

MECO[®]

CORPORATION



BARBECUE GRILL

4100 SERIES



OWNER'S MANUAL

SAVE THESE INSTRUCTIONS

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FOR CUSTOMER SERVICE CALL 1-800-251-7558

www.meco.net



READ AND FOLLOW INSTRUCTIONS CAREFULLY BEFORE ASSEMBLY OR USE. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN DEATH, SERIOUS BODILY INJURY AND/OR PROPERTY LOSS.

FOR OUTDOOR HOUSEHOLD USE ONLY. NOT FOR COMMERCIAL USE.

THESE INSTRUCTIONS MUST BE KEPT WITH THE CONSUMER AND RETAINED FOR FUTURE USE.

-NOTICE-

MECO CORPORATION STRIVES TO BE A QUALITY SUPPLIER OF CONSUMER PRODUCTS. IF WE OMITTED ANY PARTS NEEDED FOR ASSEMBLY, OR YOU NEED TROUBLESHOOTING INFORMATION, PLEASE CONTACT US USING OUR TOLL FREE NUMBER. THANK YOU FOR PURCHASING A MECO® PRODUCT.

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CONSUMER SERVICE DEPARTMENT

MECO CORPORATION®

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IMPORTANT SAFEGUARDS

Following is a list of Important Safeguards to guide you through the grilling process for a successful and safe barbecue. It is important to remember, anytime you work with fire, there is a chance of getting burned; so take precautions! Common sense and planning will prevent injuries. These tips are not intended to be an exhaustive treatment of the subject, and should not be interpreted as precluding other procedures which would enhance safe barbecue grill operations.



SAFETY WARNINGS

WARNING! FAILURE TO FOLLOW THESE SAFETY RULES MAY RESULT IN SERIOUS INJURY OR PROPERTY LOSS. READ AND FOLLOW INSTRUCTIONS CAREFULLY BEFORE USING GRILL.

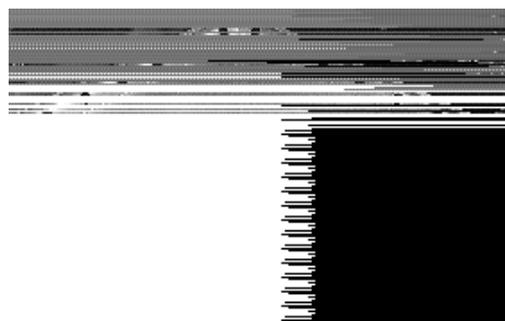
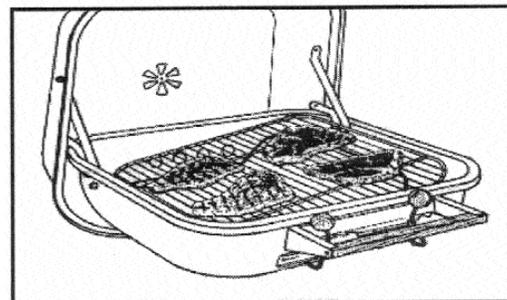
1. Always read the Owner's Manual before using your grill and follow specific usage, assembly, and safety procedures. Contact the grill manufacturer if you have specific questions about the operation of your grill.
2. Never use a barbecue grill unless all parts of the unit are firmly in place and the grill is stable.
3. Never operate your grill near combustible surfaces. Set up grill in an open area away from buildings, dry leaves, or brush. Avoid high traffic areas and be aware of wind blown sparks.
4. DO NOT operate the grill near flammable or combustible items. Cap lighter fluid and store a safe distance from the grill.
5. NEVER barbecue in your trailer, tent, house, garage, or any enclosed area because carbon monoxide may accumulate and kill you. Use your grill only outdoors with good air circulation.
6. NEVER USE gasoline, kerosene, or alcohol for igniting charcoal. These fuels may explode or flash, resulting in serious burns.
7. DO NOT USE "Instant Lighting Charcoal".
8. Wear clothing that does not have hanging shirt tails, frills or apron strings, and use flame retardant mitts when adjusting hot vents.
9. Lighter fluid should be capped immediately and placed a safe distance from the grill.
10. Once the barbecue grill has been lit, do not touch the charcoal briquettes/wood chunks to see if they are hot. Do not close Hood until ready to cook.
11. Never leave a grill unattended once it is lit.
12. Never attempt to move a hot grill.
13. Keep small children away from a hot grill to avoid burns.
14. Do not allow anyone to conduct any activities around the grill when the grill is in use, or immediately following its use. The grill body is hot during use and will remain hot for a period of time following its use.
15. NEVER add lighter fluid to existing hot or warm coals. Flare-ups can occur.
16. Open the hood carefully when cooking; the hot air and steam can burn.
17. To put out flare-ups, adjust the vents to lower the temperature. If you must douse the flames with a light spritz of water, first remove the food from the grill.

18. Use baking soda to control a grease fire and have a fire extinguisher handy. A bucket of sand or a garden hose should be near if you do not have a commercial extinguisher
19. Use long-handled barbecue utensils to avoid burns and splatters.
20. DO NOT use appliance for other than intended use.
21. Should electrically operated accessories (i.e. rotisseries, etc.) be used, be sure they are properly grounded in accordance with local codes. Electrical cords should be placed away from walkways.
22. As an alternative to lighter fluid, use an electric, metal chimney, or other starter specifically made for lighting charcoal briquettes or wood chunks. After unplugging, remove a hot electric starter cautiously and be careful where you put it. Always allow starter to cool completely before storing.
23. Never use an electric starter in the rain and/or when standing on wet ground.
24. Allow coals to burn out completely and let the ashes cool for 48 hours before disposing of them.
25. Dispose of cold ashes by wrapping them in heavy duty aluminum foil and putting them in a non-combustible container. Be sure there are no other combustible materials in or near the container.
26. If you must dispose of the ashes in less time than it takes for them to completely cool, remove the ashes from the grill keeping them in heavy duty foil and soak them completely with water before disposing in a non-combustible container.

FEATURES THAT MAKE YOUR MECO® GRILL OUTSTANDING

Exclusive Easy To Adjust Hi-Lo Tilt Cooking Grid..

Meco's cooking grid adjusts easily to three positions. All 4000 Series models have the exclusive tilting grid that allows you to cook rare and well-done at the same time. The grid height and degree of tilt are automatically and safely locked into position by moving the cool, exterior wooden knobs to the left or right according to the convenient position indicators on the full on the full-width control panel.

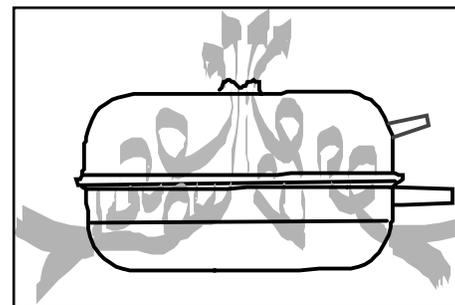


Ash Pan...

The Ash Pan prevents bottom burn out. The Ash Pan helps reflect heat. It is also long lasting and lifts out for easy cleaning. Simply throw away the ashes and wash clean with a garden hose.

Efficient Draft System For Complete Control...

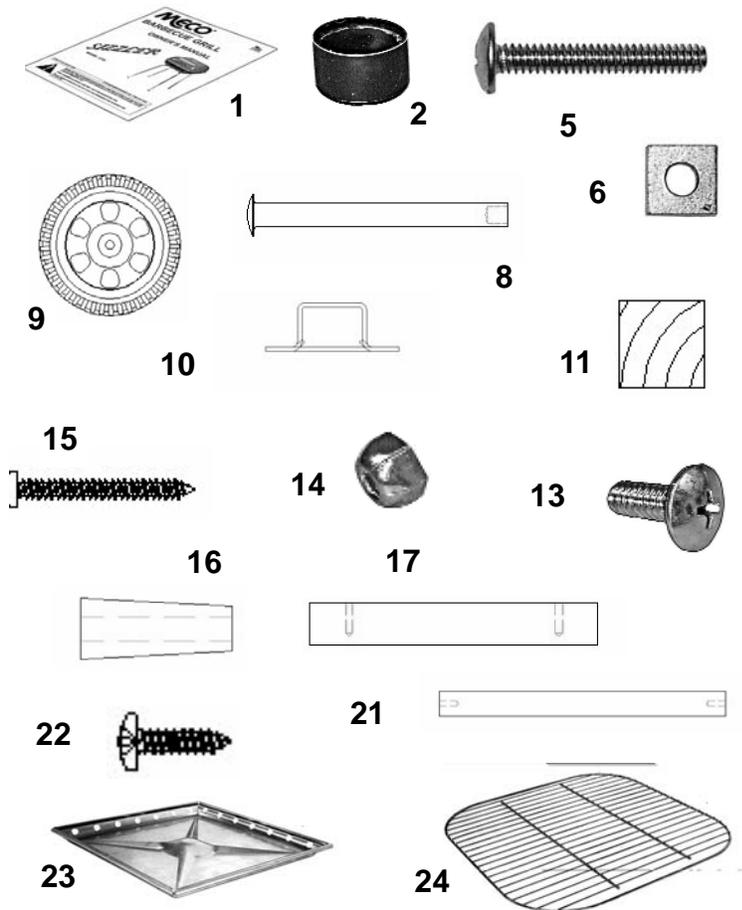
Meco® Hooded Smokers have two adjustable vents, one in the front under the handle, and one in the rear. The hood also has an adjustable vent. You can adjust these vents to speed up or slow down the charcoal's burning rate for precise temperature control. The vents also allow you to easily control flare-ups without using water. After cooking, you can close all the vents to put out the charcoal and save the unused portion for next time.



PARTS LIST

ITEM	PARTS LIST DESCRIPTION	PART #	QTY. 4100 SERIES
1	Owners Manual	03.5819.19	1
2	Leg Cap	03.5000.09	2
3	Leg, Fixed	17.1662.00	1
4	Bowl/Hinge Assy	-----	1
5	Bolt, 10-24 x 1 1/4"	03.5000.07	6
6	Nut, Square 10-24	03.5000.02	10
7	Leg, Roller	17.1663.00	1
8	Axle, Rivet	03.0104.06	2
9	Wheel	03.5001.04	2
10	Wood Anvil	03.0907.00	1
11	PushNut, Cap .25 Dia	03.5000.10	2
12	Hood/Hinge Assy	-----	1
13	Bolt, 10-24 x 1/2"	03.0201.02	8
14	Locknut, Acorn 10-24	03.5000.55	4
15	Screw, 10-AB x 1 3/4"	03.0317.01	2
16	Spacer, Hood Handle	03.1489.00	2
17	Hood Handle	03.5827.00	1
18	Bracket, Bowl Handle	17.1700.11	1
19	Adjusting Lever, Left	17.1701.11	1
20	Adjusting Lever, Right	17.1702.11	1
21	Handle, Bowl	03.1514.00	1
22	Screw, 8-18 x 3/4"	03.0424.00	2
23	Ash Pan	17.1620.00	1
24	Cooking Grid	03.1649.01	1

NOTE: Reference main assembly for some larger items.



ASSEMBLY INSTRUCTIONS

TOOLS REQUIRED: A standard Phillips screwdriver, 3/8 inch open end wrench or pliers, and a small hammer.

NOTE: The extra holes in the side of the bowl are for mounting convenient accessories (side tables, cutting board, rotisserie).

STEP 1. Before you start, take a few minutes to read through this manual. Inside are some hints that will help you get the full potential of enjoyment and service from your new Meco® grill.

STEP 2. Remove all the parts from the carton and lay them out on a smooth, clean surface. Look in the Parts List under your model number to find the exact parts you need. Do not throw away any of the packaging until you have located all the parts. Follow the steps in order and if you have any questions which require help, contact the factory and be sure to mention the model number.

STEP 3. (FIG. 1) Push a Leg Cap (2) over the ends of the Fixed Leg (3). Turn the Bowl/Hinge Assembly (4) on its side. Align the 3-holes in the Fixed Leg with the front 3-holes in the Bowl. Put a 1 1/4" Bolt (5) through the center hole of the Bowl and Fixed Leg. Attach a Square Nut (6) loosely,

Repeat for the other two Bolts and Square Nuts on the Bowl and Fixed Leg. Tighten all three Bolts and Nuts. Attach the Roller Leg (7) to the Bowl the same way. Make sure all Bolts and Nuts are tight.

STEP 4. Insert Rivet Axle (8) through hole in whitewall side of Wheel (9) underneath through Roller Leg (7). **(FIG. 2)** Place Wood Anvil (10) under the center hub of Wheel to support Rivet Axle head. With a hammer, drive the Axle Cap (11) onto the Rivet Axle. **(FIG. 3)** Rotate the grill and legs to the opposite side and repeat Wheel assembly on the Roller Leg. **Make sure the whitewall side is outside of legs before driving Axle Nut on the Rivet Axles.**

STEP 5. (FIG. 1) With Bowl and Legs still lying down, pull the Hinges out from inside the Hood/Hinge Assembly (12). Lean the Hood against the rear of the Bowl/Hinge Assembly (4). Make sure the Hinges are inside the Bowl. From the top side nearest you, align the short hinge with the rear hole in the side of the Bowl. Insert a 1/2" Bolt (13) through the Hinge and Hood; attach a Locknut (14). Align the long hinge with the next hole in the side of the Bowl. Attach a Bolt and Locknut the same way. While holding the Hood and Bowl, turn grill over to opposite side. Repeat hinge assembly to the Bowl.

STEP 6. Set the grill upright on the Legs in the normal position. Open the Hood. Put a 1 3/4" Screw (15) through the Hood, through wide end of Spacer (16), to hole in Hood Handle (17). Do not tighten completely. Repeat for other Screw, Spacer and Handle hole. Tighten both Screws securely for the Handle.

STEP 7. Line up the holes in the Handle Bracket (17) with the front 4-holes in the Bowl just above the Slide Vent. Put a 1/2 " Bolt (13) through a hole in the Bowl and out through the Handle Bracket. Attach a Square Nut (6) to the Bolt. Repeat for the other three Bolts and Nuts for the Handle Bracket and tighten securely.

FIG. 1

MAIN ASSEMBLY VIEW

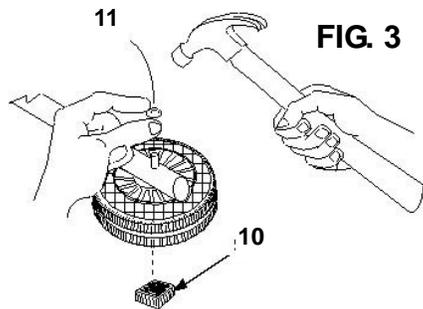
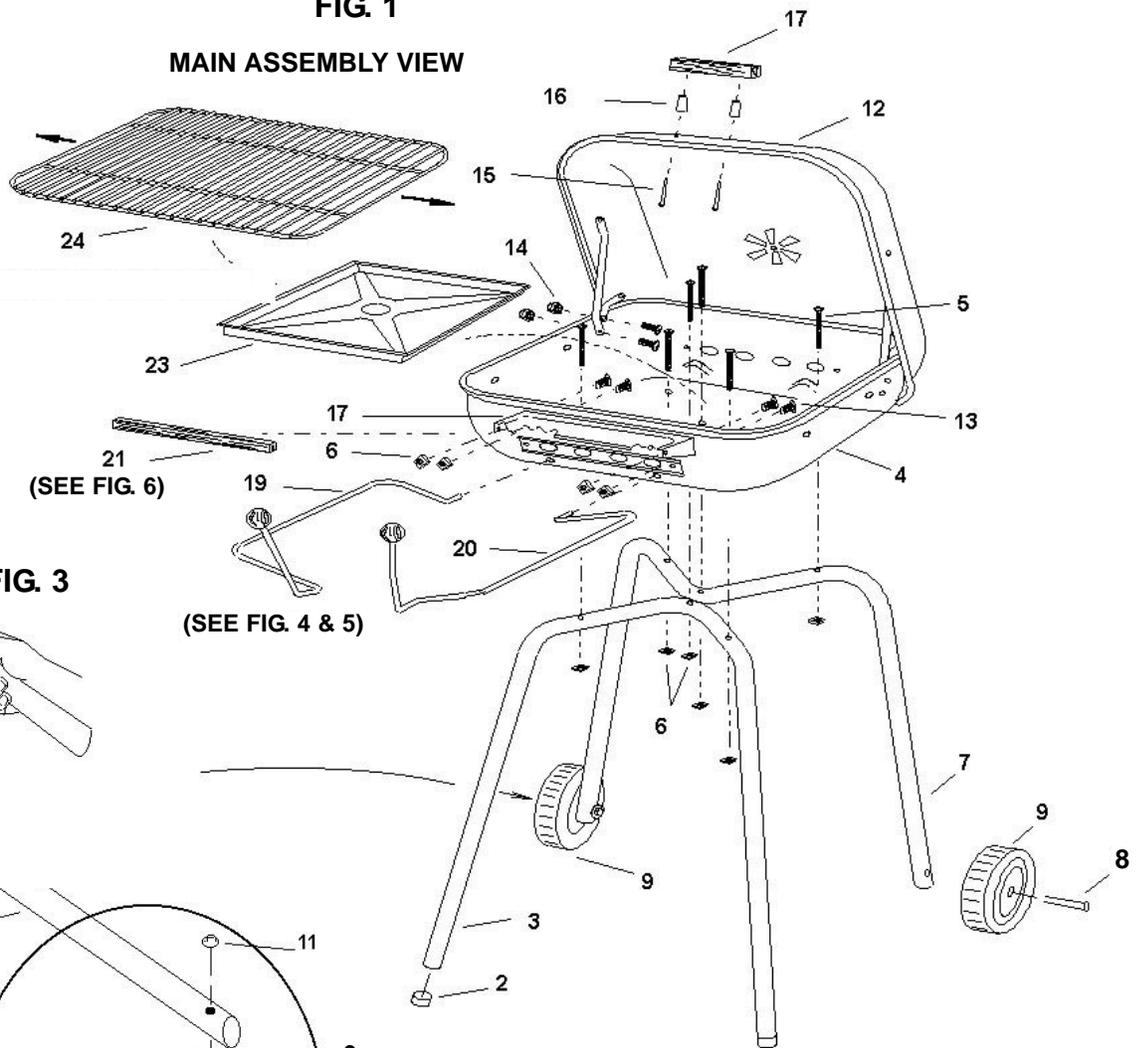


FIG. 3

(SEE FIG. 4 & 5)

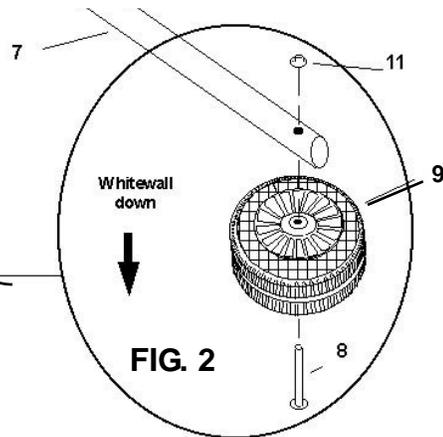
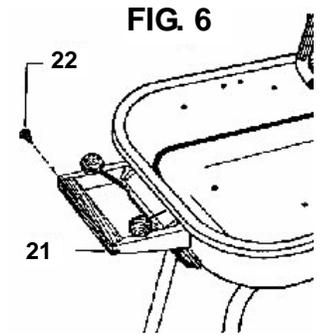
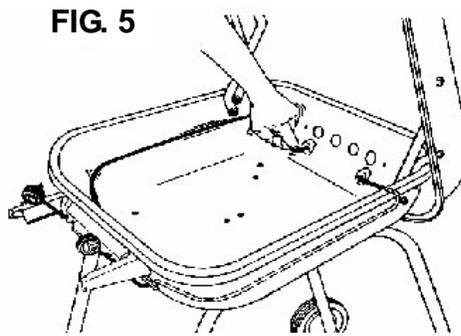
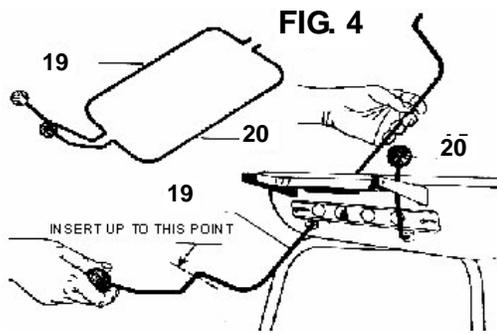


FIG. 2

STEP 8. Put the end of the Left Hand Adjusting Lever (19) into the hole underneath the Handle Bracket (17) on the left side (FIG. 4). Thread the Lever through the hole until the end reaches the hole at the rear of the Bowl (FIG. 5). Fit the Lever into one of the notches on the left side of the Handle Bracket and pull back on the back end of the Lever to let the end spring into a rear hole. Make sure the part of the lever inside the Bowl lays to the left when in its lowest position. Repeat for the Right Hand Adjusting Lever (20). Check to be sure you can position each lever into each of the threenotches in the Handle Bracket.

STEP 9. Place the Bowl Handle (21) into the Handle Bracket (20) and put a Screw (22) through the side hole in the Bracket and into the Handle (FIG. 6). Repeat on the other side and tighten both screws securely.



STEP 10. (FIG. 1) Place the Ash Pan (23) in the bottom of the Bowl. Place the Cooking Grid (24) on top of Adjusting Levers. Make sure large Grid crosswires are down and run side to side for easy height adjustment.

YOU ARE NOW READY TO USE YOUR GRILL, BUT FIRST READ SAFETY WARNINGS ON PAGE 2 OF OWNER'S MANUAL.

FIRING UP YOUR YOUR MECO® GRILL

⚠ WARNING! Use your grill only in a place with good air circulation to prevent the collection of toxic carbon monoxide gases.

⚠ WARNING! Never use gasoline, kerosene, alcohol or other volatile fluids as a starter. They can explode.

⚠ DO NOT USE "Instant Lighting Charcoal".

CAUTION! Make certain you leave the Hood all the way open until the flames have died down.

STARTING A FIRE:

STEP 1. Use a high quality hardwood charcoal to make sure you get a good fire. Charcoal briquettes made from maple, oak, birch or elm woods will burn clean with very little smoke and without unpleasant odors.

STEP 2. Open the hood and all the vents.

STEP 3. Remove the cooking grid and ash dump. For paint protection, line the bottom of the bowl with aluminum foil. Replace the ash pan.

STEP 4. Place about three pounds of charcoal (48-50 briquettes) in the ash pan.

STEP 5. Make a pyramid shaped stack near the front of the ash pan. Pour or spray on charcoal lighter fluid according to

the instructions on the container (use an electric fire starter if you wish-just leave off the lighter fluid and follow manufacturer's instructions).

STEP 6. Let the lighter fluid soak in for approximately one minute.

STEP 7. Carefully light the charcoal and let it burn for 20 to 25 minutes or until it is covered with a light gray ash.
NOTE: For a hot fire in a hurry, use a fan or a bellows to create extra air movement over the charcoal. Be careful about blowing the ashes.

FOR GRILLING... Use long-handled tongs to arrange the charcoal in a checkerboard pattern. Leave about one-half inch of space between each piece of charcoal. This will help you to avoid flare-up from the meat drippings and will give you the even heat needed for grilling.

FOR INDIRECT COOKING... such as roasting large pieces of meat on the grid, use or make a pan about an inch larger all around than the piece of meat to catch the drippings. (You can easily make a pan from aluminum foil: just crease the foil to stand up about an inch on all sides and pinch the corners firmly to stop the grease from leaking out.) Put the pan directly under the meat and surround it with charcoal. Most indirect cooking takes a long time. Place an extra supply of 8-10 charcoal briquettes along the side of the ash dump. This allows you to warm up the briquettes so they will light easily when you need them for more heat.



COOKING ON YOUR MECO® GRILL

⚠ WARNING! Do not grasp the Cooking Grid with your hands when it is hot.

1. COOKING GRID...Use barbecue mitts for handling. For SLOWER cooking, shift the adjusting lever knobs toward the center of the grill to raise the Cooking Grid. For FASTER cooking lower the Cooking Grid by pulling on both knobs and moving toward the outside of the grill. You can adjust both sides at the same time, or one at a time. By raising one side and lowering the other, you can cook rare meat and well-done at the same time.

To cook fowl and pork roasts, place the grid level on top of the grid brackets. Turn and baste the meat frequently for thorough cooking and to prevent drying out.

For thick meat such as this, cooking with the Hood down provides a more uniform heat. For hamburgers and steaks, sear the meat on both sides with the grid lowered to one of the tilted positions. Cook rare at highest and medium in the center.

All other cooking should be done with the grid in the highest position. For this purpose, your Meco® grill is equipped with an efficient draft system. (See page 3. Adjustable Draft)

2. TILT-AWAY HOOD...Leave the hood open for "Texas Style" open air barbecuing. Close the hood for "Smoker" cooking or when you want to hold in all the heat.

3. ADJUSTABLE DRAFT...Leave the hood and bowl vents open for the most heat. Close the vents partially to lower the heat. It takes a few minutes for the charcoal to react to the vent adjustment.

ROTISSERIE COOKING...Start the fire and arrange the briquettes as shown for indirect cooking (page 6). Do not put the briquettes directly under the meat. Make sure you have a drip pan ready to center under the meat. You will not need the cooking grid for rotisserie cooking.

Slide one spit fork into the spit shaft and tighten the thumb screw. Insert the pointed end of the shaft through the center of the piece of meat, or through the body cavity of a fowl. Make sure the prongs of the spit fork are securely engaged in the meat. Slide the other spit fork into the shaft and into the meat and tighten the thumb screw. Check for balance by turning the shaft in the palm of your hand. Adjust if needed, then, tighten the thumb screws securely. You may have to tie loose sections of the meat, such as the wings and legs of a fowl, with string to keep them out of the fire. Insert the end of the spit shaft into the motor and let the handle end rest in the bracket on the other side of the bowl. Close the hood all the way and open the vents about halfway for a delicious smoked flavor. If you do not wish to have a strong smoked flavor, pull the hood stop brackets up as far as possible and lower the hood to rest on the brackets. This will allow most of the heat your grill does not have a rotisserie, you can order an adapter kit from your dealer or from Meco® Corporation.

NOTE: The hood must remain partially open on covered grills with the rotisserie adapter kit. Hood stop brackets are provided in the kit. When the spit shaft is removed, the grill may be used with the hood closed. The kit will not interfere in any way with normal operation of the grill.

SMOKING...For true smoke flavor, use chips or chunks of wood from nut or fruit trees such as hickory, walnut, cherry or apple. Soak the chips in water overnight so they will not burn when you put them on the charcoal.

After you get the fire started, put the soaked chips on top of the hot charcoal. Place the meat on the grid or rotisserie spit and close the hood. Raise the grid to the highest position and adjust the vents for low heat.

Continue adding chips while the meat cooks to maintain the appropriate amount of smoke. Smoking is a very slow process. Therefore, allow plenty of cooking time.

FLARE-UP...Close all the vents for at least one minute to stop flare-up. You do not have to use water.

PUTTING OUT THE CHARCOAL...Save your charcoal to use again by closing the hood and all the vents. The charcoal will be put out in just a little while and the next time you cook, you will need to add less new charcoal.

CARING FOR YOUR MECO® GRILL

Ashes...Remove the ashes as soon as possible after each time you cook. Wait until the charcoal has cooled, lift out the ash pan and pour out the ashes. You can save the larger pieces of charcoal for use next time you cook. Use a garden hose to wash out accumulated grease and ashes. Let the ash pan dry before putting it back in your grill.

For easier cleaning, line the bottom of the fire bowl underneath the ash pan with a double layer of aluminum foil. Make sure you leave all the vents uncovered.

Cooking grid, spit forks, spit shaft...Use a detergent and hot water solution just as you would for any cooking equipment. A stiff brush may be helpful in removing heavy grease deposits.

Hood and Bowl...Dampen a cloth in hot water and a detergent solution. Then, wipe both the inside and outside of the hood and bowl. Wipe all areas dry before storing.

Note: Do not use oven cleaner or abrasive cleaner on your Meco® grill. This may cause damage to the paint finish.

Storage...After you have cleaned your grill, store it in a clean, dry area. Leave all the vents open so moisture does not collect inside causing rust. If you store your grill outside, close the top vent to keep the rain out but leave the bottom vents open. You can extend the life of your new grill by using a heavy duty grill cover for storage.

RECIPES YOU CAN USE AGAIN AND AGAIN

JUICY BURGERS...

1 beef bouillon cube	1/2 teaspoon salt
1/2 cup boiling water	1/2 teaspoon pepper
1 pound ground beef	1/2 teaspoon ground sage
1/3 cup dry bread crumbs	1/2 teaspoon ginger
1 teaspoon grated lemon peel	4-5 hamburger buns toasted

Dissolve bouillon cube in boiling water. Mix thoroughly with beef, crumbs, lemon peel and seasoning. Shape into four or five patties and chill thoroughly. Grill in high position until done or about seven minutes on each side. Serve on toasted buns. Makes four or five servings.

SMOKY MOUNTAIN SPARERIBS...

1/2 cup Worcestershire sauce	1/4 teaspoon Tabasco
1/2 cup vinegar	2 racks spareribs (approx. 6pounds)
1/2 teaspoon salt	
1/2 cup margarine (melted)	

Combine marinade ingredients and brush onto ribs. Use soaked wood chips and the indirect cooking method shown on page 5. Place meat bone side down on grid. Raise grid to highest position over moderate fire. Lower hood and cook 1 1/2-2 hours or until done. Add wood chips and charcoal if necessary to maintain smoke and even heat. Turn and baste the ribs every 10 minutes during the last 30-40 minutes of cooking. Makes 8-10 servings as second meat or 6 main dish servings.

BARBECUED PORK...

Thicker pork cuts should be cooked with the grid in the highest position. The secret is to brown the meat, but not to grill it so long that it becomes dry. Cook for approximately 20-30 minutes.

4 pork steaks or chops	1/4 cup soy sauce
1/2 inch thick	2 teaspoons salt
1 beef bouillon cube	1 teaspoon ground ginger
2 tablespoons hot water	1/4 cup molasses

Dissolve bouillon cube in hot water, add remaining 4 ingredients and blend. Put meat in dish and pour marinade over meat; cover and refrigerate 2 hours, turning occasionally. Remove pork from marinade, drain well and grill for 10-15 minutes per side, basting occasionally with remaining marinade. Makes 4 servings.

HOT DOGS - STUFFED...

Hot Dogs	Relish
Cheese	Bacon

Use Indirect Method, slit hot dogs lengthwise, within 1/4 inch of each end. Stuff hot dogs with cheese and relish and wrap in bacon. Place on cooking grid over drip pan and cook 15-20 minutes or until bacon is crisp.

ISLAND STEAK...

6 ribeye steaks (approx. 1 inch)	1 dash monosodium glutamate
1 cup soy sauce	juices from small piece of celery (approx. 1/4 medium size stalk)
1 clove garlic (crushed)	
1/4 cup salad oil	
1/4 cup dry red wine	

Combine all ingredients except the steak (use garlic press to get celery juice). Marinate the steaks with this mixture for 30 minutes only. Drain the steaks and sear each side one minute with grid in low position over moderate fire. Raise grid to high position and cook to taste. Turn steaks twice.

BAKED HAM...

Fully cooked canned ham, smoked and cured whole ham, shank or butt portion.
Whole cloves
Pineapple rings

Ham Glaze: 1 cup light brown sugar, firmly packed, 1/2 cup orange juice, 1/2 cup honey. Combine sugar, juice and honey. Marinate meat in mixture a minimum of 4 hours.

Use the indirect cooking method with the grid in its highest position and drip pan under the meat. Remove any rind left on ham and score fat diagonally to give a diamond effect. Insert a whole clove into the center of every diamond. Center ham, fat side up, on cooking grid directly above drip pan. Close hood. Approximately 9 minutes per pound is suggested cooking time for ham. Since it can be eaten without cooking, any temperature you desire is safe. Smoked or cured ham, which is not fully cooked, should be cooked to an internal temperature of 160°. Baste with ham glaze 3 or 4 times during last 30 minutes of cooking time. Garnish with pineapple rings about 15 minutes before end of cooking time. Once cooking is complete, brush with ham glaze.

BAKED POTATOES...

Insert an aluminum baking nail through the center of each russet Idaho potato. Let the nail extend on each end. Place the potatoes around the side of the cooking grid to leave room for cooking your meat. Cook 40-50 minutes over moderate fire. Garnish by cutting an "X" at the top of each potato. Push in on each of the four corners and add butter and seasonings to taste.

BARBECUE SAUCE...

Combine all the ingredients except the garlic and mix well. Pour into pint jars and store in refrigerator. Add garlic one hour before using. Makes six pints. NOTE: Apply the sauce generously during the last few minutes of cooking. Tomato base sauces burn easily and can cause the meat to lose its taste if added too soon.