



INSTALLATION & OPERATION MANUAL HEAVY DUTY ELECTRIC GRIDDLES

MODELS



HEG36E

HEG24E
HEG36E
HEG48E
HEG60E
HEG72E



WEG36E

WEG24E
WEG36E
WEG48E
WEG60E
WEG72E

For additional information on Vulcan or to locate an authorized parts and service provider in your area, visit our website at www.vulcanequipment.com

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INSTALLATION, OPERATION AND CARE OF HEAVY DUTY ELECTRIC GRIDDLES

GENERAL

Heavy Duty Electric Griddles are produced with quality workmanship and materials. Proper installation, usage and maintenance of your griddle will result in many years of satisfactory performance. Thoroughly read this entire manual and carefully follow all of the instructions provided.

INSTALLATION

Before installing, check the electrical service to make sure it agrees with the specifications on the rating plate. If the supply and equipment voltages do not agree, do not proceed with the installation. Contact your dealer or Vulcan immediately.

INSTALLATION CODES AND STANDARDS

Your Vulcan griddle must be installed in accordance with:

In the United States of America:

1. State and local codes
2. National Electrical Code ANSI/NFPA – 70 (latest edition) available from The National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269.
3. NFPA Standard #96 Vapor Removal from Cooking Equipment, (latest edition) available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

In Canada:

1. Local code
2. Canadian Electrical Code C22.1 Part 1 (latest edition) available from the Canadian Standard Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada, L4W 5N6.

UNPACKING

This griddle was inspected before leaving the factory. The carrier assumes full responsibility for the safe delivery upon acceptance of the shipment. Check for possible shipping damage immediately after receipt.

If the griddle is found to be damaged, complete the following steps:

1. Carrier must be notified within 5 business days of receipt.
2. Carrier's local terminal must be notified immediately upon discovery (note time, date, and who was spoken to), and follow up and confirm with written or electronic communication.
3. All original packing materials must be kept for inspection purposes.
4. The griddle cannot have been moved, installed, or modified.
5. Notify Vulcan Customer Service immediately at 800-814-2028.

LEG ASSEMBLY

Attach the legs to the body by threading the exposed leg stud into the threaded holes located on the underside of the unit. Tighten each leg so that the top face of the leg is pressed firmly against the body bottom. Do not operate griddle without legs or integrated stand as damage will occur.

LEVELING

Position the griddle in the desired location. Level the griddle by using a wrench to turn the adjustable feet. You must hold the leg while turning the foot so that it's attachment to the griddle is not loosened.

LOCATION

The installation location must be kept free and clear of combustibles. Do not permit air to blow directly at the griddle. Avoid open windows next to the griddle wherever possible. Avoid wall-type fans which create air cross-currents within the room.

This griddle is Design Certified for installation on a non-combustible counter with 4" legs, or combustible floor with 24" high stand.

INSTALLATION CLEARANCES

	COMBUSTIBLE CONSTRUCTION	NON-COMBUSTIBLE CONSTRUCTION
Back:	1"	0"
Right	1"	0"
Left Side	1"	0"

ELECTRICAL CONNECTIONS

⚠ WARNING Electrical and grounding connections must comply with the applicable portions of the National Electrical Code and/or other local electrical codes.

⚠ WARNING Disconnect the electrical power to the griddle and follow lockout / tagout procedures.

Electrical Connections

1. Remove the junction box cover plate(s) at the back of the unit. This exposes the built-in junction boxes and griddle line leads.
2. Select a suitable knockout on the rear or bottom of the junction box.
3. Connect the griddle's line leads to the supply wires with factory supplied wire connectors as shown in the applicable wiring instructions. Do not disturb the internal griddle wiring.
4. Push the excess wire into the junction box and replace the cover plate. Never operate the griddle without the junction box covers in place.

NOTICE Since the griddle is not fused, you must connect it to a fused circuit equipped with a suitable disconnecting means as required by local authorities.

Phase Wiring Connections

HEG24E/WEG24E

208,240 & 480 VAC 3-PHASE WIRING CONNECTIONS:

1. CONNECT WIRE #5 TO "L1"
2. CONNECT WIRE #6 & #11 TO "L2"
3. CONNECT WIRE #10 TO "L3"

208 & 240 VAC 1-PHASE WIRING CONNECTIONS:

1. CONNECT WIRE #5 & #10 TO "L1"
2. CONNECT WIRE #6 & #11 TO "L2"

HEG36E/WEG36E

208,240 & 480 VAC 3-PHASE WIRING CONNECTIONS:

1. CONNECT WIRE #10 TO "L1"
2. CONNECT WIRE #11 TO "L2"
3. CONNECT WIRE #5 & #6 TO "L3"

208 & 240 VAC 1-PHASE WIRING CONNECTIONS:

1. CONNECT WIRE #5 & #10 TO "L1"
2. CONNECT WIRE #6 & #11 TO "L2"

HEG48E/WEG48E

208,240 & 480 VAC 3-PHASE WIRING CONNECTIONS:

1. CONNECT WIRE #10 & #11 TO "L1"
2. CONNECT WIRE #8, #9 & #13 TO "L2"
3. CONNECT WIRE #12 TO "L3"

208 & 240 VAC 1-PHASE WIRING CONNECTIONS:

1. CONNECT WIRE #8, #12 & #13 TO "L1"
2. CONNECT WIRE #9, #10 & #11 TO "L2"

HEG60E/WEG60E

208,240 & 480 VAC 3-PHASE WIRING CONNECTIONS:

LEFT JUNCTION BOX

1. CONNECT WIRE #18 TO "L1"
2. CONNECT WIRE #16 TO "L2"
3. CONNECT WIRE #15 TO "L3"

RIGHT JUNCTION BOX

1. CONNECT WIRE #8 & #10 TO "L1"
2. CONNECT WIRE #17 TO "L2"
3. CONNECT WIRE #12 TO "L3"

208 & 240 VAC 1-PHASE WIRING CONNECTIONS:

LEFT JUNCTION BOX

1. CONNECT WIRE #15 & #16 TO "L1"
2. CONNECT WIRE #18 TO "L2"

RIGHT JUNCTION BOX

1. CONNECT WIRE #10 & #12 TO "L1"
2. CONNECT WIRE #8 & #17 TO "L2"

HEG72E/WEG72E

208,240 & 480 VAC 3-PHASE WIRING CONNECTIONS:

LEFT JUNCTION BOX

1. CONNECT WIRE #16 & #11 TO "L1"
2. CONNECT WIRE #15 TO "L2"
3. CONNECT WIRE #18 TO "L3"

RIGHT JUNCTION BOX

1. CONNECT WIRE #8 & #10 TO "L1"
2. CONNECT WIRE #17 TO "L2"
3. CONNECT WIRE #19 TO "L3"

208 & 240 VAC 1-PHASE WIRING CONNECTIONS:

LEFT JUNCTION BOX

1. CONNECT WIRE #11 & #18 TO "L1"
2. CONNECT WIRE #16 & #15 TO "L2"

RIGHT JUNCTION BOX

1. CONNECT WIRE #10 & #19 TO "L1"
2. CONNECT WIRE #8 & #17 TO "L2"

Electrical Data

STANDARD VOLTAGES-208 VOLTS OR 240 VOLTS 50/60 Hz.-SINGLE OR THREE PHASE 480 VOLTS 50/60 Hz.-THREE PHASE ONLY																
MODEL NUMBER	TOTAL CONN. KW	TOTAL KW PER CONN	3 PHASE LOADING			NOMINAL AMPS PER LINE WIRE CONN.										
			KW PER PHASE			3 PHASE									1 PHASE	
			PER CONN.*			208 VOLT			240 VOLT			480 VOLT			208	240
			X-Y	Y-Z	X-Z	X	Y	Z	X	Y	Z	X	Y	Z	VOLT	VOLT
HEG24E/WEG24E	10.8	10.8	5.4	5.4	0.0	22.5	45.0	22.5	19.5	39.0	19.5	9.7	19.5	9.7	51.9	45.0
HEG36E/WEG36E	16.2	16.2	5.4	5.4	5.4	45.0	45.0	45.0	39.0	39.0	39.0	19.5	19.5	19.5	77.9	67.5
HEG48E/WEG48E	21.6	21.6	10.8	5.4	5.4	67.4	67.4	45.0	58.5	58.5	39.0	29.2	29.2	19.5	103.8	90.0
HEG60E/WEG60E**	27.0	16.2	5.4	5.4	5.4	45.0	45.0	45.0	39.0	39.0	39.0	19.5	19.5	19.5	77.9	67.5
		10.8	5.4	0.0	5.4	45.0	22.5	22.5	39.0	19.5	19.5	19.5	9.7	9.7	51.9	45.0
HEG72E/WEG72E*	32.4	16.2	5.4	5.4	5.4	45.0	45.0	45.0	39.0	39.0	39.0	19.5	19.5	19.5	77.9	67.5
		16.2	5.4	5.4	5.4	45.0	45.0	45.0	39.0	39.0	39.0	19.5	19.5	19.5	77.9	67.5

*NOTE: Two separate conduit connections must be made: each connection carries one-half of the rated load.

**NOTE: Two separate conduit connections must be made: one connection carries 16.2 KW, the other connection carries 10.8 KW.

OPERATION

⚠ WARNING The griddle and its parts are hot. Use care when operating, cleaning or servicing the griddle.

⚠ WARNING Disconnect power supply and follow lockout / tagout procedures before cleaning and servicing the appliance.

BEFORE FIRST USE

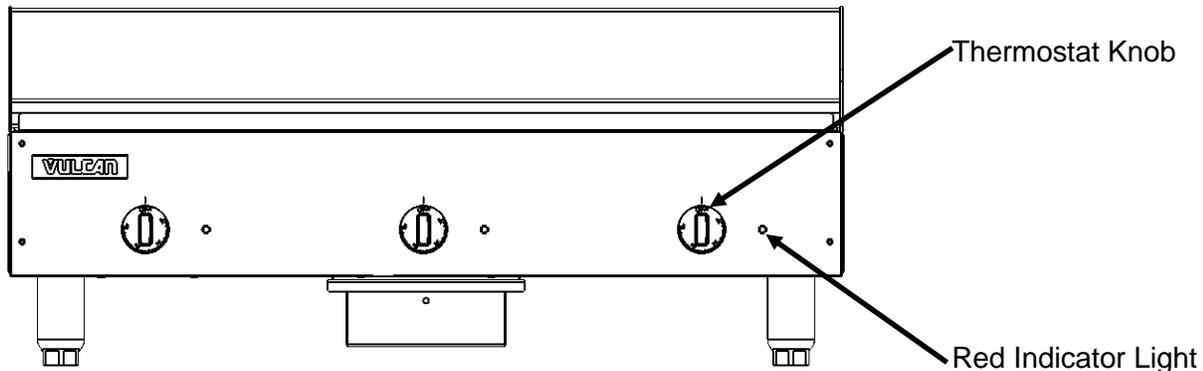
Remove all packing material and protective plastic from the surfaces of the unit. Before leaving the factory the griddle cooking surface is coated with vegetable oil as a rust inhibitor. Remove this film when the griddle plate is being cleaned prior to its first cooking use. Heat the griddle to 200-300°F to loosen and melt the coating, then clean the surface by adding water or a non-corrosive, grease dissolving commercial cleaner, following the manufacturer's directions. Scrape the oil residue from the plate with a griddle scraper. Rinse thoroughly and wipe dry with a soft clean cloth. Clean all accessories.

SEASONING THE GRIDDLE

Season the griddle to avoid possible surface corrosion before first use, and after every cleaning. This will also help reduce the sticking of cooked food product. Heat griddle to a low temperature (300-350°F) and apply a small amount of cooking oil – about one ounce per square foot of surface. Use a soft lint-free cloth to spread the oil over the entire griddle surface to create a thin film. Wipe off any excess oil with a cloth. Repeat the procedure until the griddle has a slick, mirror-like finish.

CONTROLS

Each thermostat independently controls a 12” wide griddle section. When each thermostat is turned ON, the corresponding red indicator light will illuminate to indicate that the elements are on for that section. When the griddle plate reaches the desired temperature set point, the elements will be turned off for that section and the indicator light will go off. Indicator lights will cycle off and on as the thermostats turn the corresponding heating elements off and on to maintain the set temperatures. At the end of each day, you must turn all thermostat knobs to the OFF position to turn off the unit.



USING THE GRIDDLE

To preheat, set the thermostats for the desired temperatures 20 minutes before cooking.

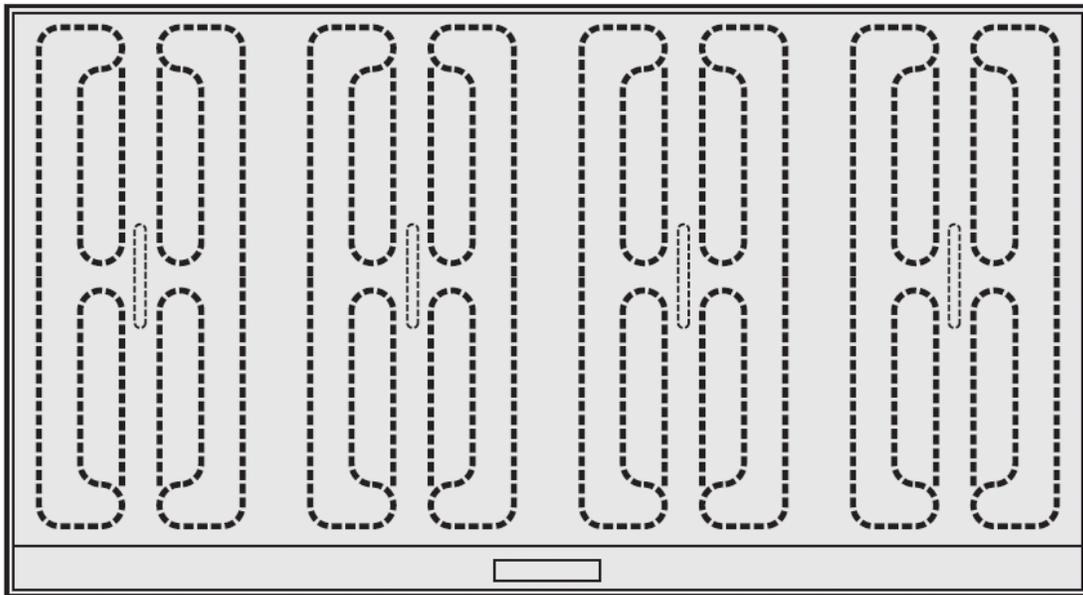
A uniform and systematic approach to loading the griddle will produce the most consistent product results.

ZONE COOKING

This griddle features two tubular heating elements in each 12” section. Each section is controlled by an independent thermostat. Each 12” section is a separate cooking zone, and allows cooking a wide variety of products over a single griddle plate. The chart below is a suggested usage of zone cooking.

When zone cooking, it is suggested that you start with your lowest temperature setting at either side of the griddle, increasing the zone temperature as you move up the zone line. These zone cooking guidelines will vary depending on product temperatures, size and shape. This guide should be adjusted to suit your product and operational cooking preference.

HEG48E/WEG48E



ZONE 1 (300°F)	ZONE 2 (350°F)	ZONE 3 (350°F)	ZONE 4 (400°F)
PRODUCT Sausage Eggs (Hard Fried) Eggs (Scrambled) Burger (Well Done) Steak (Well Done) Chicken Breast Frozen Foods Pork Chops	PRODUCT Pancakes French Toast Bacon Eggs (Sunny Side Up) Boiled Ham Steak (Medium Well) Fresh Burger (Medium Well) Small Frozen Burger (Medium Well) Omelet Hash Browns Canadian Bacon		PRODUCT Steak (Rare) Stir Fry Vegetables Salmon Fish Cakes Lobster Scampi

NOTICE

It is recommended to avoid using ice to rapidly cool the griddle surface temperature. Doing so could result in thermal shock and damage to the cooking surface.

CLEANING THE GRIDDLE

⚠ WARNING The griddle and its parts are hot. Use care when operating, cleaning or servicing the griddle.

Clean the griddle regularly. A clean griddle always looks better, lasts longer and performs better. To produce evenly cooked, perfectly browned griddle products keep the griddle plate clean and free of carbonized grease. Carbonized grease on the surface hinders the transfer of heat from the griddle surface to the food, resulting in spotty browning and loss of cooking efficiency. Carbonized grease tends to cling to griddle foods, giving them a highly unsatisfactory and unappetizing appearance.

NOTICE Do not use a water-jet to clean the griddle as this can cause damage to internal electrical components.

The standard HEG and WEG griddle plates are carbon steel, but can be scored or dented by careless use of a spatula or scraper. Be careful not to dent, scratch, or gouge the plate surface. Do not try to knock off loose food that may be on the spatula by tapping the corner or the edge of the spatula on the griddle surface.

Clean the griddle surface thoroughly. Use a griddle stone, screen, or Scotch Bright™ pad on the surface as necessary. Rub with the grain of the metal while the griddle is still warm (not hot). A detergent may be used on the plate surface to help clean it, but be sure the detergent is thoroughly removed by flushing with clear water. After removal of detergent the surface of the plate the griddle should be seasoned according to the instructions in this manual.

AFTER EACH USE

Clean the griddle with a griddle scraper during the work shift. Take care not to vigorously strike the back or side splashes with the scraper.

ONCE PER DAY

Thoroughly clean the griddle back splash, sides and front. Turn the griddle off and allow it to cool down between 275°F-300°F, apply some water to the cooking surface and clean it

with a griddle scraper. Remove, empty and wash the grease drawer in the same manner as an ordinary cooking utensil.

Wipe the griddle exterior clean with a damp cloth to prevent grease accumulation and dry.

ONCE PER WEEK

Clean the griddle cooking surface thoroughly. A detergent may be used on the plate surface to help clean it, but be sure the detergent is thoroughly removed by flushing with clear water.

After removal of detergent the surface of the plate the griddle should be seasoned according to the instructions in this manual.

Clean stainless steel surfaces with a damp cloth and polish with a soft dry cloth. To remove discoloration, use a griddle cleaner.

If the griddle usage is very high, consider conducting this weekly cleaning procedure more than once per week.

SHUTDOWN OF GRIDDLE

1. Turn all thermostats to the OFF position. This will shut down the griddle completely.

EXTENDED SHUTDOWN

1. Turn all thermostats to the OFF position.
2. Shut off the main electrical supply.
3. Apply a heavy coat of vegetable oil over the griddle plate to inhibit rust.

MAINTENANCE

⚠ WARNING The griddle and its parts are hot. Use care when operating, cleaning or servicing the griddle.

⚠ WARNING Disconnect power supply and follow lockout / tagout procedures before cleaning and servicing the appliance.

LUBRICATION

There are no parts on this unit that require lubrication.

SERVICE AND PARTS INFORMATION

Contact the Service Contractor in your area to obtain service and parts information. For a complete listing of Service and Parts depots refer to or www.vulcanequipment.com

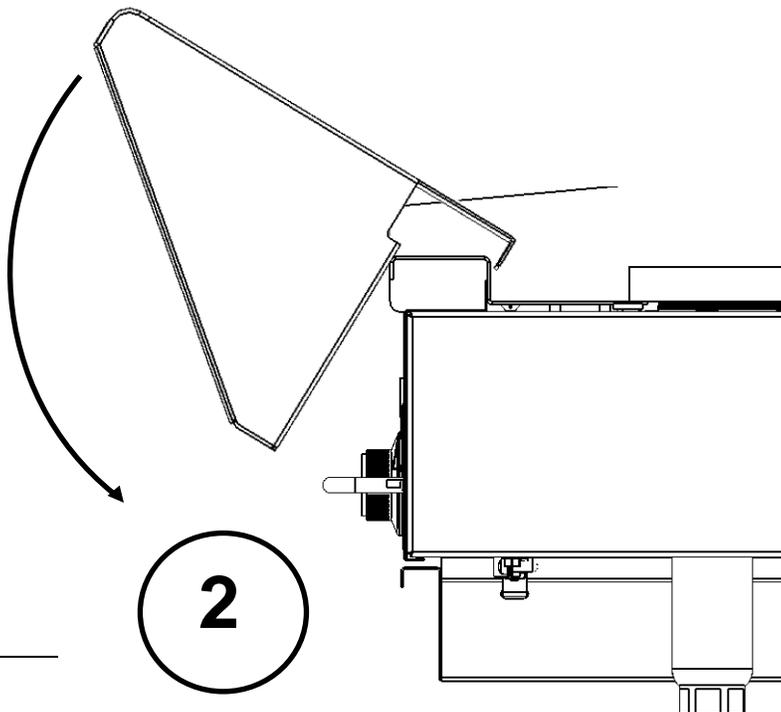
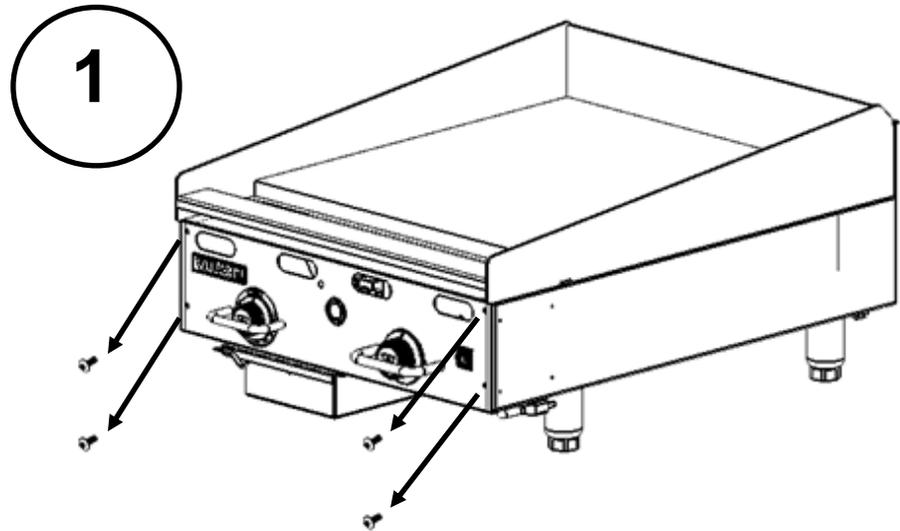
When calling for service the following information should be available from the appliance serial plate: Model Number, Serial Number and voltage.

TROUBLESHOOTING

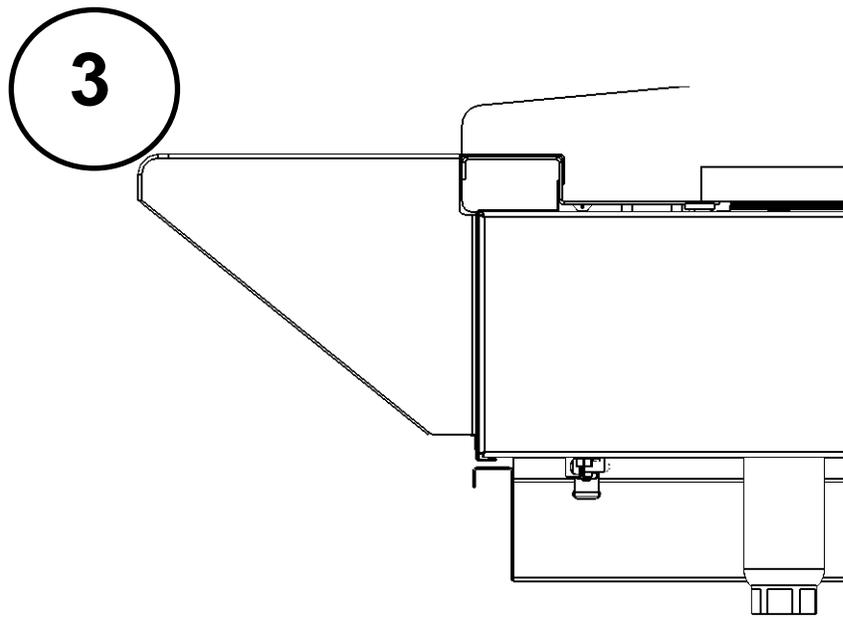
PROBLEM	POSSIBLE CAUSES
Heat does not come on when the temperature controller is turned on	<ol style="list-style-type: none">1. Problem with thermostats. (Call for service)2. Problem with heating elements. (Call for service)3. Main power supply disconnected. (Call for service)
Fat appears to smoke excessively	<ol style="list-style-type: none">1. Temperature set too high.2. Moisture in food may be turning into steam
Food sticks to griddle or burned around edges or contains dark specs	<ol style="list-style-type: none">1. Temperature set too high.2. Griddle surface requires cleaning and/or seasoning.3. Surface under food not covered with enough cooking oil.
Food under-cooked inside	<ol style="list-style-type: none">1. Temperature set too low.2. Food not cooked for long enough time.
Food tastes greasy or has objectionable off-flavor	<ol style="list-style-type: none">1. Food itself may have off-flavor.2. Food stored improperly before cooking.3. Too much griddle fat used.4. Temperature set too low.
Noticeable build-up of gum on griddle	<ol style="list-style-type: none">1. Temperature set too high.2. Griddle surface needs cleaning and/or seasoning.3. Too much griddle fat used.

ACCESSORY INSTALLATION

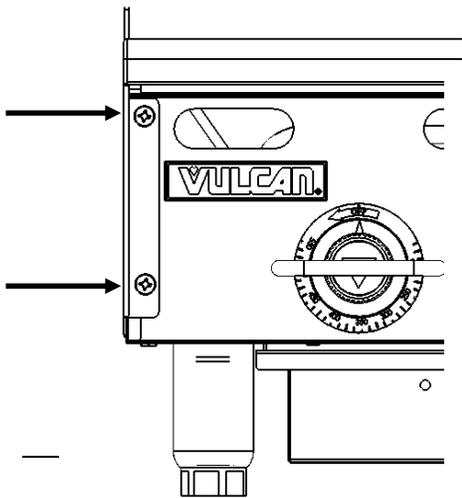
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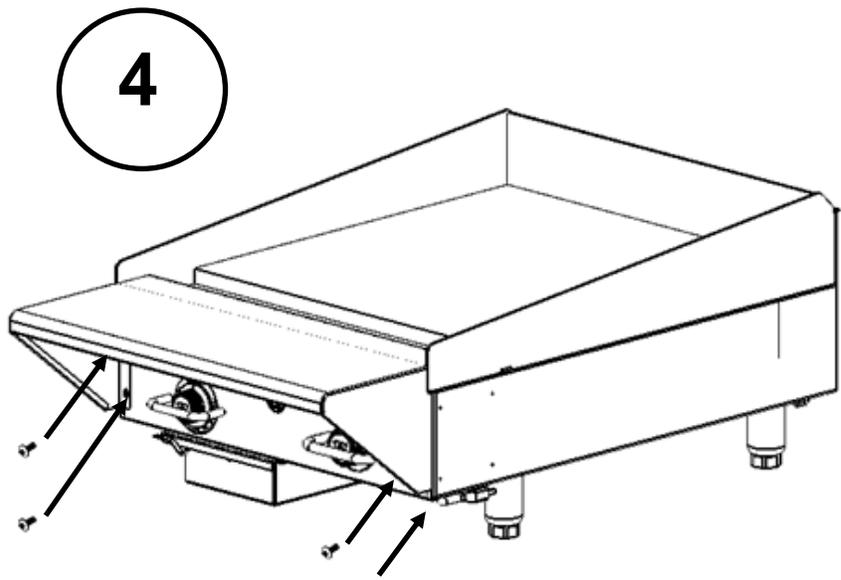
SIDE VIEW



SIDE VIEW



FRONT VIEW



NOTES