheated to provide optimum performance. Preheat the barbecue on high for 10-15 minutes, or longer if weather conditions require.

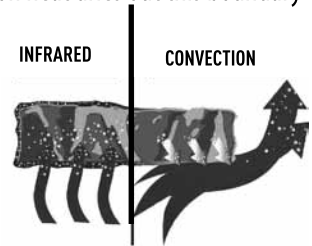
INFRARED BARBECUING 101

INFRARED HEAT. BARBECUING'S JUICY LITTLE SECRET™

Infrared energy is comprised of those frequencies just beyond the visible light spectrum. Simply put, it is light that we cannot see, but our bodies (and food) detect as heat. Most electromagnetic energy can cause heating but infrared is the perfect choice for cooking. Traditional convection grills heat with hot air, and can dry out your food. With infrared barbecues, infrared frequencies strike the food and cause the molecules to vibrate, thereby creating the heat that cooks your food.



All meat has a moisture saturated boundary layer. Convection heat dries out this boundary layer while cooking, where as infrared heat is able to penetrate this boundary layer without displacing it. That is why a hamburger will shrink more on a convective barbecue than on an infrared barbecue. The results are that cooking with infrared heat provides more juicy and flavorful results. High end restaurants have known for years that cooking with infrared produces the best steaks, and now Char-Broil is bringing this same technology to your backyard!



COOKING WITH INFRARED HEAT

- Sear marks are best made on fresh sections of the barbecue.
- Think about your meal and organize your food according to cooking techniques and

required times as well as best use of the barbecuing area.

- Coat each piece of meat, fish or fowl with a light spray of high heat oil.
- When using a sauce or glaze with excess sugars, brush on food during the final 10 minutes of cooking. Excess sugars will burn and turn to carbon, and that's not the smoke flavor you want! Keep in mind that excessive marinades will require extra cleaning afterwards.

Until you get used to cooking on the Char-Broil TRU-Infrared barbecue, you may want to adjust your regular cooking times. If you are familiar with cooking on a well-prepared charcoal fire, your sense of timing will be more easily adaptable to the TRU-Infrared cooking system. If you are used to cooking on open-flame gas burners, reduce the heat settings you normally use by at least 30% and the cooking time by about half. After some experience you'll have a sense of what temperature setting and cooking times best work for you and deliver the results you want.

COOKING WITH WOOD CHIPS

Wood chips can be placed on or between the cooking grates for added smoke flavor when barbecuing. You can drop wood chips right out of the bag with no need to pre-soak them first. NOTE: Do NOT place wood chips directly under greasy foods as this can increase the risk of flare up.

*Here are some hardwood varieties that work particularly well with foods:
Alder, Apple, Cherry, Hickory and Mesquite.*



PREVENTING FLARE-UPS

Your TRU-Infrared cooking system was designed to eliminate flare-ups during normal use. Engineered perforations keep flames in the firebox beneath the cooking grate and away from your food. However, under certain conditions, you may experience a flare-up on top of the cooking grate. The following tips can help reduce the chance of this occurring.

- When searing fatty foods, leave the grill lid in the open position.
- Try to keep your grill away from windy areas. Wind forces oxygen between the grates which can result in flare-ups.
- During cooking, if grease pools, remove food (if possible) and turn burners on high with the barbecue lid open until grease has burned off.

SEARING

Searing meat is all about creating a flavor “crust” and capturing internal juices so meat remains moist on the inside and every bite is delicious. Whether you’re barbecuing a steak with direct heat or slow roasting a pork shoulder, getting a good “crust” on the outside of the meat as soon as possible will help to ensure the flavor and the moisture remain inside. What is the crust? Natural proteins and sugars drawn to the surface of the meat react to temperatures in the “Searing Range” of 150° C and above. Searing creates what is also known as “The Maillard Reaction.” The TRU-Infrared cooking system produces the perfect searing temperatures when infrared heat impacts the surface of the meat. Here’s a good searing tip for you to experiment with: Use a little coarse salt on your steaks, chops and roasts - this helps draw proteins to the surface of the meat - and when they get hit with the infrared heat this surface will sear and create that delicious crust you love to taste. On a turkey or chicken use a light touch of oil on the skin for the same effect. Sear the meat on a TRU-Infrared barbecue by first using a higher setting, then lower the burner to finish cooking. You may even want to use aluminum foil to “hold” cooked food on the warming rack as you prepare the additional courses.

BARBECUING THE PERFECT BURGER

Ground beef with a 20 percent fat/80 percent lean ratio is best for a juicy burger with a good, meaty texture.

- Form patties with gentle pressure and don’t over-pack.
- Form a slight depression in the middle of the patty so the edges are slightly thicker than the center. This will produce a less-round, more evenly-cooked patty.
- Patties should be no more than 227g and 13mm thick.
- Set barbecue to medium heat and cook for 3 to 4 minutes per side until the meat is no longer pink or when a thermometer inserted from the side to the center reads at 70° C.



HOW TO BARBECUE A SUCCULENT BEEF STEAK

Pick the right kind of steak. Tender cuts like sirloin, tenderloin, porterhouse, New York strip, and shell steak are the best. Fibrous steaks, like skirt and flank, also taste great barbecued—especially when thinly sliced on the diagonal. Restaurant quality steaks are graded by the USDA as either ‘choice’ or ‘prime’ and have not been frozen.

- The meat should be at room temperature, seasoned lightly with kosher salt (to help draw out the proteins in the meat) and ground pepper. Lightly oil the surface with vegetable or other high smoke-point oil.
- Set barbecue to high temperature and place the steaks on the grate, lined up in the same direction.
- Cook steaks on each side 2 to 3 minutes for a steak 13mm thick, 3 to 4 minutes for a steak 25mm thick, 4 to 6 minutes when 38 to 50mm thick.
- Always turn the steak with tongs or a spatula; *never use a fork*. The holes made by a fork allow the juices to escape.
- To check for doneness, you can use your finger pressed on the meat. Rare meat moves easily when pressed with your finger, while a well done steak is stiff, and medium-rare is right in the middle. This is a skill that will develop with practice. You can also use an instant read thermometer inserted from the side of the steak, preferably through any fat on the edge and only when your experience suggests they are nearly done.
- Don't overlook the last, most important step: **Let the steaks rest for 2 to 3 minutes before you serve them.** This allows the juices to flow back from the center of the meat to the exterior, giving you a juicier steak.
 - Always cut meat across the grain to preserve tenderness.



There are more beef recipes at charbroil.com

BRINING

Brining is a process similar to marination in which meat (most often pork or chicken) is soaked in a salt solution (the brine) before cooking. Brining makes cooked meat more moist by hydrating the cells of the muscle tissue before cooking, and traps water molecules and holds them during cooking. This prevents the meat from drying out, or dehydrating. Brine larger cuts of pork like shoulders, racks, roasts and even pork chops.

Char-Broil's EZ Basic Brine Recipe

- 60 ml kosher salt
- 60 ml packed brown sugar
- 960 ml hot water

1. Thoroughly mix all the ingredients, place meat in an appropriate sized sealable plastic bag and cover with brine.

2. Place in refrigerator for 4-24 hours depending upon size of meat.
3. Remove and rinse, pat dry and allow to come to room temperature before adding rub or other seasonings.

INJECTING FLAVORS

Flavors and moisture can be added by injecting meat with marinade solutions under cold conditions before cooking. Needle injectors are used to incorporate marinades directly into the thicker muscle pieces in meats. The brine or marinade is injected right where you need it.

ADDITIONAL TIPS TO HELP YOU PREPARE PORK

- Use an instant read thermometer to check the internal temperature of the meat furthest from the bone and nearest to the center of the thickest part.
- As you near the end of the estimated cooking time, cut into the meat near the bone to determine doneness before pulling the meat off the barbecue.
- Brush glazes or sauces that contain any sweet ingredients like sugar or honey during the last few minutes of barbecuing to prevent them from charring.

PREPARING PORK RIBS

There are several varieties of ribs and each requires it's own technique to bring out the best flavors and textures. These tips are general rules to consider when cooking any pork rib.

- Before cooking apply a dry blend of herbs and spices to suit your tastes and compliment the flavor of the meat.
- Set barbecue to low temperature.

Important points to consider for barbecuing pork ribs with TRU-Infrared:

1. Unlike other barbecues, the TRU-Infrared barbecue emits infrared heat. It will sear the outside, penetrating the meat and sealing it so the internal moisture will remain.
2. Cook the ribs for 1/2 - 1 hour depending upon how much meat, bone and fat they contain. Baste the ribs with a light coating of apple cider vinegar during the last 10 minutes.



3. If desired, you can brush on a glaze of barbecue sauce or marmalade during the final 10 minutes instead of the apple cider vinegar.
4. Drop smoke chips directly on or between the cooking grates. This will add smoke flavor to the ribs.
5. Determining when pork ribs are done can be tricky and color is not an indication of doneness. Smoke from burning wood chips can turn the interior of the meat pink and leave you with the impression that it's not cooked. If you can move the rib bones back and forth without a lot of resistance the meat is cooked. A better judge is to remove the ribs after an hour and use an instant read thermometer inserted into the thickest part of the meat away from the bone.
6. Infrared heat cooks differently than conventional gas or charcoal barbecues - the outside of the ribs will be crusty and the inside will be moist.

BARBECUING VEGETABLES

Barbecuing gives vegetables a lightly smoked flavor and it doesn't take much preparation. Here are several tips on barbecuing vegetables on the TRU-Infrared Cooking System:

- Set barbecue to medium-high heat.
- We recommend you lightly brush or spray vegetables with olive oil before barbecuing to add flavor, promote sear marks, and keep them from drying out and sticking to the barbecue.
- Barbecued vegetables are usually served as a side dish with other barbecued foods, but they can also be served as a main course, drizzled with plain or flavored olive oil.
- In general, vegetables benefit from direct, high-heat barbecuing methods.
- Mushrooms and other small vegetables can be barbecued whole. Larger vegetables just need to be sliced or cut into wedges.
- Start vegetable over medium-high heat to sear their skins, turning every 1-2 minutes. Then, move to low heat to finish cooking, turning occasionally.
- The easiest way to tell if vegetables are cooked is to pierce them with a fork or skewer. If it goes in easily, the vegetables are done.

VEGETABLE COOKING CHART

VEGETABLE	ESTIMATED COOKING TIME	SETTING
CORN In husks or foil - soak 20-30 minutes. Without husks.	30-40 minutes (total) 5-7 minutes	Medium/High
MUSHROOMS Portobello Regular	3-4 min/side 2-4 min/side	Medium/High
ONIONS Quartered Sliced	10-12 min/side 4-8 min/side	Medium/High
PEPPERS Whole Cut in half	16-20 min, let skin color 8-12 min	Medium/High
SQUASH (yellow and zucchini) Sliced Halved lengthwise	4-6 min/side 8-12 min (total)	Medium/High
TOMATOES Sliced Whole	2-4 min/side 8-24 min (total)	Medium/High

* This chart is offered as a broad guideline for cooking times. Refer to times in individual recipes for more specific cooking times.

BARBECUING PERFECT SEAFOOD

Barbecuing adds a light, smoky flavor to seafood and, like sautéing, also sears food - giving it a crisp, savory outer crust. Whole fish, firm-fleshed steaks, shrimp and scallops do well on the barbecue. Mollusks such as oysters, clams and mussels are sometimes barbecued in the shell and, although barbecuing causes the shell to open, it does little to actually enhance the flavor.

- Set barbecue to medium.
- To keep fish from sticking to the barbecue, make sure the cooking grate is clean and very hot before you start to barbecue. Rub it quickly with a paper towel dipped in a little oil before you put the seafood on the barbecue. A barbecue pan gives seafood a light smoked flavor and cooks it with virtually no fat.
- Whole fish such as snapper, pompano, and sea bass must be handled carefully so they don't



stick and fall apart. Firm fish steaks such as tuna and swordfish are particularly good on the barbecue because they hold together well and don't stick.

- Barbecued shrimp are tastiest when the shell is left on. Lightly sprinkle the shrimp with salt. Barbecue them about 5 minutes until the shells turn pink. Serve hot off the barbecue.

BARBECUING WITH A PLANK

- Before you begin cooking with a plank *it must be soaked*. This helps to keep food moist while cooking, creates a more even cooking rate, and lends more of the flavor characteristic of the wood you have selected. Soaking a plank prior to cooking also reduces its burn rate and prolongs the life of the plank. Be sure to soak the plank prior to each cooking session, even if the plank has been used before.
 - Many liquids such as fruit juices, vinegar, wine and other alcohols can also be used, although water is the most commonly used liquid for soaking. Immersing the plank in these different liquids renders their faint flavors into the food being cooked. Soaking times for planks should be at least one hour, but like marinating, can be longer based on personal preference. Also, the size and type of wood helps determine soaking times.
 - Once the plank has been prepared by soaking in water, place it on the barbecue, cooking side down, and preheat the barbecue to medium for approximately five minutes. This allows the plank to dry. The plank should not be allowed to catch fire. Once the plank is preheated, brush a light coating of oil onto the cooking side of the plank. This seasons the wood and keeps the food from sticking.



YES, FRUITS ARE GOOD ON THE BARBECUE TOO!

Lightly barbecuing fruit (especially stone fruits) caramelizes their natural sugars, which enhances their flavor and provides an attractive "barbecue mark".

- Set barbecue to medium.
- Be sure to put fruits on a liberally oiled cooking grate to avoid sticking.
- Slice fruit in half and remove pits. Barbecue with pulp side down. Barbecue until tender. Turn only once.
- Barbecue the fruits until they are lightly browned. You want them to be tender but not mushy when gently pierced with a sharp knife. The key for barbecuing fruits is to use low heat.

- Fruits don't take long to cook on the barbecue (about 3 to 5 minutes). Thicker pieces of fruit, such as halved peaches or pears, may require a little more time. Thinly sliced fruit requires less time. Fruit can burn easily because of its sugar content, so watch it closely. Also, keep cooking times short for ripe fruit to prevent it from getting mushy.

Try these ideas for including barbecued fruits in your meals:

Cut fruit, such as apples, pears, mangoes, pineapples, and peaches into chunks and brush lightly with vegetable oil before barbecuing. Put pineapple slices or bananas sliced lengthwise directly on the barbecue. A touch of cinnamon or brown sugar to finish the barbecued fruit is tasty!

BARBECUING GREAT CHICKEN EVERY TIME

Barbecued chicken is one of the most popular barbecued foods. There are some simple steps you can take to ensure your barbecued chicken turns out beautifully browned and cooked thoroughly while also remaining moist and tender.

- Consider brining the chicken pieces overnight. Brining adds moisture and tenderizes to the meat.
- Completely thaw chicken before barbecuing so that it cooks more evenly. Whenever possible, defrost chicken in the refrigerator. Defrost chicken in the microwave only if it will be immediately put on the barbecue. Chicken in airtight bags may be defrosted in cold tap water. Change the water every 30 minutes. Chicken defrosted in the microwave or by the cold water method should be cooked before refreezing.
- Keep raw chicken and cooked chicken apart! Use a different platter to serve the barbecued chicken from the plate that was used to carry the raw chicken to the barbecue. Also, either discard raw poultry marinade, or boil it for at least 2 minutes before serving it with cooked chicken.
- If you are packing for a picnic keep uncooked chicken in a cooler with ice or cold packs until ready to barbecue. The temperature in the cooler should stay below 5°C. If the day is hot, remember that chicken should not remain out longer than an hour after it is barbecued.
- If possible, allow the chicken to come up to room temperature prior to barbecuing. This should take only about 20 minutes. Barbecuing cold chicken will delay the overall cooking time and can result in an overcooked exterior with under-cooked interior.



- When you barbecue chicken parts, remember that a different thickness will affect the barbecuing time and so will the fat content. As a general rule, white meat takes less time than dark meat, while breasts and thighs will take longer than wings.
- Set barbecue to medium and cook until a meat thermometer inserted into the thickest part of the meat reaches 74°C. Be sure the thermometer does not touch the bone. The infrared energy of the TRU-Infrared cooking system will lightly sear the outside of the chicken, skin or skinless, and help seal in the moisture.
- Be sure to remove the barbecued chicken and cover it lightly with aluminum foil; then let it rest for several minutes as the internal temperature will continue to rise and the chicken will finish cooking.
- If you enjoy sauce or glaze on your barbecued chicken, we recommend brushing it on lightly during the final 10 minutes of barbecuing.
- Consider using a dry rub on the outside of your chicken up to 24 hours before barbecuing to enhance flavors.

CLEANING YOUR GRILL

WHY CLEAN?

We've all heard the saying 'An ounce of prevention is worth a pound of cure'. This is great advice when it comes to keeping your barbecue clean. Besides the versatile cooking performance, the ability to burn off the TRU-Infrared cooking system also makes clean-up a breeze!

CHAR-BROIL TRU-IRRED RUTINE MAINTENANCE

The more you use your TRU-Infrared barbecue the better it will cook. The darker "more seasoned" the stainless steel barbecue grate or emitter becomes the hotter and the more evenly it will cook. In order to keep it performing at its peak, it does require some maintenance.

After each use, it is advised that you burn off any excess grease and food debris that has accumulated on your grates. Turn barbecue to HIGH and close the lid. Leave it on for around 15 minutes (or until the grill stops smoking) and any debris should be turned to ash. After the barbecue has cooled down, but still warm, burned or baked on debris can be removed using the included cleaning tool. It is much easier to clean food particles while warmth is still present.

A light coat of high heat cooking oil after each use (once the barbecue has cooled and been brushed with a wire brush) will keep the surfaces seasoned and help inhibit any rusting – again, just like a cast iron skillet. The next time you grill go ahead and wipe the grilling surface with a well oiled cloth before you pre-heat. This should remove any debris that may have accumulated and will help prevent your barbecued foods from sticking to the cooking surface. (Removed 2 paragraphs)

Always coat the grates and emitter plates with a light coat of high-heat cooking oil after cleaning. This added layer of protection will ensure your TRU-Infrared barbecue will be ready for your next barbecuing experience.

Visit charbroil.com for videos and additional tips and tricks for cleaning your TRU-Infrared barbecue.

GENERAL CLEANING

Plastic parts: Wash with warm soapy water and wipe dry. Do not use abrasive cleaners, degreasers or a concentrated barbecue cleaner on plastic parts. This can result in damage and failure to the parts.

Porcelain surfaces: Because of glass-like composition, most residue can be wiped away with baking soda/water solution or glass cleaner. Use non-abrasive scouring powder for stubborn stains.

Painted surfaces: Wash with mild detergent or non-abrasive cleaner and warm water. Wipe dry with a soft non-abrasive cloth.

Stainless steel surfaces: Stainless steel can rust under certain conditions. This can be caused by environmental conditions such as chlorine or salt water, or improper cleaning tools such as wire or steel wool. It can also discolor due to heat, chemicals, or grease build-up. To maintain your barbecue's high quality appearance, wash with mild detergent and warm water, or use a stainless steel barbecue cleaner. Baked-on grease deposits may require the use of an abrasive plastic cleaning pad. Use only in direction of brushed finish to avoid damage. Do not use abrasive pad on areas with graphics.

INSECTS

Spiders like to make their homes in the venturi tubes of barbecues. These must be inspected and cleaned regularly to ensure there are no blockages. Refer to your produce guide for complete information.

STORING YOUR BARBECUE

- Clean and oil cooking grates.
- Store barbecue in a dry location.
- When LP cylinder is connected to barbecue, store outdoors in a well ventilated space and out of reach of children.
- Cover barbecue if stored outdoors. Choose from a variety of barbecue covers available online at charbroil.com.
- Store barbecue indoors ONLY if LP cylinder is turned off, disconnected, and removed from grill. Never store LP cylinder indoors.
- When removing barbecue from storage, follow the 'Cleaning the Burner Assembly' instructions in the Use and Care section of the product guide.

ROUTINE SERVICE & MAINTENANCE CLEANING SCHEDULE

Regular cleaning will do wonders in terms of prolonging the life of your barbecue. Go online to charbroil.com for cleaning tips & tricks.

	EACH USE	EVERY 6 MOS.
CLEAN AND OIL COOKING GRATES	X	
CLEAN/INSPECT FIREBOX	X	
CHECK GAS SUPPLY HOSE(S) FOR CRACKS/LEAKS	X	
CHECK GAS REGULATOR FOR LEAKS	X	
CHECK THAT ALL GAS FITTINGS ARE TIGHT	X	
CLEAN/INSPECT BURNERS AND VENTURIS		X

Refer to your product guide or visit our Support Center at charbroil.com for more information on trouble shooting and care and maintenance of your new barbecue.

TRU-INFRARED BARBECUE CLEANING/MAINTENANCE LOG	DATE	DONE

UPDATES

For updates to this guide and to find answers to your questions about TRU-Infrared, go online to charbroil.com.

At charbroil.com you have access to hundreds of barbecuing recipes. Sign up for our newsletter, and receive a new recipe every few weeks from backyard barbecuing enthusiasts.

Thanks again from all the folks at Char-Broil and... Happy barbecuing!



