

# Clamshell Grill Model 38



Place this chapter in the Grill section  
of the Equipment Manual.

Manufactured exclusively for  
McDonald's® by

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### Warranty

A warranty checkout card is shipped with all new equipment that leaves the factory. The warranty checkout card is packed in an envelope which also contains this operator's manual. Refer to the warranty checkout card and the warranty classifications listed in the Parts Identification/Function section when service is performed on your machine.

It is recommended that the operator take the necessary time to carefully read through the complete warranty information contained in the warranty checkout card. Any questions or unclear statements found within the card should be made clear to you upon delivery of the machine. Thoroughly understand your warranty protection before you begin operation.

For any questions pertaining to the Taylor Warranty, please contact your authorized Taylor Distributor, or Taylor Company, Rockton, Illinois 61072.

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May, 2001 (Original Publication)  
(Updated October, 2011)  
EM SD11

Printed in  
The United States of America



## INTRODUCTION

The Model 38 Clamshell Grill is capable of cooking a variety of products. The clamshell grill provides all of the features of a flat grill, as well as the advantages of two-sided cooking.

The Model 38 is designed for indoor use only.

**Note:** Only instructions originating from the factory or its authorized translation representative(s) are considered to be the original set of instructions.

## SAFETY

Always follow these safety precautions when operating the grill:



**DO NOT** operate the grill without reading this operator's manual. Failure to comply may result in equipment damage or personal injury. This manual should be kept in a safe place for future reference.



Per IEC 60335-1 and its part 2 standards, "This appliance is to be used only by trained personnel. It is not intended for use by children or people with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless given supervision or instruction concerning the use of the appliance by a person responsible for their safety."



**DO NOT** install the unit in an area where a water jet could be used. **DO NOT** use a water jet to clean or rinse the grill. Failure to follow this instruction may result in serious electrical shock. In addition, water may collect inside the grill and destroy electrical components and cause injury from hot steam.



**DO NOT** operate the grill unless it is properly grounded. Failure to comply may result in equipment damage or personal injury.



This unit is provided with an equipotential grounding lug that is to be properly attached to the rear of the frame by the authorized installer. The installation location is marked by the equipotential bonding symbol (5021 of IEC 60417-1) on both the removable panel and the equipment's frame.



- **DO NOT** operate the grill with larger fuses than specified on the data label.
- All repairs must be performed by an authorized Taylor service technician. The main power supplies to the grill must be disconnected prior to performing any repairs.
- Cord Connected Units: Only Taylor authorized service technicians may install a plug on these units.
- Stationary appliances which are not equipped with a power cord and a plug or other device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 3 mm installed in the external installation.
- Appliances that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly when disconnected or not used for long periods, or during initial installation, shall have protective devices such as a GFI, to protect against the leakage of current, installed by the authorized personnel to the local codes.

- Supply cords used with this unit shall be oil-resistant, sheathed flexible cable not lighter than ordinary polychloroprene or other equivalent synthetic elastomer-sheathed cord (Code designation 60245 IEC 57) installed with the proper cord anchorage to relieve conductors from strain, including twisting, at the terminals and protect the insulation of the conductors from abrasion.

Failure to follow these instructions may result in personal injury, equipment damage, or poor grill performance.

**WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.**



- This appliance must be isolated from all combustible construction and materials including, but not limited to; walls, partitions, furniture, floors, curtains, paper, boxes, and decorations. Failure to comply may result in fire and cause destruction and severe injury.



#### **FOR YOUR SAFETY**

**Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.**



- **DO NOT** obstruct the ventilation openings at the rear of this appliance.
- **DO NOT** obstruct the flow of air in and around the grill.
- **DO NOT** operate the grill unless all service panels and access doors are attached with screws. Failure to comply may result in personal injury from gas or electrical components.



**USE EXTREME CAUTION** while setting up, operating, and cleaning the grill. Avoid coming in contact with the hot grill surfaces or with the hot grease. Failure to comply will result in burn injuries.



- The grill must be placed on a level surface.
- To ensure thorough cleaning, the grill must be pulled away from the wall. When returning the grill to its original position, use extreme caution to smoothly and slowly roll the grill backward into place.

Failure to follow these instructions may cause the grill to tip and can result in severe equipment damage or personal injury.



**NOTICE** all warning labels that have been attached to the grill to further point out safety precautions to the operator.

## HAZARD COMMUNICATION STANDARD

**(HCS) - The procedure(s) in this manual include the use of chemical products.**

**These chemical products will be highlighted with bold faced letters followed by the abbreviation (HCS) in the text portion of the procedure. See the Hazard Communication Standard (HCS) manual for the appropriate Material Safety Data Sheet(s) (MSDS).**

This piece of equipment is made in America and has American sizes on hardware. All metric conversions are approximate and vary in size.

**NOISE LEVEL:** Airborne noise emission does not exceed 70 dB(A) when measured at a distance of 1.0 meter from the surface of the machine and at a height of 1.6 meters from the floor.

These instructions are valid only if the country code symbol appears on the appliance. If the symbol does not appear on the appliance, refer to the technical instructions which give the necessary instructions for adapting the appliance to the utilization conditions of that country.



If the crossed out wheeled bin symbol is affixed to this product, it signifies that this product is compliant with the EU Directive as well as other similar legislation in effect after August 13, 2005. Therefore, it must be collected separately after its use is completed, and cannot be disposed as unsorted municipal waste.

The user is responsible for returning the product to the appropriate collection facility, as specified by your local code.

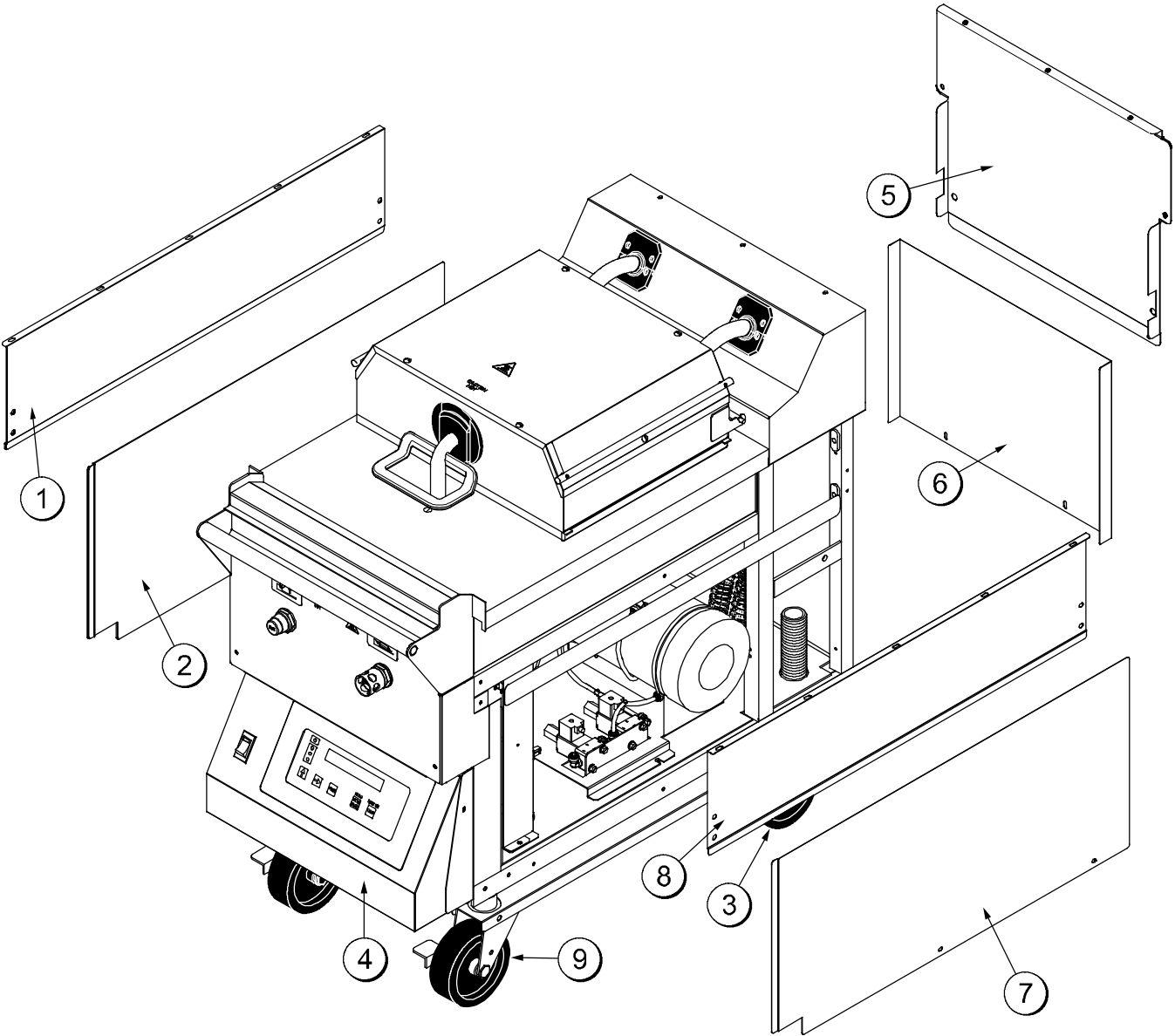
For additional information regarding applicable local laws, please contact the municipal facility and/or local distributor.

## PARTS IDENTIFICATION/FUNCTIONS

### Exploded View

ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION	WARR. CLASS
1	X79948	Panel A.-Side Upper Left	1	Provides access to internal components for service and cleaning.	103
2	079950	Panel-Side Left	1	Provides access to internal components for service and cleaning.	103
3	078377	Caster-5" 7-5/8 Stem (Rear)	2	Allows grill mobility.	103
4	X74024	Door A.-Control	1	Houses the controls and the fan interlock switch.	103
5	X78480	Panel A.-Back Service (Upper)	1	Provides access to internal components for service and cleaning.	103
6	078479	Panel-Back (Lower)	1	Provides access to internal components for service and cleaning.	103
7	079951	Panel-Side Lower Right	1	Provides access to internal components for service and cleaning.	103
8	X79949	Panel A.-Side Upper Right	1	Provides access to internal components for service and cleaning.	103
9	078376	Caster-5" 7-5/8 Stem - Locking (Front)	2	Prevents grill movement.	103

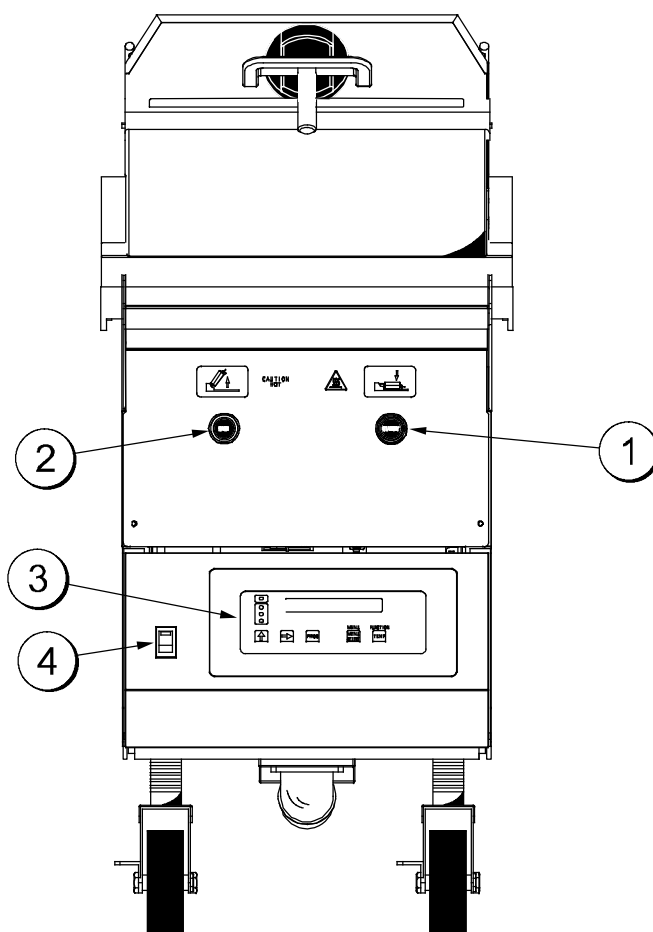
Exploded View



## Front View

ITEM	PART NO.	DESCRIPTION	QTY	FUNCTION	WARR. CLASS
1	076012	Button-Black Operator (STANDBY)	2	Deactivates the cook cycle, keeps the upper platen in the closed position and displays the message "STANDBY" on the control. When pressed twice within five seconds, the upper platen will automatically lower into the STANDBY position.	103
2	076011	Button-Red Operator (RAISE)	2	Cancels the STANDBY mode, raises the upper platen and deactivates the cook cycle.	103
3	X74240-SER	Control-Grill (without chip)	2	The device that controls the functions of the grill.	312
4	076989-WP	Switch-Rocker-DPST 10A (FAN INTERLOCK)	1	The FAN INTERLOCK switch to activate the exhaust fans and power to control the grill.	103
*5	076299	Holder-Fuse	1	Holds the fuse for the control circuit.	103
*5a	079837-070 079837-040	Fuse 7 A (60 Hz) Fuse 4 A (50 Hz)	1	Protects electrical components from power surges.	000

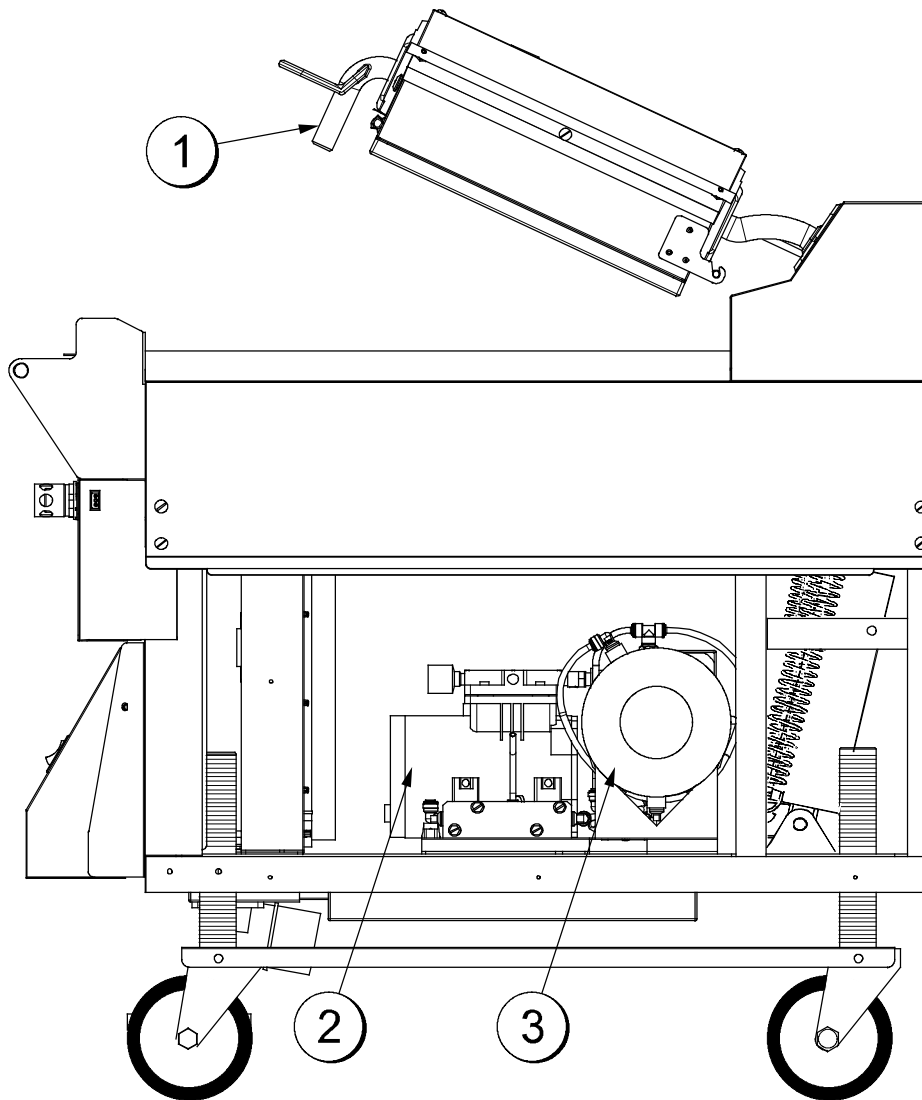
\*Not Shown





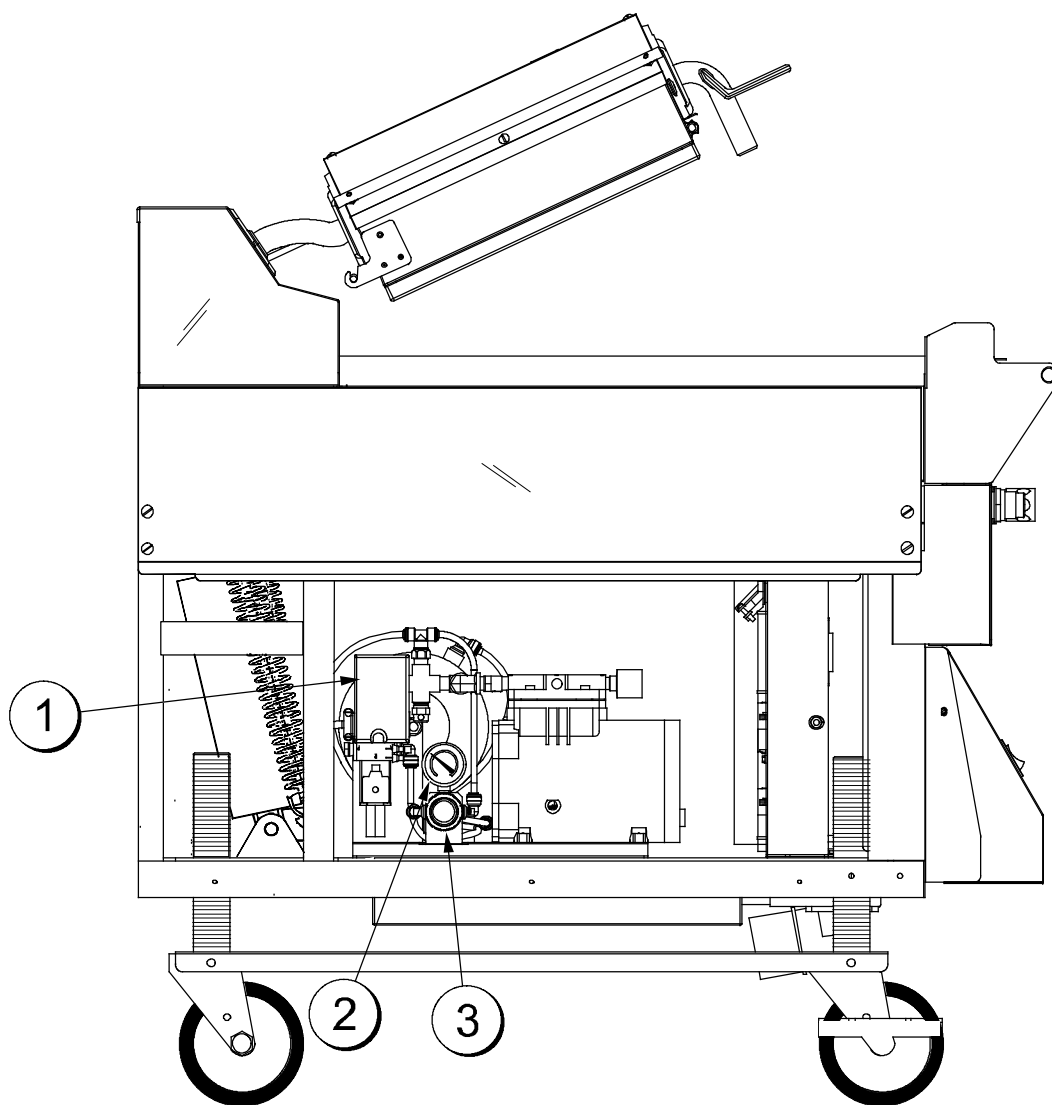
## Right Side View

ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION	WARR. CLASS
1	079768	Handle A.-Platen	1	Used for lowering the upper platen.	103
2	075506-12	Compressor-Air (60 Hz)	1	Supplies air pressure.	***
	032129-27	Compressor-Air (50 Hz)	1	Supplies air pressure.	***
3	078820	Tank-Accumulator	1	Stores air for air cylinder.	103



# Left Side View

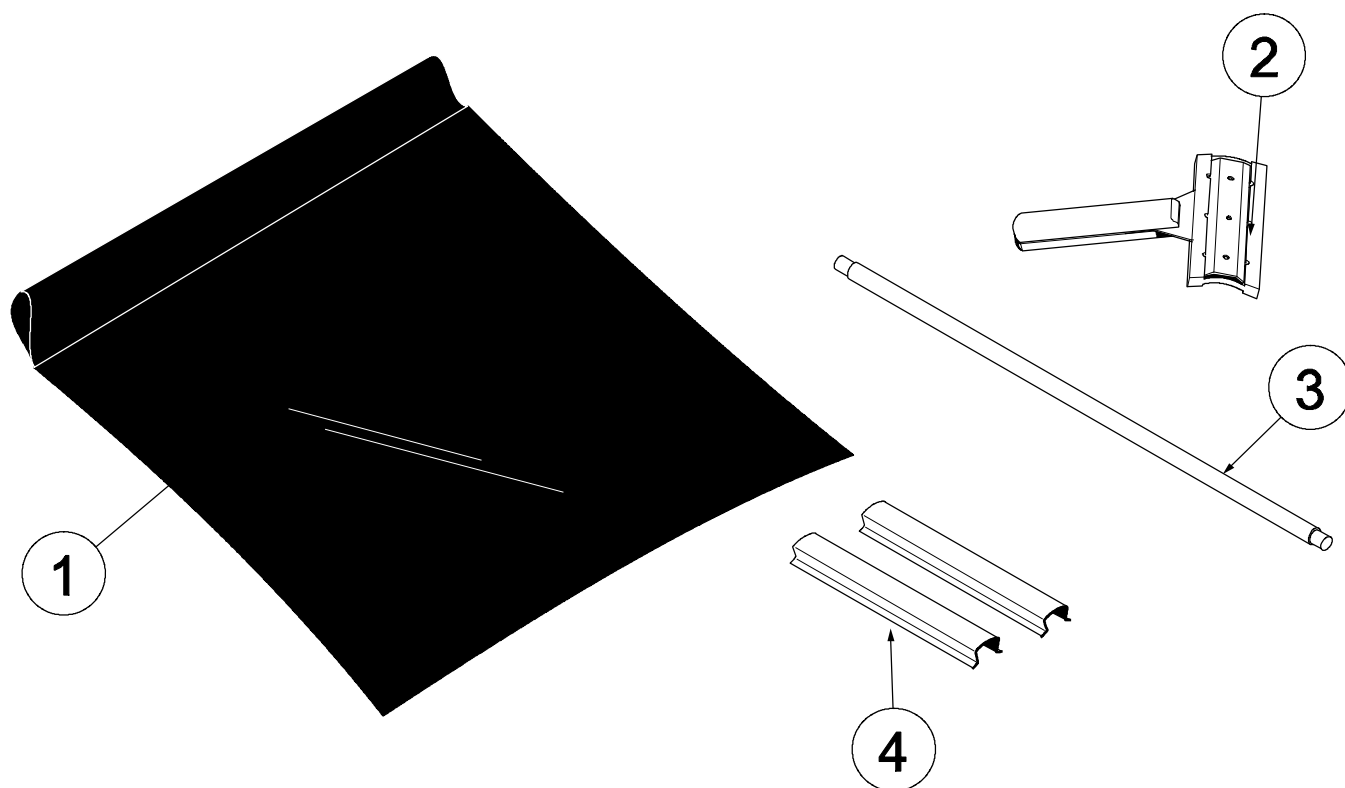
ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION	WARR. CLASS
1	077879	Switch-Pressure	1	Controls the air pressure.	103
2	043643	Gauge-Pressure	1	Indicates pressure to the air cylinder.	103
3	029830	Regulator 0-50 PSI	1	Regulates the pressure necessary to hold the platen in the closed position.	103



## Accessories

ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION	WARR. CLASS
1	076213	Sheet-Release Material	6	Prevents product from sticking to the upper platen.	000
2	075887	Scraper-Teflon Wiper	1	Used to clean the release material sheet.	000
*2a	075888	Wiper Strip (Replacement Strip)	1	Blade replacement for the wiper squeegee.	000
3	076155	Rod-Release Material	1	Secures the release material to the bottom of the upper platen.	000
4	072673	Clip-Release Material w/Tab	2	Holds the release material sheet in place on the upper platen.	000

\*Not Shown



## EQUIPMENT SET-UP PROCEDURES

### Installing Release Material Sheet

1. Slide the release material rod through the hemmed end of the release material sheet.

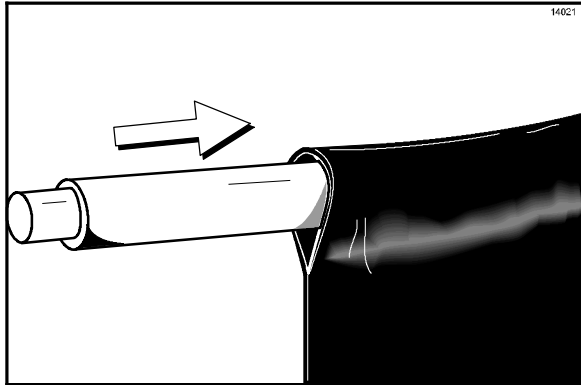


Figure 1

2. Hook the release material rod on the release material hook at the bottom of the upper platen.

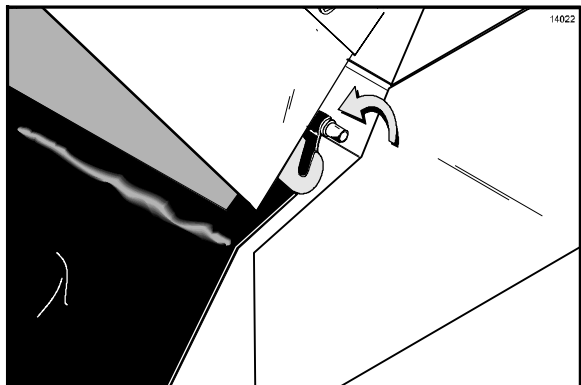


Figure 2

3. Holding the bottom of the release material sheet in place, gently pull the sheet up to the top.

**Note:** Make sure the release material fits smoothly over the upper platen.

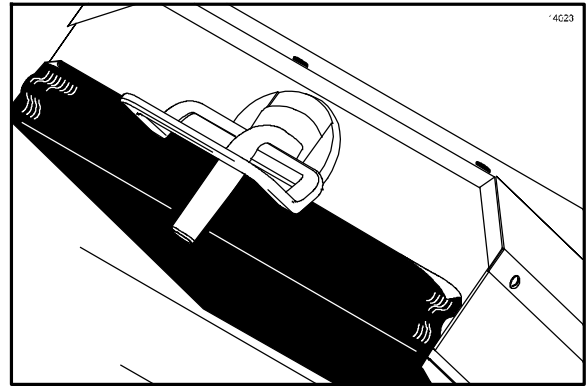


Figure 3

4. Place the locking clips over the release material sheet, and press them into place over the release material bar.

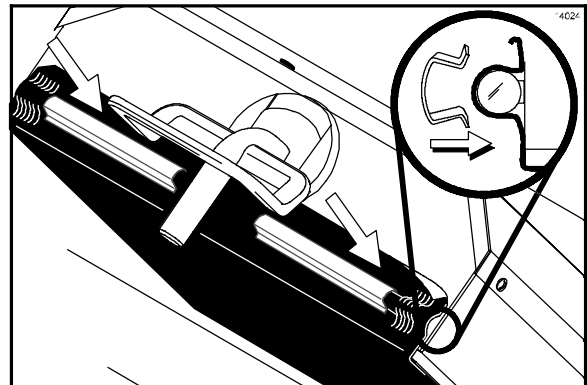


Figure 4

5. Check the alignment and tightness of the release material against the upper platen.

**Note:** Installing the release material sheet too tightly may cause premature failure of the sheet.

**Note:** It is **not** necessary to change the release material if small pin holes develop.

The release material must be changed when:

- Product sticks to the release material.
- Carbon builds up, causing problems in taste or appearance.
- There is a tear in the release material in the cooking area.
- The release material substance is worn from the release material sheet.
- The temperature of the upper platen drops more than 10°F. (5.6°C.) from the temperature recorded when the release material was removed.

**Note:** Temperature checks should only be conducted with the release material sheet removed.

**Note:** Rotate and reverse the release the material sheet on a daily basis.

## Care of Release Material Sheet

- **DO NOT** fold or crease.
- **DO NOT** touch with any sharp object or abrasive.
- **DO NOT** hose with hot water or soak in water.
- **DO NOT** place under other objects.

## Start-Up of the Clamshell Grill

1. Place the FAN INTERLOCK switch in the ON position. The controller will display the message "INITIALIZATION" and then the message "OFF".

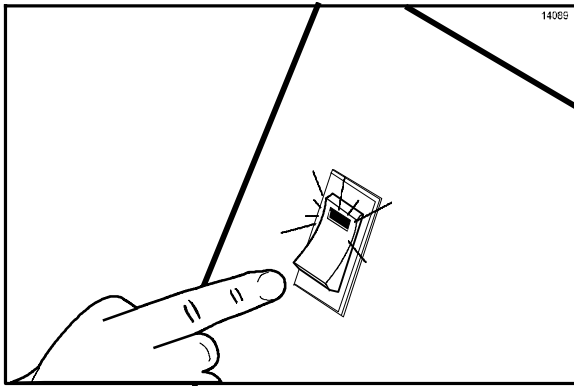


Figure 5

**Note:** An audible tone will sound until a key is pressed.

2. Press and release the MENU SELECT key to scroll through the product selections. Continue this process until the desired product is displayed. The product that is displayed will be entered automatically. The display will alternate between the message "TOO COOL" and the name of the menu item until the proper temperature is reached.

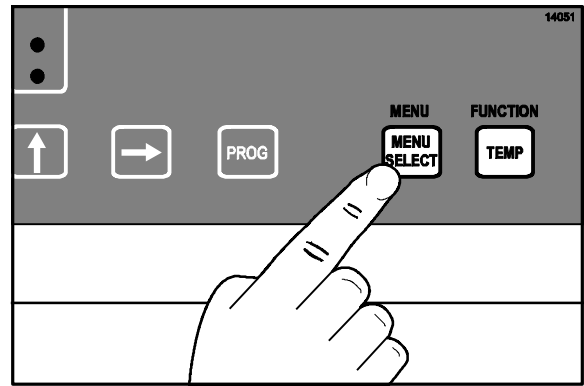


Figure 6

**Note:** Only those menu items that are programmed to be included on the Operating Mode Menu List will be displayed. If an item cannot be found, see the section "Change a Menu Item". (See page 27 "To Change a Menu Item".)

3. When the display stops alternating between the message "TOO COOL" and the name of the menu item, the grill is at operating temperature. This is the **Operating Mode**.

**Note:** The upper platen will not stay closed and the timers will not operate until the required temperature has been attained. The message "PLATEN NOT LATCHED" will appear on the display if either action is attempted.

## Product Selection

1. Press and release the MENU SELECT key to scroll through the product selections. Continue this process until the desired product is displayed. The display may alternate between the message "TOO COOL" and the name of the menu item until the proper temperature is reached.

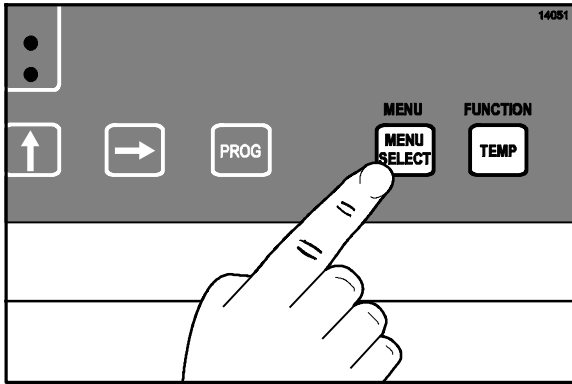


Figure 7

2. Lower the platen into the COOK position.



**CAUTION: NEVER USE FORCE TO RAISE THE UPPER PLATEN. DAMAGE TO COMPONENTS WILL RESULT. USE ONLY THE RAISE BUTTON TO OPEN THE UPPER PLATEN!**

## Patty Placement

Placement procedures of meat products must be followed on the clamshell grill. Meat must be placed on the lower grill plate two patties at a time, front to back and right to left. When the cook cycle is complete, the upper platen will raise.

**Note:** It is very important that all patties be removed from the lower grill plate in the same sequence that they were placed before cooking.

Patties must be removed immediately after the upper platen has been raised to the OPEN position and after the meat has been seasoned.

The maximum amount of meat patties to be cooked on the clamshell grill is as follows.

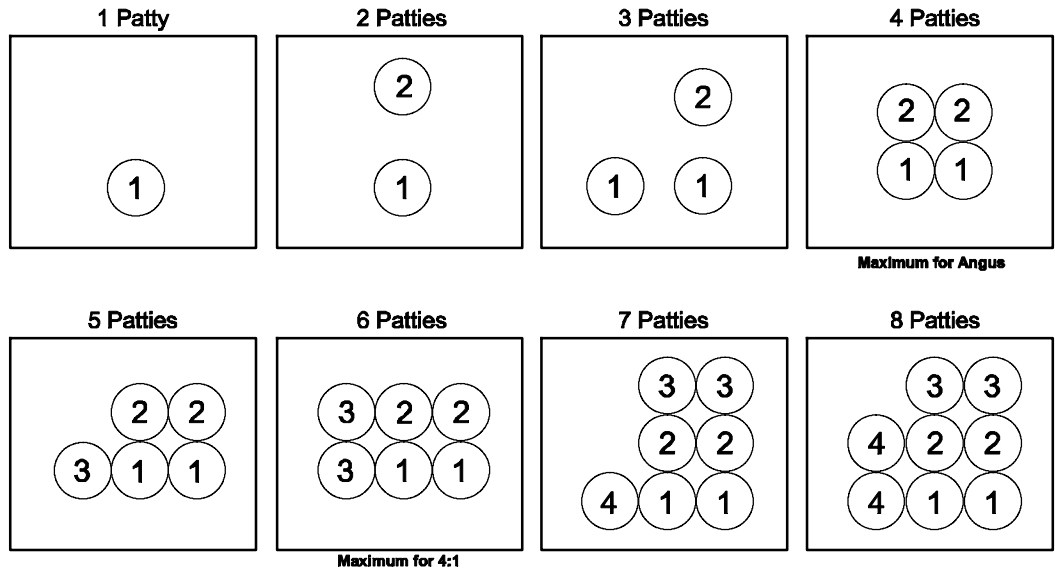
- 9 regular (10:1) patties
- 6 quarter pound (4:1) patties
- 9 sausage patties
- 6 circular bacon

The following chart is to be used as a patty placement guide:

**Taylor Model 38  
Clamshell Grill  
10:1, 4:1, Sausage, Circular Bacon  
and Patty Placement Guide**

**Model 32/34/35/36/38/C832/C835 patties laying pattern**

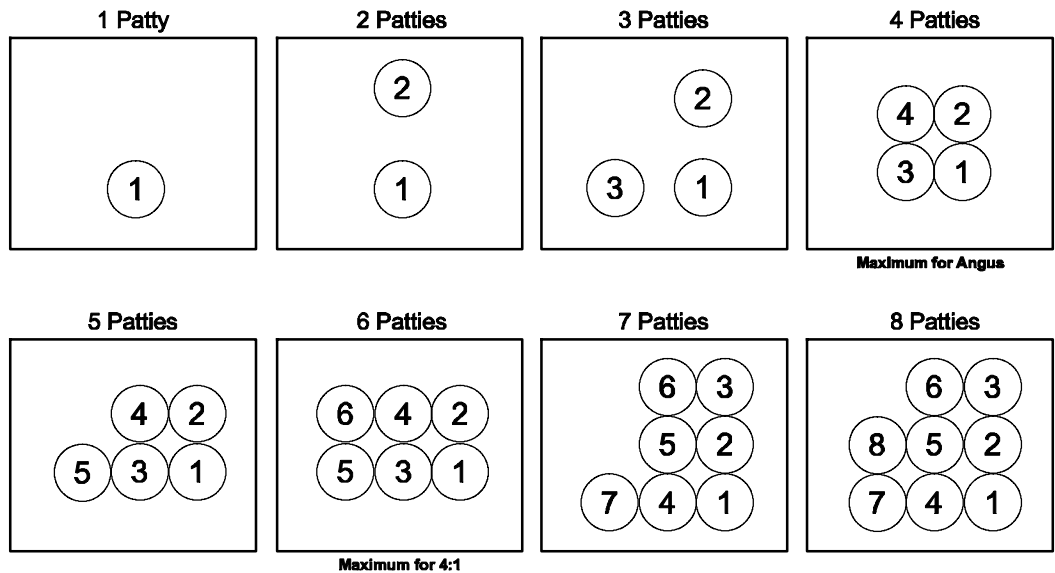
**NOTE:**  
Lay the patties on  
the grill two at a time  
from front to back,  
right to left.




---

**Model 32/34/35/36/38/C832/C835 patties pulling pattern**

**NOTE:**  
Remove the patties  
one at a time in the  
order shown –  
from back and  
right to left.



**Note:** Patty placement procedures for International Markets may differ. Follow the recommendations of your local McDonald's authorities.

## Standby Procedures

Whenever the clamshell grill is idle and product is not being cooked, the upper platen must be placed in the STANDBY position.

1. To place the upper platen in the STANDBY position, lower the platen and press the STANDBY button; or press the STANDBY button twice from the open position.
2. To raise the upper platen to the OPEN position to resume cooking, press the RAISE button.

**Note:** If the clamshell grill remains idle for 5 continuous minutes without being placed in STANDBY, a tone will sound and the display will flash "PUT GRILL IN STANDBY".



**CAUTION: NEVER USE FORCE TO RAISE THE UPPER PLATEN. DAMAGE TO COMPONENTS WILL RESULT. USE ONLY THE RAISE BUTTON TO OPEN THE UPPER PLATEN!**

## Cleaning After Each Run of Product

1. Using the grill scraper, scrape the grease on the lower grill plate from front to back. **Do not** scrape across the rear of the lower grill plate with grill scraper.

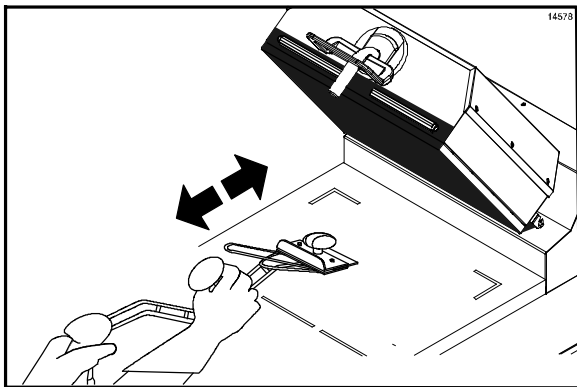


Figure 8

2. Use the wiper squeegee to clean the release material sheet on the upper platen. Use a downward motion to clean the sheet. Hold the handle at a slight upward angle with the wiper end facing downward.

**Do not** press hard against the release material sheet in order to prevent scratching or tearing.

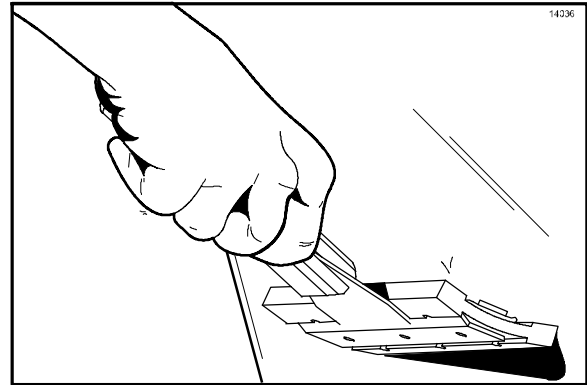


Figure 9

3. **Using the wiper squeegee**, push the grease at the rear of the lower grill plate into the grease can. **Do not** use the grill scraper for this step.

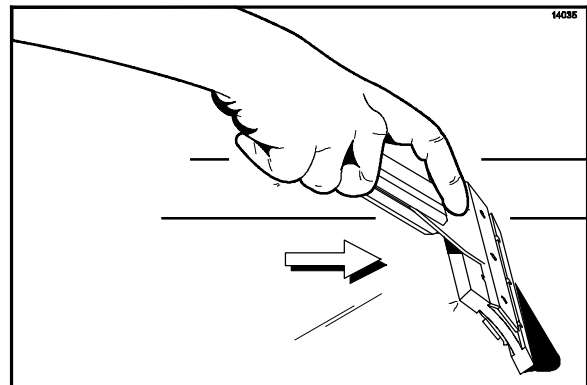


Figure 10

4. Use the grill cloth to clean the back splash plate and the bullnose areas as needed during operation.

**Note:** To increase the life of the release material sheet, wipe it with a damp, folded grill cloth a minimum of **four times** every hour.



**CAUTION: THE UPPER PLATEN SURFACE IS VERY HOT! TO PREVENT BURN INJURIES, USE EXTREME CAUTION WHEN WIPING THE RELEASE MATERIAL SHEET.**



### To Cook in the Flat Grill Mode

1. Select a flat grill menu by pressing the MENU SELECT key until the desired menu item is displayed. The display may alternate between the message "TOO COOL - Product Name" or the message "TOO HOT - Product Name" until the grill reaches the set temperature.
2. After laying product in the prescribed method, press the STANDBY button to start the cooking time countdown.
3. Perform the required functions displayed on the LED (i.e., sear, turn). Pressing the RAISE button will cancel the count down.
4. When the cooking time is complete, the display will flash the message "REMOVE" and an audible alert will sound. Remove the product per the prescribed method.

### To Transition From Breakfast to Lunch

Approximately 30 minutes before changing to the lunch menu, perform the following steps:

1. Press the TEMP key to display the upper platen temperature.
2. Within 5 seconds, press the UP ARROW key. The upper platen indicator (amber) will light and maintain the normal operating (set) temperature.

### To View Settings For a Menu Item

1. While in the Operating Mode, and a menu item has been selected, press the UP ARROW key. Pressing the UP ARROW key repeatedly will scroll through the time, gap settings, and set temperatures. The display will return to the Operating Mode if the UP ARROW key has not been pressed for 5 seconds.

### To Display the Current Temperature

**Note:** The actual temperatures may be displayed at any time, including during a cooking cycle.

1. Press the TEMP key to display the actual temperature of the lower, front zone.
2. Repeatedly pressing the TEMP key will scroll through all other heat zones.

**Note:** Pressing the TEMP key once, and then pressing the PROG key five times will display all temperature zones at the same time. To return to the Operating Mode, press the MENU key or the RIGHT ARROW key.

### Reloading Factory Defaults

All factory defaults may be reloaded. Reloading these defaults will change all product selections to the original factory settings. After loading the defaults, all heat zones must be recalibrated.

1. While in the Operating Mode, press and hold the PROG key to display the software version number.
2. Press and hold the UP ARROW key until "RELOAD DEFAULTS?" is displayed.
3. Press the RIGHT ARROW key to accept this option and reload the factory defaults. Pressing the PROG key will return the control to the software version screen without loading the defaults.

## CLOSING PROCEDURES



- **CAUTION:** Never use cold water or ice to cool the upper platen or the lower grill plate.
- Never use grill screens on the upper platen or the lower grill plate.
- Never allow the grill scraper or abrasive cleaning materials to come in contact with the release sheet.

1. Raise the upper platen to the OPEN position by pressing the red RAISE button. (See Figure 11.)

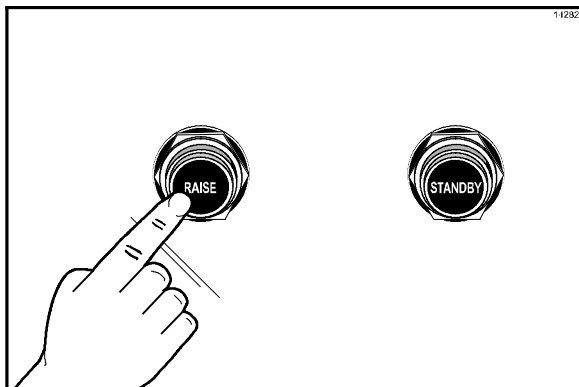


Figure 11



**CAUTION: NEVER USE FORCE TO RAISE THE UPPER PLATEN. DAMAGE TO COMPONENTS MAY RESULT. USE ONLY THE RAISE BUTTON TO OPEN THE UPPER PLATEN!**

2. Press the MENU SELECT key until the message “CLEAN MODE” is displayed.

When the cook surfaces reach the proper temperature for cleaning, a tone will sound and the message “READY TO CLEAN” will be displayed.

To cancel the alarm, press the MENU SELECT key until the message “OFF” is displayed. (See Figure 12.)



Figure 12

3. Put on heat-resistant gloves. (See Figure 13.)

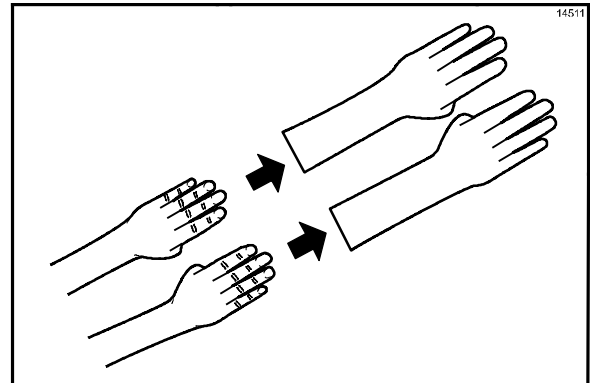


Figure 13



**CAUTION: THE UPPER PLATEN SURFACE AND RELEASE SHEET ARE VERY HOT. TO PREVENT BURN INJURIES, USE EXTREME CARE.**

4. Wipe the exposed surface of the release sheet with a clean, sanitizer-soaked grill cloth. (See Figure 14.)

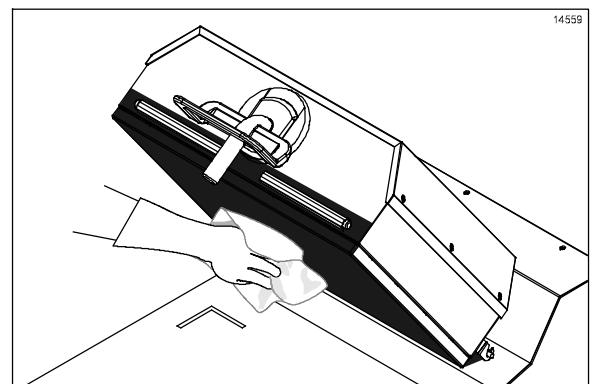


Figure 14

5. Remove the upper release material locking clips by grasping them and sliding them off of the release material bar.

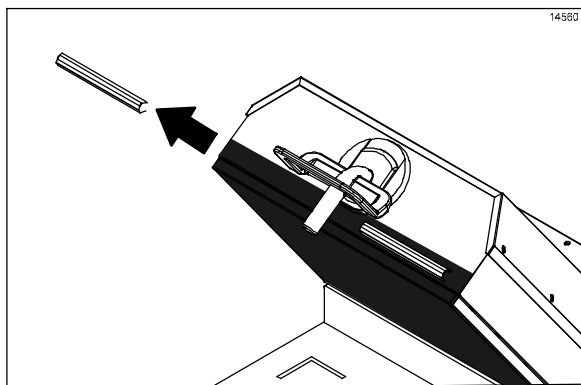


Figure 15

6. Carefully pull the release material sheet down. Unhook the release material rod from the release material hook. (See Figure 16.)

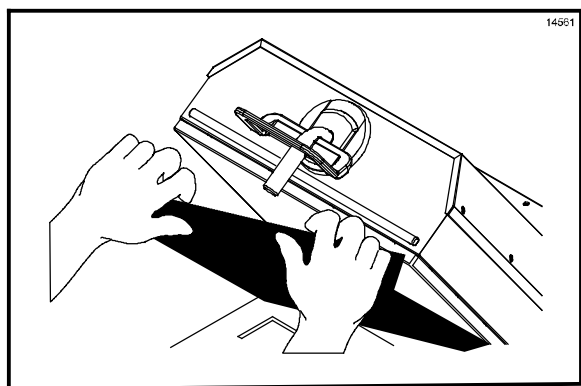


Figure 16

7. Place the release material sheet on a clean, flat surface temporarily for further cleaning. **Do not** fold, crease, or lay it on sharp objects. (See Figure 17.)

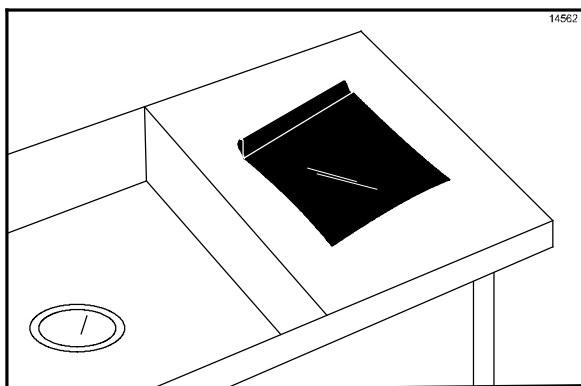


Figure 17

8. Take the release material locking clips and the release material rod to the sink for cleaning. If necessary, soak them in a hot solution of **SolidSense APSC** to remove carbon accumulation.
9. Scrape the **lower** grill surface with the grill scraper, in a front to back direction. (See Figure 18.)

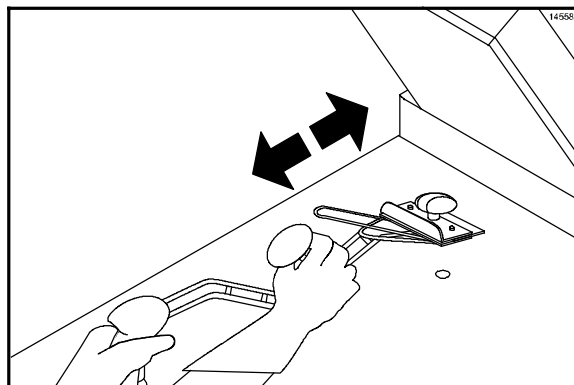


Figure 18

10. Use the grill squeegee to push residual grease into the grease pans. (See Figure 19.)

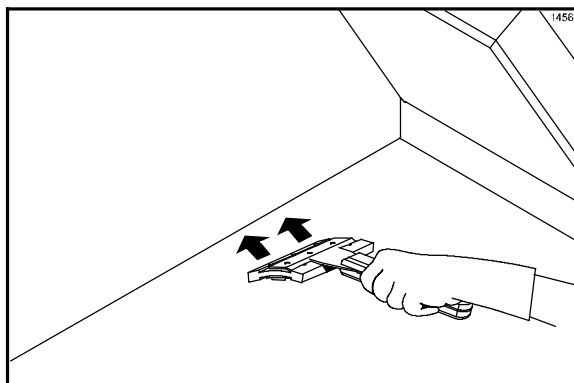


Figure 19

11. Remove, empty, and reinstall the grease pans. (See Figure 20.)

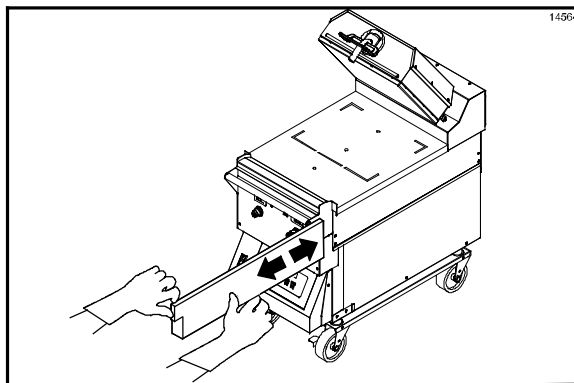


Figure 20

12. Open one packet of **McD Hi-Temp Grill Cleaner (HTGC)**. Empty the contents into an entrée base or stainless steel pan. (See Figure 21.)

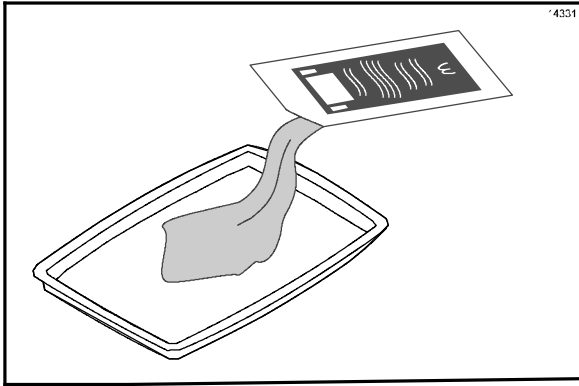


Figure 21

13. Dip the Kay Grill Cleaning Pad Holder into the grill cleaner. (See Figure 22.)

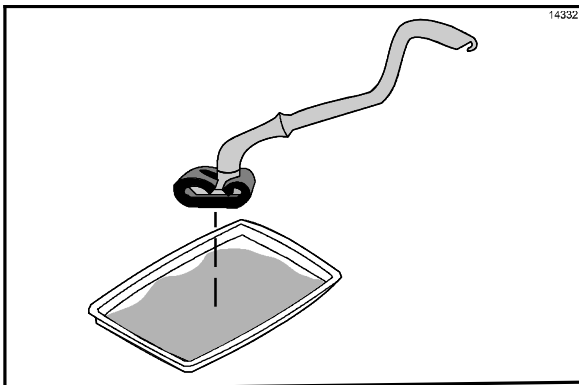


Figure 22

**IMPORTANT: DO NOT scrub while applying the grill cleaner in the following steps:**

14. Apply **McD Hi-Temp Grill Cleaner (HTGC)** to the front side of the platen. (See Figure 23.)

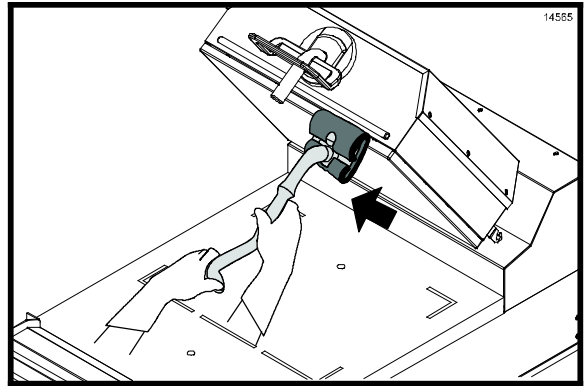


Figure 23



**DO NOT USE METAL SCRAPERS, ABRASIVE PADS, SCREENS OR WIRE BRUSHES ON THE UPPER PLATEN. DAMAGE TO COMPONENTS MAY RESULT.**

15. Apply the grill cleaner to the platen surfaces. (See Figure 24.)

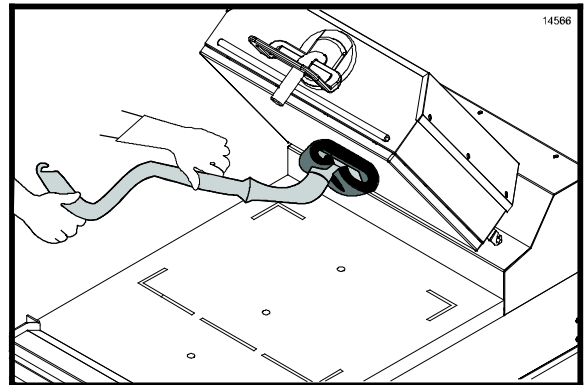


Figure 24

16. Apply the grill cleaner to the back side of the platen. (See Figure 25.)

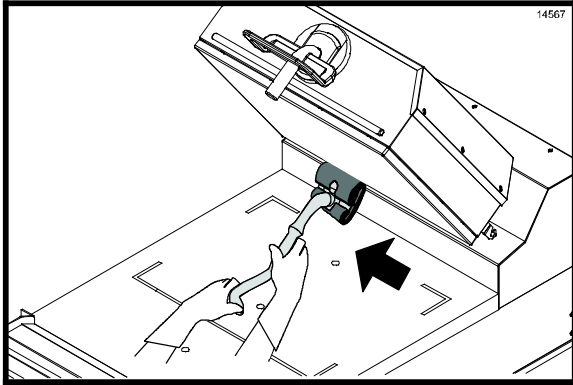


Figure 25

19. Scrub the platen surfaces. (See Figure 28.)

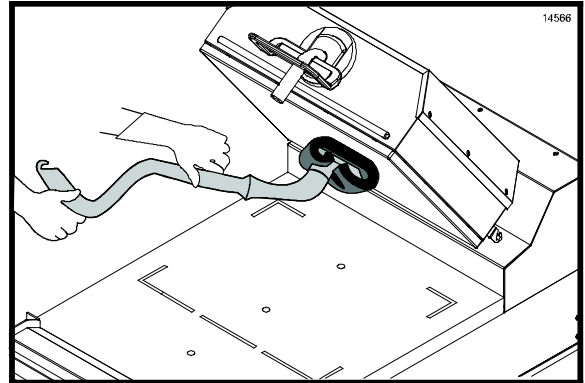


Figure 28

17. Apply the grill cleaner to the outer edges of the platen. (See Figure 26.)

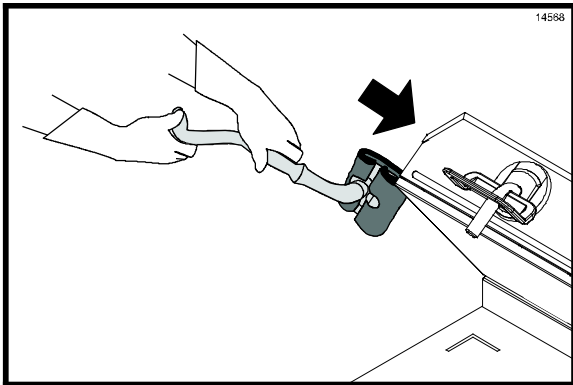


Figure 26

20. Scrub the back side of the platen. (See Figure 29.)

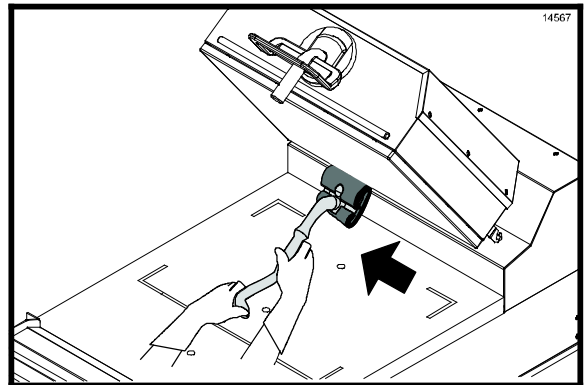


Figure 29

18. Using the Kay Grill Cleaning Pad Holder, scrub the front side of the platen. (See Figure 27.)

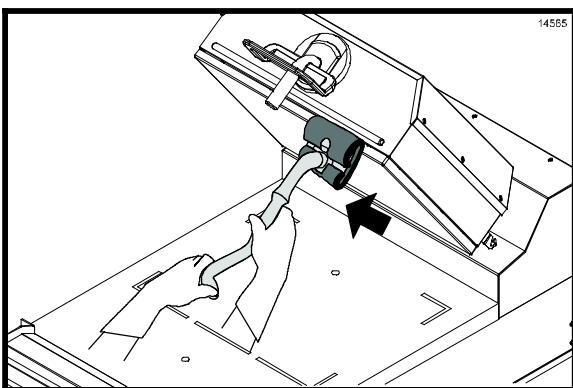


Figure 27

21. Scrub the outer edges of the platen. (See Figure 30.)

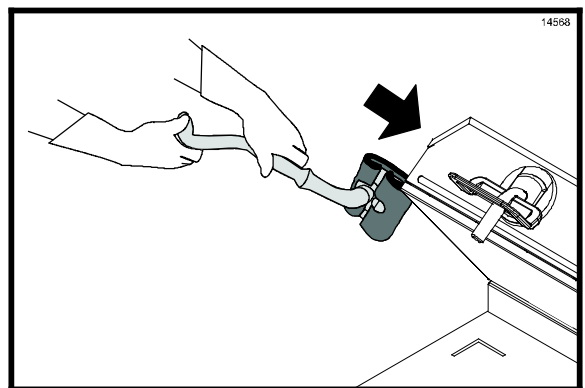


Figure 30

22. Rinse the front, sides, and back of the platen surfaces with a clean, sanitizer-soaked grill cloth. (See Figure 31.)

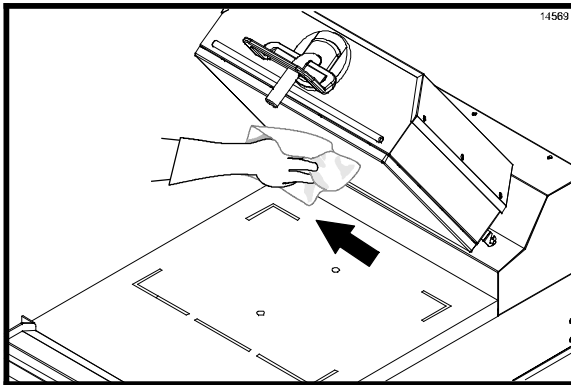


Figure 31

23. Pour the remaining **McD Hi-Temp Grill Cleaner (HTGC)** onto the lower grill surface. (See Figure 32.)

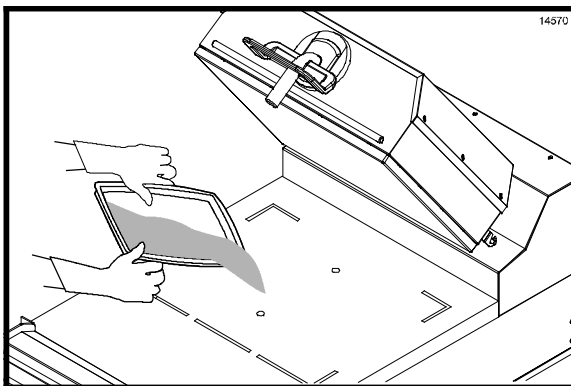


Figure 32

24. Spread a light coating of the grill cleaner over the entire lower grill surface, using front to back strokes. **Do not scrub while applying product.** (See Figure 33.)

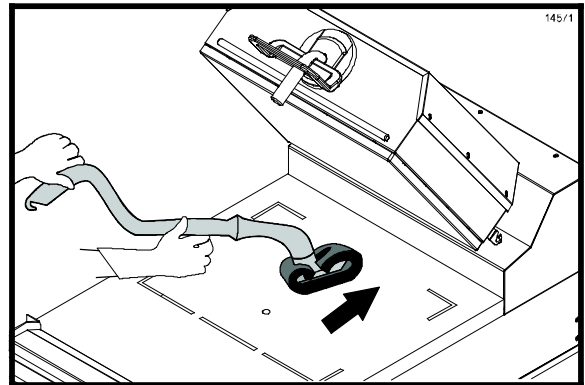


Figure 33

25. Using the cleaning pad holder, lightly scrub the lower grill surface until all soil has been liquified by the grill cleaner. For stubborn soils, apply additional grill cleaner and lightly scrub. (See Figure 34.)

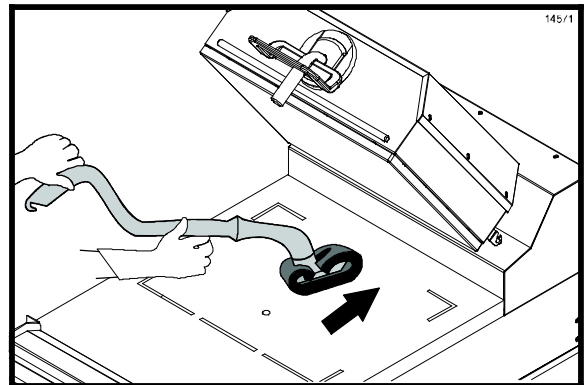


Figure 34

**Note:** The rear of the upper platen, as well as the tubular arm, can easily be wiped from the front of the unit. If cleaning is performed on a daily basis, there should be no carbon build-up.

26. Pour a small amount of lukewarm water on a clean, sanitizer-soaked grill cloth while holding it over the bottom grill surface. Wipe the lower grill surface until all residue is removed. (See Figure 35.)

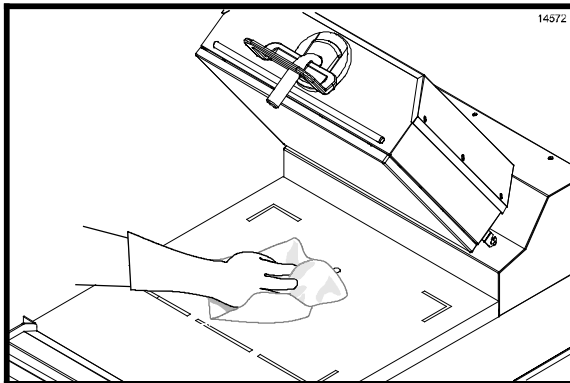


Figure 35

27. Place the upper platen release sheet flat on the lower grill surface. Gently clean both sides of the sheet with the Kay Grill Cleaning Pad Holder. (See Figure 36.)

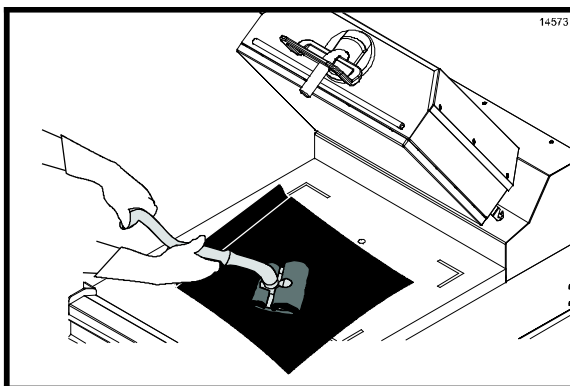


Figure 36

28. Rinse both sides of the release sheet with a clean, sanitizer-soaked grill cloth. (See Figure 37.)

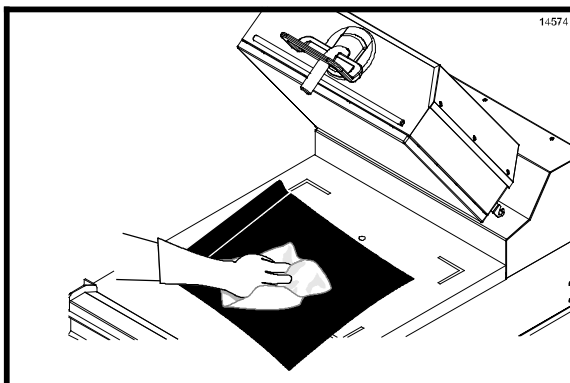


Figure 37

29. Re-install the release sheet. Secure the sheet with the locking clips and rod. (See Figure 38.)

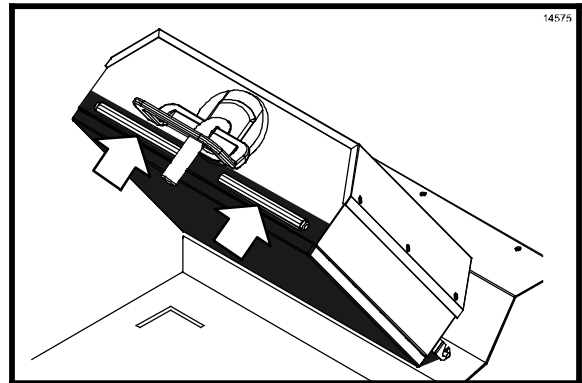


Figure 38

30. Wipe the lower grill surface with a clean, sanitizer-soaked grill cloth. Repeat until no visible soil remains. (See Figure 39.)

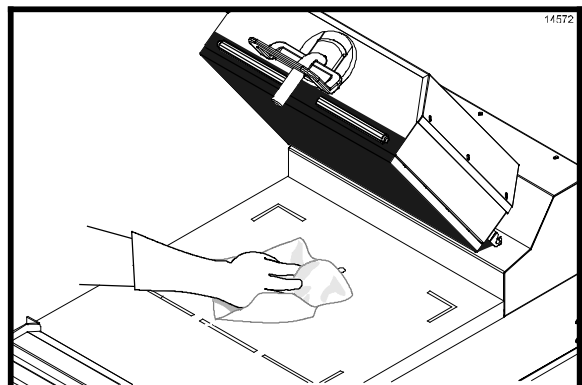


Figure 39

31. Remove and empty the grease pans. (See Figure 40.)

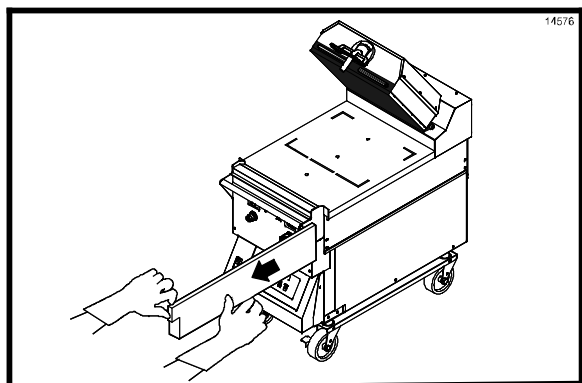


Figure 40

32. Wash and rinse the grease pans in the 3-compartment sink.
33. Re-install the grease pans. (See Figure 41.)

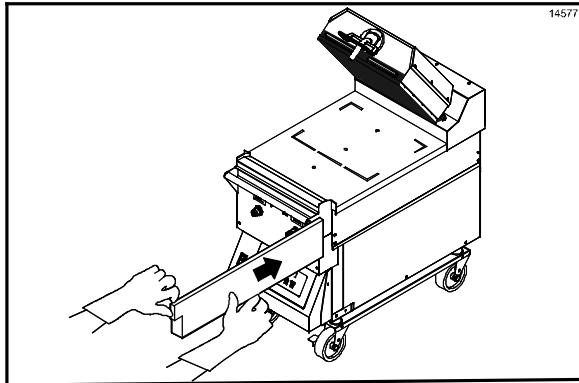


Figure 41

34. Wipe the remaining grill surfaces with a clean sanitizer-soaked grill cloth.

35. Apply a light coat of fryer cooking oil to the entire **lower** grill surface.
36. Leave the upper platen in the OPEN position overnight.
37. Place the fan interlock switch in the OFF position. (See Figure 42.)

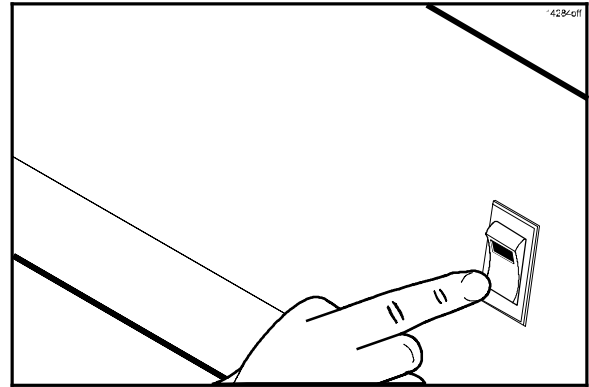


Figure 42



## TROUBLESHOOTING GUIDE



**WARNING:** Inspection, testing and repair of electrical equipment should be performed only by qualified service personnel.



**The clamshell grill should be disconnected from all electricity when servicing, except when electrical tests are required.**



**DANGER:** Use extreme care during electrical circuit tests. Live circuitry may be exposed.



The grill must be pulled away from the wall for thorough cleaning. When returning the grill to its original position, use extreme caution to smoothly and slowly roll the grill backward into place. Failure to do so may cause the grill to tip, and will cause severe equipment damage or personal injury.

### ENTIRE GRILL

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
The clamshell grill will not heat. (The control displays the message "HEATER FAILURE"*.) <b>*Note:</b> This pertains to the upper and the lower heaters.	The power connection is not connected.	Check the power connection.
	The grill contactor is faulty.	Call a service technician.
	The restaurant circuit breaker has tripped.	Reset the restaurant breaker.
	The heater is faulty.	Call a service technician.
	The high limit switch is faulty.	Call a service technician.
	The solid state relay is faulty.	Call a service technician.
One heating zone will not heat (the indicator light is green).	The interface board is faulty.	Call a service technician.
	The processor control is faulty.	Call a service technician.
	The thermocouple is faulty.	Call a service technician.
One heat zone will not heat (the indicator light is amber).	The wire harness is faulty.	Call a service technician.
	The solid state relay is faulty.	Call a service technician.
	The interface board is faulty.	Call a service technician.
One of the heat zones is overheating. (The display reads "TOO HOT".)	The wire harness is faulty.	Call a service technician.
	The solid state relay is faulty.	Call a service technician.
	The interface board is faulty.	Call a service technician.

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
The exhaust hood and grill will not turn on when FAN INTERLOCK is placed in the ON position.	The restaurant circuit breaker has been tripped.	Reset the circuit breaker.
	FAN INTERLOCK cord is not connected properly.	Reconnect the cord.
	The fan disconnect switch on the roof is in the OFF position.	Turn the switch ON.
	The FAN INTERLOCK switch is faulty.	Call a service technician.
The exhaust hood does not turn on when the FAN INTERLOCK switch is in the ON position.	The FAN INTERLOCK switch is faulty.	Call a service technician.
	Loose or broken wires.	Call a service technician.
The grill will not turn on when the FAN INTERLOCK switch is in the ON position.	The fuse in the control box is blown.	Call a service technician.
	The FAN INTERLOCK switch is faulty.	Call a service technician.
	The ansul reset tripped.	Press the ansul reset button.
The upper platen will not stay in the COOK or STANDBY position.	The processor control is faulty.	Call a service technician.
	The control harness is faulty.	Call a service technician.
	The interface board is faulty.	Call a service technician.
	The latch switch is faulty.	Call a service technician.
	The latch solenoid is faulty.	Call a service technician.
	The pneumatic system is faulty.	Call a service technician.
The upper platen stays in the COOK position after the cook cycle is over.	The spring is broken.	Call a service technician.
The upper platen will not stay in the COOK position, but will stay in the STANDBY mode.	The processor control is not set properly.	Check the time setting on the processor control.
The upper platen will not stay in the STANDBY mode, but will stay in the COOK position.	Incorrect use of the STANDBY button.	Press the STANDBY button within five seconds of lowering the platen into the COOK position.
The upper platen opens too rapidly.	The orifice/check valve is incorrect or missing.	Call a service technician.

<b>PROBLEM</b>	<b>PROBABLE CAUSE</b>	<b>CORRECTIVE ACTION</b>
The product is under-cooked or overcooked.	The release material sheet is worn.	Replace the release material sheet.
	Incorrect cooking time.	Reset the processor control for the correct time.
	Incorrect temperature.	Adjust the processor control to the proper setting.
	The preset gap height is incorrect.	Call a service technician.
	The heating zone is not heating.	Call a service technician.
The product is not cooking evenly.	The upper platen surface has carbon build-up.	Closing procedures must be followed to remove carbon build-up.
	The release material sheet is worn.	Replace the release material sheet.
	The air pressure is not high enough.	Adjust the air pressure to 35 psi.
	The preset gap height is incorrect.	Call a service technician.
The display reads "PROBE OPEN".	Thermocouple is faulty.	Call a service technician.
The display reads "UPPER PLATEN STUCK".	The arm bearings are dirty.	Call a service technician.
	The air pressure is not high enough.	Adjust the air pressure to 30 psi.
	The air cylinder is faulty.	Call a service technician.
	Plugged air lines to cylinders.	Replace the air lines.
The automatic air drain will not close.	Faulty solenoid.	Call a service technician.
	Loose or broken wire.	Call a service technician.

## ORDERING/SERVICE INFORMATION

Taylor Distributor: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Date of Installation: \_\_\_\_\_

### Data Label

The data label provides necessary information that the operator should record and refer to when calling for parts or service. The data label for the Model 38 is located on the front panel.

Complete for quick reference when this information is requested.

1. Model Number: 38

2. Serial Number \_\_\_\_\_

3. Electrical Specs:

Voltage \_\_\_\_\_ Cycle \_\_\_\_\_ Phase \_\_\_\_\_

4. Maximum Fuse Size: \_\_\_\_\_ Amps

## NON-SCHEDULED MAINTENANCE



**WARNING: INSPECTION, TESTING, AND REPAIR OF ELECTRICAL EQUIPMENT SHOULD ONLY BE PERFORMED BY QUALIFIED SERVICE PERSONNEL.**



**ALL ELECTRICAL CONNECTIONS SHOULD BE DISCONNECTED AND THE HOOD CIRCUIT BREAKER SHOULD BE TURNED OFF WHEN SERVICING THE CLAMSHELL GRILL. FAILURE TO DO SO MAY RESULT IN EQUIPMENT DAMAGE OR PERSONAL INJURY.**

## MENU ITEMS

### Change a Menu Item

Menu items may be programmed by selecting the “YES” or “NO” options on the display. Only those items with “YES” selected will appear in the Operating Mode Menu List.

1. To add an item to the Operating Mode menu list, press and hold the PROG key for five seconds (while in the Operating Mode). The software version will be displayed.
2. Press the PROG key again to display “MENU ITEMS”.
3. Press the MENU SELECT key to scroll through all product names until the desired product name is displayed.
4. Pressing the UP ARROW will alter the display message between “YES” and “NO”. Selecting “YES” when an item is displayed will allow that item to be displayed in the Operating Mode menu list.
5. Pressing the PROG key will return to the “MENU ITEMS” display. Pressing the RIGHT ARROW key will return the control to the Operating Mode.

### Change Product Cook Times

1. To change the cook times for a specific product (while in the Operating Mode), press and hold the PROG key for five seconds.
2. Press the PROG key again. The words “MENU ITEMS” will appear.
3. Press the MENU SELECT key to scroll through all products. Continue pressing the MENU SELECT key until the desired product is displayed.
4. Press the TEMP key. The message “REMOVE IN” will appear.
5. Press the RIGHT ARROW key to move the cursor (blinking digit) to the required digit position.
6. Press the UP ARROW key to obtain the desired number. Repeat steps 5 and 6 as necessary.
7. To return to the Operating Mode, press the PROG key to display “MENU ITEM”, and then press the RIGHT ARROW key.

### Change Alarm Mode

The alarm mode may be set to Auto or Manual. If the alarm is set to Auto, the audible alert will occur five seconds before the end of the cook time is finished. If the alarm is set to Manual, the audible alert will occur as the timing is finished. In the Manual Mode, the alarm must be cancelled by pressing the Raise or the Standby button.

1. While in the Operating Mode, press and hold the PROG key until the version number appears.
2. Press the PROG key until “MENU ITEMS” appears.
3. Press the MENU SELECT key to scroll through all product names until the desired product is displayed.
4. Press and release the TEMP key until “ALARM (AUTO/MAN)” appears.

- Pressing the UP ARROW key alters the display message between “AUTO” and “MANUAL”. Set it to the desired mode.
- To return to the Operating Mode, press the PROG key and the RIGHT ARROW key.

### Change Product Cook Temperatures

- To change the temperature for a specific product (while in the Operating Mode), press and hold the PROG key for five seconds. The software version will be displayed.
- Press the PROG key again. The words “MENU ITEMS” will appear.



Figure 43

- Press the MENU SELECT key to scroll through all products until the desired product is displayed.
- Press the TEMP key to scroll through all grill functions.

**Note:** Press the TEMP key once to display the “REMOVE IN” screen, twice to display the “ALARM AUTO” screen, three times to display the “TOP TEMP” screen, and four times to display the “BOTTOM TEMP” screen. Continue pressing the TEMP key until the message “TOP TEMP” is displayed.

- Press the RIGHT ARROW key to move the cursor (blinking digit) to the required digit position.

- Press the UP ARROW key to obtain the desired number. Repeat steps 5 and 6 as necessary.
- Press the TEMP key to move to the “BOTTOM TEMP” display. Repeat steps 5 and 6 as necessary.
- Press the PROG key to return to the “MENU ITEMS” display.



Figure 44

- Press the RIGHT ARROW key to return to the Operating Mode.

### To Program an Optional Menu Item

- To select and program an Optional Menu item (while in the Operating Mode), press and hold the PROG key for five seconds or until the software version is displayed.
- Press the PROG key again to display “MENU ITEM”.
- Press the MENU SELECT key to scroll through all products until the desired OPTIONAL MENU item is displayed.
- Press the UP ARROW to alter the display message from “NO” to “YES”. Selecting “YES” will allow the item to be displayed in the operating Mode menu list.
- Refer to “**Change Product Cook Times**”, steps 4 through 6 to set the desired cook time.
- Refer to “**Change Alarm Mode**” steps 4 through 5 to select the desired alarm mode.
- To select the proper gap setting, press the TEMP key to display “GAP SETTING”. Press the RIGHT ARROW key to move the cursor (blinking character) to the required digit position. Press the UP ARROW key to obtain the desired number. Repeat as necessary.

8. Refer to “**Change Product Cook Temperatures**” steps 4 through 7 to select the desired cook temperatures.
9. The Optional Menu item may be programmed with any product name desired. The product name must be 16 characters or less.
  - a. Press the TEMP key to display the Optional Menu item. The first character should be blinking.
  - b. Press the UP ARROW key to obtain the desired character.
  - c. Press the RIGHT ARROW key to move the cursor (blinking character) to the next digit.
  - d. Repeat steps a. and b. as desired.
10. To return to the Operating Mode, press the PROG key to display “MENU ITEM”, and then press the RIGHT ARROW key.

## SYSTEM SET-UP

### Probe Calibration

1. While in the Operating Mode, press and hold the PROG key until the software version is displayed.

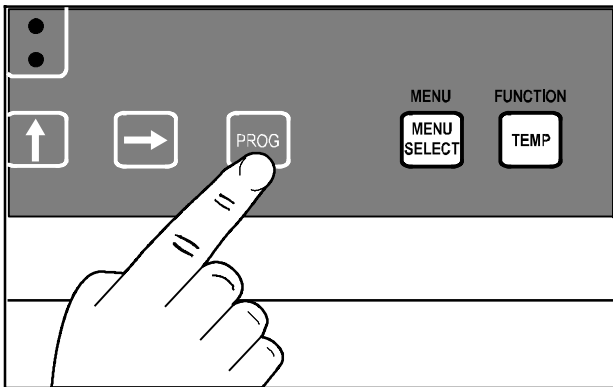


Figure 45

2. Press the PROG key twice. The message “SYSTEM SETUP” should be displayed.



Figure 46

**Note:** All system set up functions will be accessed from this screen.

3. Press and release the MENU key once to display the message “PROBE CALIBRATION”.



Figure 47

4. Press the TEMP key to display the message “B. FRONT TEMP \_\_\_\_F (or C)”.



Figure 48

5. Place the pyrometer surface probe in the center of the selected heat zone.
6. If the displayed temperature on the controller is more than 5°F/3°C different from the surface probes display,
  - a. Press the UP ARROW key to **increase** the temperature amount to match the displayed temperatures.



Figure 49

or

- b. Press the RIGHT ARROW key to **decrease** the temperature amount to match the displayed temperatures.



Figure 50

7. Press the TEMP key to display the next heat zone temperature (i.e., CENTER, BACK, or TOP).
8. Repeat steps 5 through 7 for all other zones.
9. Press the MENU SELECT key to return to the “PROBE CALIBRATION” display or press the PROG key to return to the “SYSTEM SETUP” display. To return to the Operating Mode, press the RIGHT ARROW key.



Figure 51

## Display Temperature in °F/°C

1. Press "PROG" to display the version number.
2. Press "PROG" to display the menu item.
3. Press "PROG" to display the SYSTEM SETUP screen.
4. While at the SYSTEM SETUP screen, press the MENU key twice to display the message "DISPLAY TEMP IN \_\_\_\_". Pressing the UP ARROW key will alter the display message between F and C to display the temperature in degrees Fahrenheit or Celsius.
5. Press the PROG key to return to the SYSTEM SETUP display. To return to the Operating Mode, press the RIGHT ARROW key.

## Alarm Volume

1. While at the "SYSTEM SETUP" screen, press the MENU key three times to display the message "ALARM VOLUME: \_\_\_\_". Pressing the UP ARROW key will toggle the alarm volume between LOW or HIGH.
2. To return to the Operating Mode, press the PROG key once, then press the RIGHT ARROW key.

## Too Cool Delay

When the temperature of a heating zone drops 39°F (22°C) below the setpoint, a timer will start. If the timer expires before the temperature rises above this level, a "TOO COOL" error message will be displayed and cooking will be prohibited. The timer will be reset when the temperature rises above the 39°F (22°C) below the setpoint. If the timer has been initiated by a previous cook cycle and the temperature is still 39°F (22°C) below the setpoint, another cook cycle of the same menu item may be started as long as the timer has not expired. Once the cooking cycle for any product is initiated, the grill will go through the cycle until the end.

If another product is selected and the temperature is 39°F (22°C) below the setpoint with the timer running, the timer will be reset. The "TOO COOL" message will be displayed and cooking will be prohibited until the temperature rises above the 39°F (22°C) below the setpoint.

The timer will only be initiated on the lower plate zones. If the upper platen temperatures drop below the 39°F (22°C) below the setpoint, a "TOO COOL" message will be displayed immediately.

The timer is adjustable from 0 to 999 seconds, with a default of 300 seconds. If the timer is set at 0, the lower plate will operate with no "TOO COOL" timer as in the upper platen.

1. While at the "SYSTEM SETUP" screen press the MENU key six times to display the message "TOO COOL DELAY: 300S".
2. Press the RIGHT ARROW key to move the cursor (blinking character) to the required digit position.
3. Press the UP ARROW key to obtain the desired number. Repeat steps 2 and 3 as necessary.
4. To return to the OPERATING mode, press the PROG key once; then press the RIGHT ARROW key.

There are other items in the "SYSTEM SETUP" menu: "AUTO CLOSE", "MULTI STAGE CLAM", "POST COOK ADJUST", and "IGNITOR: MULTI". These items should only be accessed by a qualified service technician.

## CLAMSHELL GRILL CONTROLS

### Fan Interlock Switch

This switch controls power to the grill and must be turned "ON" to start the operation. The light will illuminate when the switch is ON. The controller will display "INITIALIZATION". The display will flash to "OFF". This process is a self diagnostics check.



## Indicator Lights

There are four indicator lights indicating the status of each zone on the grill: three on the lower (front to rear), and one on the upper platen (center). Each light can display three different colors, indicating the status for the corresponding zone.

**Red:** The zone(s) is too hot, more than 79°F/44°C over the set temperature.

**Amber:** The zone(s) is calling for heat.

**Green:** The zone(s) is at or above the set temperature.

## Display

The controller display will contain information relevant to each operation in both the Cook and the Program Modes.

## Up Arrow Key

This key has two functions:

1. In the Cook Mode, when pressed, will display the Remove Time, Gap Settings, Top Temperature and Bottom Temperature for the menu item displayed. Each item will be displayed in the order as stated above. After five seconds, the display will return to the product menu item.
2. In the Program Mode, will change the value of the current cursor digit (see RIGHT ARROW key).

## Right Arrow Key

This key operates only in the Cook and Program Modes. In the Program Mode various displayed parameters will be shown in numerical values. Each number, when displayed, will have a flashing digit . . . the cursor digit. The RIGHT ARROW key will move the cursor to the next digit. Using the RIGHT ARROW key in conjunction with the UP ARROW key described above, any parameter value displayed in the Program Mode may be altered.

In the Cook Mode, the RIGHT ARROW key can be used to cycle through the menu selections in reverse order.

## Program Mode Key

This key has two functions:

1. The primary function is to access Programming and Calibration of the grill. Push and hold for five seconds. The display will show the type and the version number. There are two programming features: MENU ITEMS and SYSTEM SETUP.
2. The second function is used with the TEMP key. To display all temperature zones at the same time, press the TEMP key one time and the PROG key five times. This will display all four temperature zones.  
(example: T 325 B 300 C 310 F 312).

## Menu Key

This key has two functions:

1. In the Cook Mode this key will allow you to change menu items.
2. In the Programming Mode this key is used to advance to the next program item.

## Temperature/Function Key

This key has two functions:

1. In the Cook Mode, each time the key is pressed, the current temperature for that zone will be displayed. The displayed temperature begins at the lower front platen and works sequentially to the top each time you press the key. After five seconds the display will return to the menu item selected.
2. In the Program Mode, this key becomes the Function key allowing you to scroll through the functions in the MENU ITEMS section of programming. This key has no function in the SYSTEM SETUP portion of programming.
3. In the Probe Calibrate Mode, this key can be used to cycle through the temperature zones.

## Standby Button

Press this button once to lower the grill to the COOK position. Press this button twice to lower the platen into the STANDBY position. The controller will go into an idle state and the display will flash the message “STANDBY”, along with the menu item currently selected. For energy conservation and periods of non-use, this will maintain grill temperatures. Press this button once to lower the platen into the COOK position. When the cook time has elapsed, the platen will automatically raise.

## Cancel/Raise Platen Button

From the Standby Mode, pushing this button will cancel Standby and raise the platen. During the cooking cycle, pressing this button will cancel the cooking timer and return the grill to the Ready Mode.

## Error Messages

If a zone temperature falls below the set-point, and the controller does not detect a temperature increase within 240 seconds, the messages “**FAULTY ELEMENT - OR**” and “**SHORTED PROBE**” will flash alternately. An alarm will tone to warn the operator of this error.

The message “**PROBE OPEN**” will flash on the display when an open probe condition occurs. The controller will then deactivate the respective heater. If the open probe condition is eliminated, the controller will return to the OFF mode. The “**PROBE OPEN**” Error Message can be cancelled by pressing any key.

During the start-up procedure, the message “**EEPROM CORRUPT**” will be displayed on the LED if a new version of software has been loaded or if the controller detects a corrupt menu item. To acknowledge this condition and return to the OFF mode, press the PROG key.

If the heater or heater element is faulty, the message “**LOWER HEATER FAILURE**” or “**UPPER HEATER FAILURE**” is displayed. This message also is displayed when there is a power supply deficiency.

If the controller does not detect an open latch switch within 2 to 4 seconds after an attempt to open the platen is made, the message “**UPPER PLATEN STUCK**” will appear. To cancel this alarm, the unit must be powered down, or the latch switch must be opened.

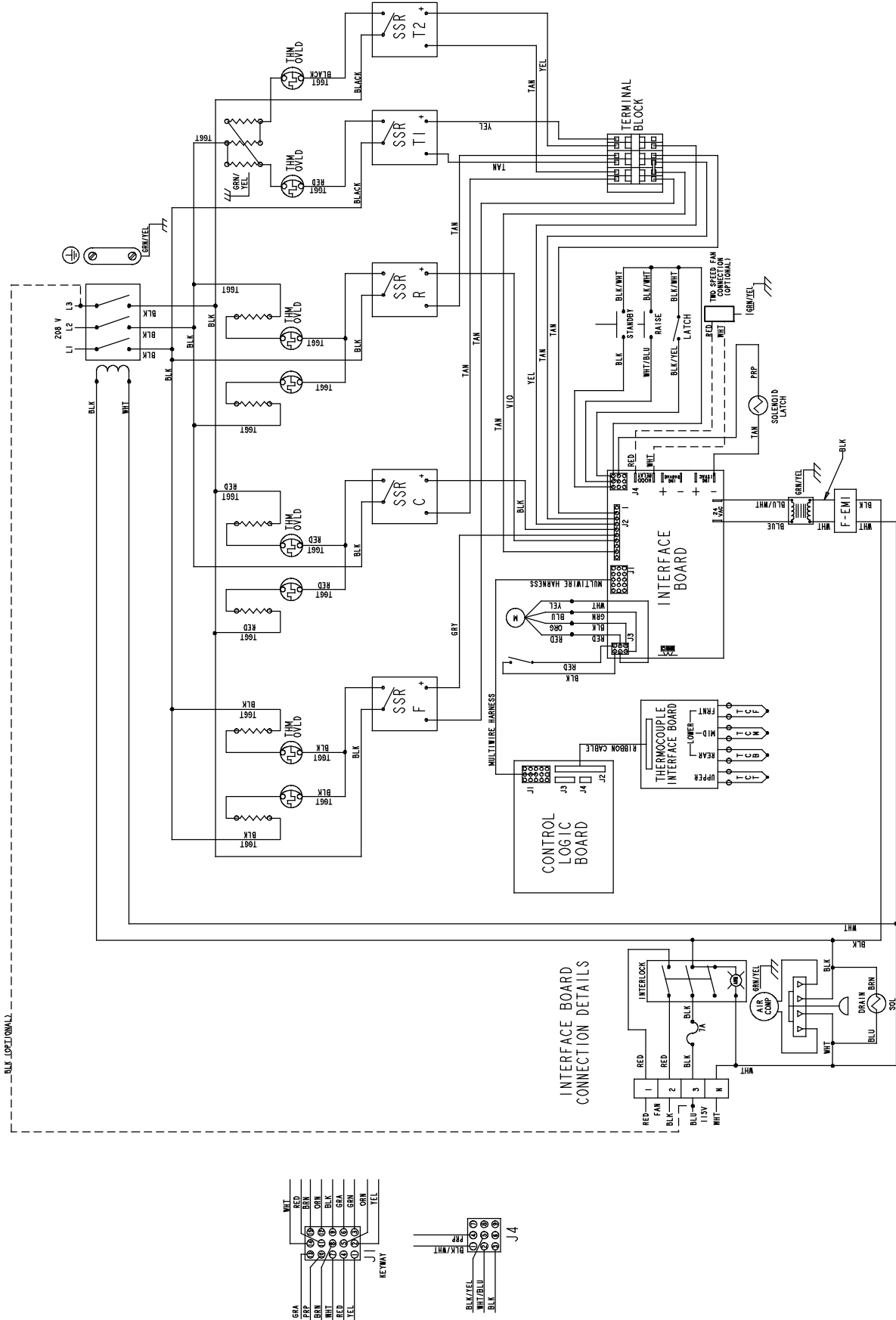
If the latch switch does not close within 3 to 5 seconds after the STANDBY button has been pressed, a “**PLATEN NOT LATCHED**” message will be displayed. The alarm can be cancelled by pressing any key on the control.

After the control has detected this failure, and until the power switch is placed in the OFF position, only flat grill items can be cooked.

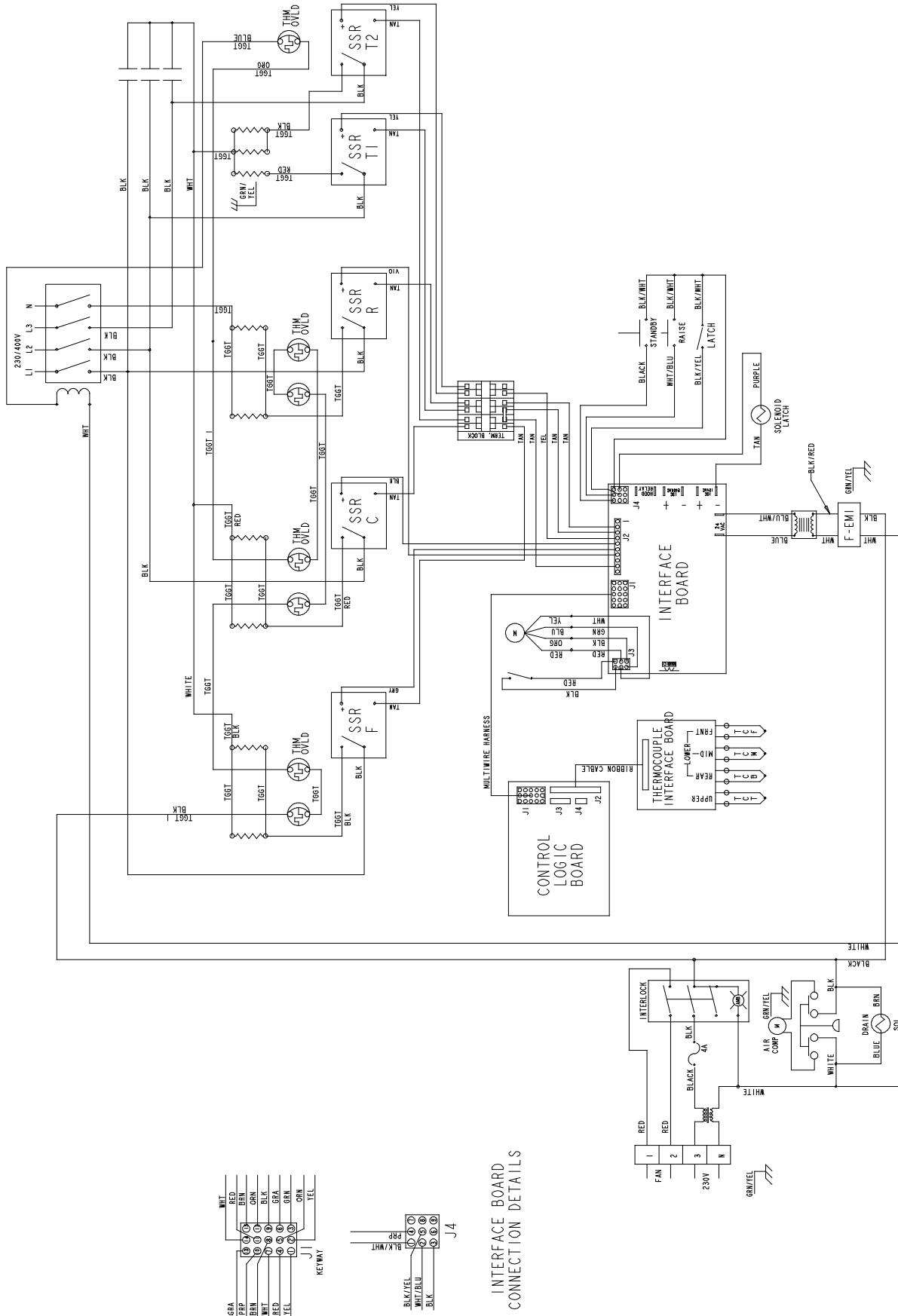
The message “**HOME SWITCH STUCK ON**” will be displayed when the platen is closed and the home switch is not opened. After the control has detected this failure, and until the power switch is placed in the OFF position, only flat grill items can be cooked.

The message “**HOME SWITCH NOT SEEN**” is displayed when the platen is opened and the home switch is not closed. The alarm is cancelled by pressing any key on the control. After the control has detected this failure, and until the grill is powered down, only flat grill items will be allowed.

# 38 WIRING DIAGRAM 074289-23 (Rev. 10/11)

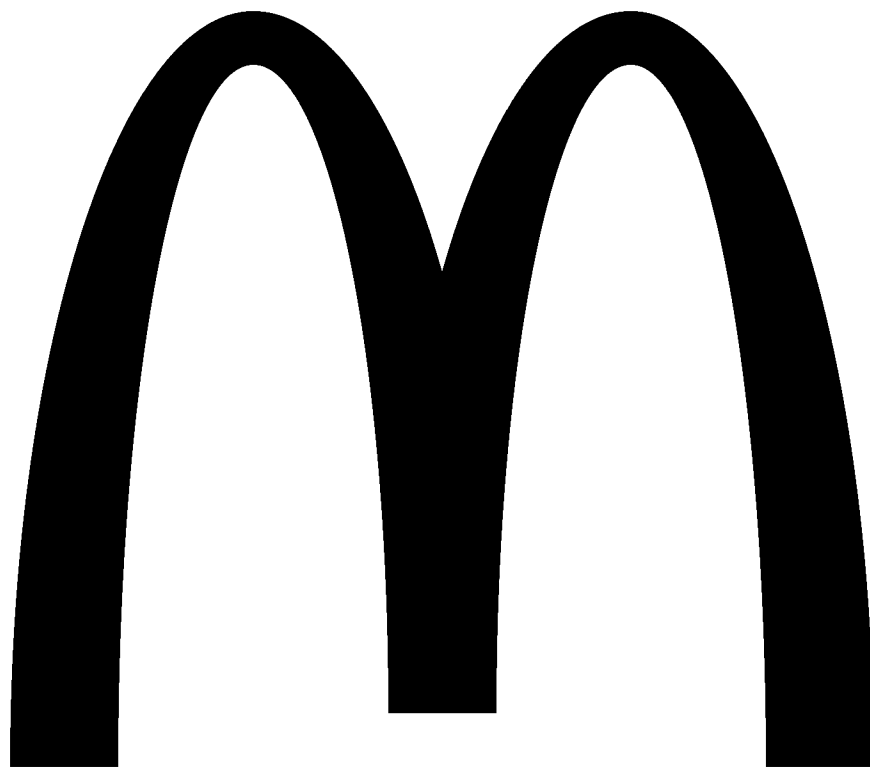


# 38 WIRING DIAGRAM 074289-75 (Rev. 10/11)



**38 WIRING DIAGRAM**  
**074289-78 (Rev. 10/11)**





053810-M