

Service Manual



WOOD STONE GAS PLANCHA

Specialty Equipment

***Countertop Model
and Optional Stand Model***

WOOD STONE GAS PLANCHA

WS-GPL-6036-CT01

WS-GPL-4836-CT01

WS-GPL-3636-CT01

WS-GPL-2436-CT01

WOOD  **STONE**

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WOOD STONE GAS PLANCHA SERVICE

WS-GPL-6036-CT01 (w/ OPTIONAL STAND)

WS-GPL-4836-CT01 (w/ OPTIONAL STAND)

WS-GPL-3636-CT01 (w/ OPTIONAL STAND)

WS-GPL-2436-CT01

THIS SERVICE MANUAL IS FOR USE ONLY BY QUALIFIED SERVICE TECHNICIANS.



WS-GPL-6036-CT01



WS-GPL-6036-CT01
Shown with optional stand



WS-GPL-4836-CT01



WS-GPL-4836-CT01
Shown with optional stand



WS-GPL-3636-CT01



WS-GPL-2436-CT01

**WOOD STONE GAS PLANCHA INSTALLATION AND OPERATION INSTRUCTIONS****RETAIN THIS MANUAL FOR FUTURE REFERENCE**

Additional copies of this manual and prompt responses to service/maintenance questions are available from Wood Stone @ 1-800-988-8103.

IMPORTANT: Consult your local gas supplier for a statement outlining a procedure to be followed in the event you smell gas. Post the statement in a prominent location.

FOR YOUR SAFETY: Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

ESURE DE SÉCURITÉ: Ne pas entreposer ni utiliser de essence ni autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.

IMPORTANT: It is recommended this equipment be installed, maintained and serviced by authorized professionals.

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

AVERTISSEMENT: L'installation, le réglage, la modification, la réparation ou l'entretien incorrect de cet appareil peut causer des dommages matériels, des blessures ou la mort. Lire attentivement les instructions d'installation, de fonctionnement et d'entretien avant de procéder à son installation ou entretien.



IF THIS EQUIPMENT IS NOT PROPERLY INSTALLED A FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THESE INSTALLATION INSTRUCTIONS. A MAJOR CAUSE OF APPLIANCE-RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS APPLIANCE BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

Please read this entire manual before you install the appliance. Failure to follow instructions may result in property damage, bodily injury or even death. Contact your local building or fire officials about restrictions and installation inspection in your area.

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

DO NOT THROW THIS MANUAL AWAY

Intertek
ANSI Z83.11
CSA 1.8



Intertek
ANSI/NSF 4

The Wood Stone Gas Plancha has been tested and approved by Intertek Testing Services and conforms to ANSI Z83.11; is certified to CSA 1.8 and CGA 2.17; and to NSF/ANSI 4.

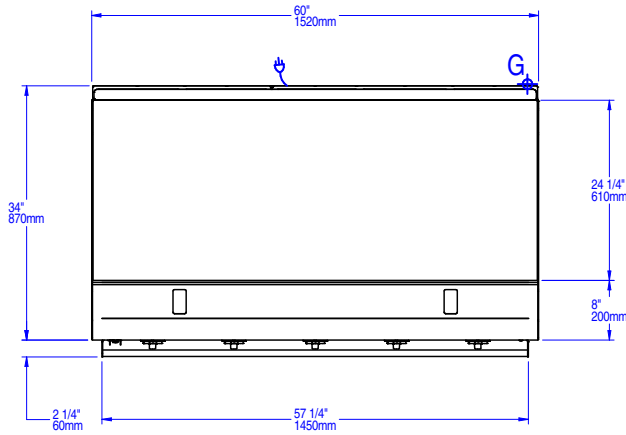


See Troubleshooting section (p. 22) for detailed troubleshooting instructions.

PROBLEM	CAUSE/SOLUTION
<p>Plancha will not turn on.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Verify that incoming power to unit is turned ON. <input type="checkbox"/> Check for damage to the unit's Power Cord or the wall receptacle. <input type="checkbox"/> Check for damage to the unit's Power Switch. Replace if damaged. <input type="checkbox"/> Check circuit breaker for circuit supplying the unit. <input type="checkbox"/> Check that any wall switches external to the unit that control power are turned ON. <input type="checkbox"/> Check that any interlocks external to the unit are turned ON, i.e., ventilation is ON; fire system is not tripped. <input type="checkbox"/> Check wall outlet for 120 VAC between line and neutral (not ground). <input type="checkbox"/> If connected to a GFI outlet or circuit, verify that it is not tripped. Reset if necessary. <input type="checkbox"/> Try connecting unit to a different circuit. <input type="checkbox"/> For more information, please follow detailed troubleshooting instructions in this manual.
<p>Red Fault Light is lit. Plancha is not heating.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Verify that the gas quick connect (hose) is connected <input type="checkbox"/> Check that the gas shutoff is in ON position. <input type="checkbox"/> Make sure there is no air in the gas line. <input type="checkbox"/> Check that any interlocks external to the unit are turned ON, i.e., ventilation is ON; fire system is not tripped. <input type="checkbox"/> For more information, please follow detailed troubleshooting instructions in this manual.
<p>Red Fault Light is lit. Plancha is heating.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Indicates that there was an ignition issue with one of the zones. <input type="checkbox"/> Turn off the plancha and restart. If fault recurs, follow detailed troubleshooting instructions in this manual.
<p>Plancha is not reaching or maintaining cook temperature.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Make sure temperature knobs are set correctly. <input type="checkbox"/> Check that the plancha surface has been properly cleaned <input type="checkbox"/> Follow Surface Temperature Measurement instructions in this manual. Note any zones that are out of range. Follow detailed troubleshooting instructions in this manual.
<p>Plancha turns OFF on its own</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Verify all POWER steps in the first section above. <input type="checkbox"/> Check power switch. Power switch should be illuminated when the plancha is turned on. <input type="checkbox"/> What is the temperature of the griddle? <input type="checkbox"/> Green Zone Indicator Lights are lit only when there is a call for heat for that zone. If a zone is at temperature the associated green light will be OFF. <input type="checkbox"/> Follow detailed troubleshooting instructions in this manual.

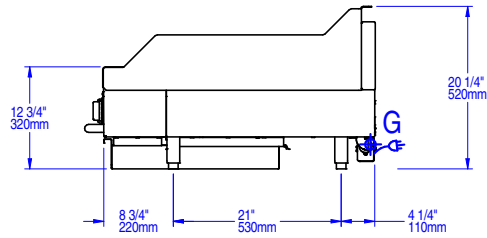
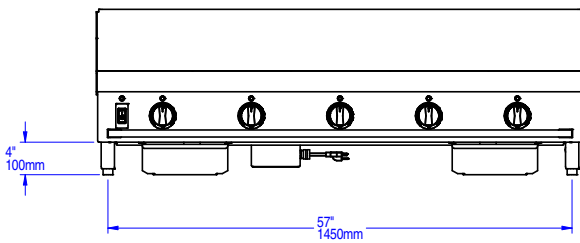


WS-GPL-6036-CT01 COUNTERTOP MODEL



Front view

Side view



Shipping weight: 735 lbs Unit weight: 595 lbs

UTILITIES SPECIFICATIONS Refer to data plate when installing.

Gas 

3/4 inch FNPT gas inlet
150,000 BTU/hr Natural Gas (NG)
125,000 BTU/hr Solaronics models
OR

150,000 BTU/hr Propane (LP)
125,000 BTU/hr Solaronics models

Maximum gas inlet pressure
1/2 psi (14 inches W.C.)

Electrical 

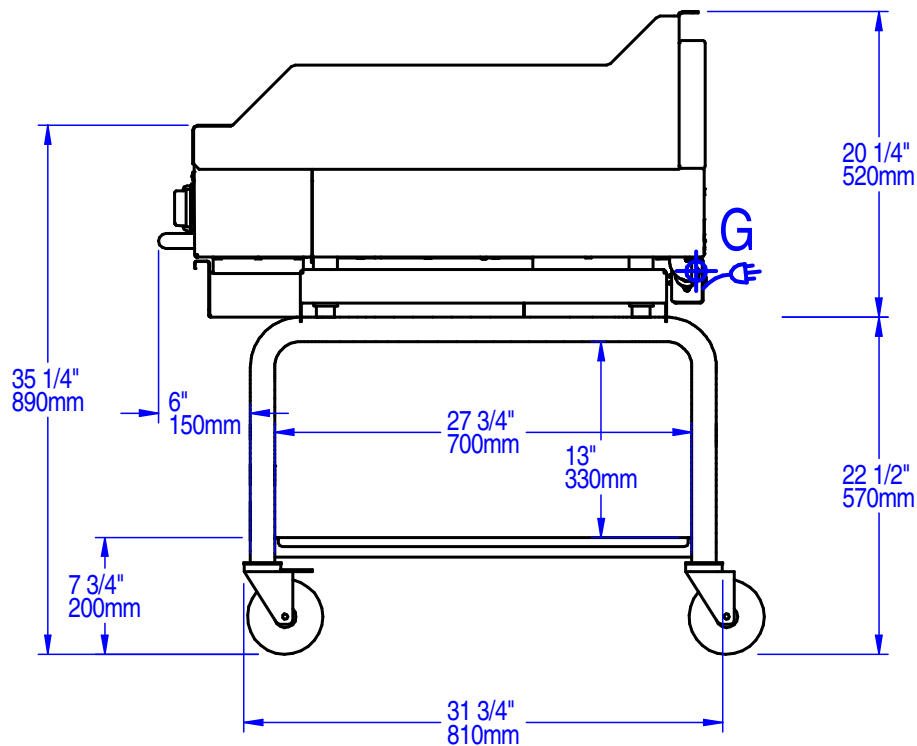
120 VAC, .5 A, 50/60 Hz
Equipped with a NEMA 5-15P plug for use with
a standard 120 VAC 15 A or 20 A outlet.

Venting

The Wood Stone Gas Plancha must be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The appliance must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.



WS-GPL-6036-CT01 WITH OPTIONAL STAND



Shipping weight: 835 lbs. Unit weight: 695 lbs.

UTILITIES SPECIFICATIONS Refer to data plate when installing.

Gas 

3/4 inch FNPT gas inlet
150,000 BTU/hr Natural Gas (NG)
125,000 BTU/hr Solaronics models
OR
150,000 BTU/hr Propane (LP)
125,000 BTU/hr Solaronics models
Maximum gas inlet pressure
1/2 psi (14 inches W.C.)

Electrical 

120 VAC, .5 A, 50/60 Hz
Equipped with a NEMA 5-15P plug for use with
a standard 120 VAC 15 A or 20 A outlet.

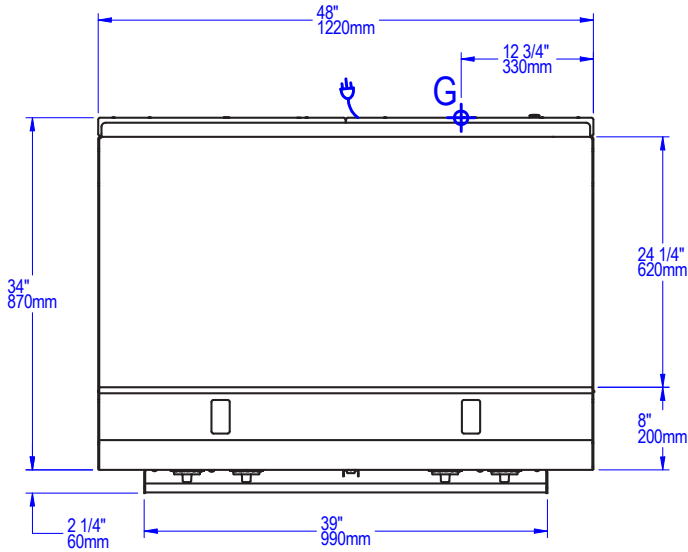
Venting

The Wood Stone Gas Plancha must be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The appliance must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

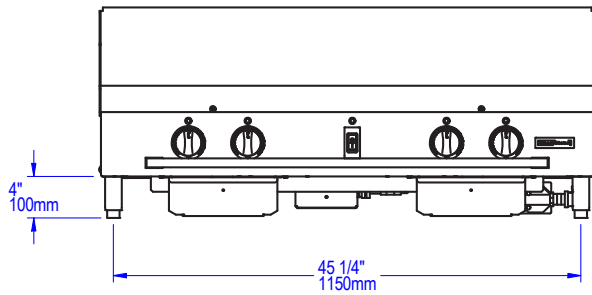


GPL-4836-CT01 COUNTERTOP MODEL

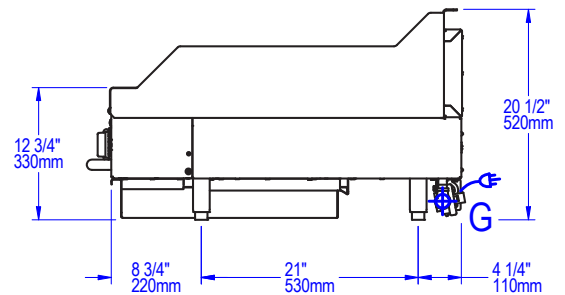
Plan view



Front view



Side view



Shipping weight: 580 lbs Unit weight: 484 lbs

UTILITIES SPECIFICATIONS

Gas ⚡ G

3/4 inch FNPT gas inlet
110,000 BTU/hr Natural Gas (NG)
100,000 BTU/hr Solaronics models
OR
118,000 BTU/hr Propane (LP)
100,000 BTU/hr Solaronics models

Electrical ⚡

120 VAC, .5 A, 50/60 Hz
Equipped with a NEMA 5-15P plug
for use with a standard 120 VAC
15 A or 20 A outlet.
Refer to data plate when installing.

Venting

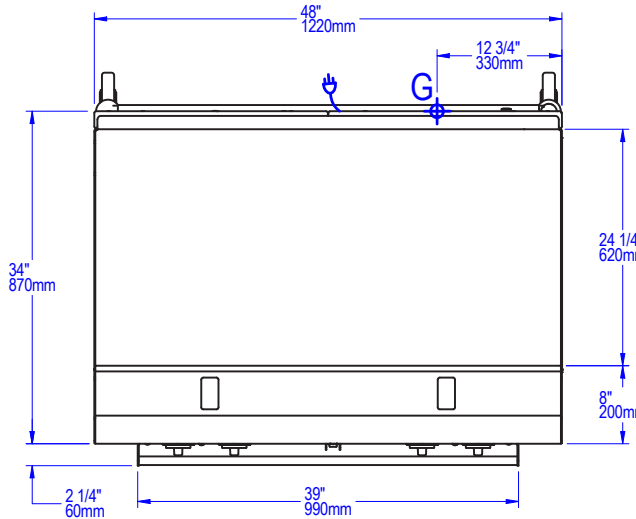
The Wood Stone Gas Plancha must be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The appliance must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

Maximum gas inlet pressure
1/2 psi (14 inches W.C.)

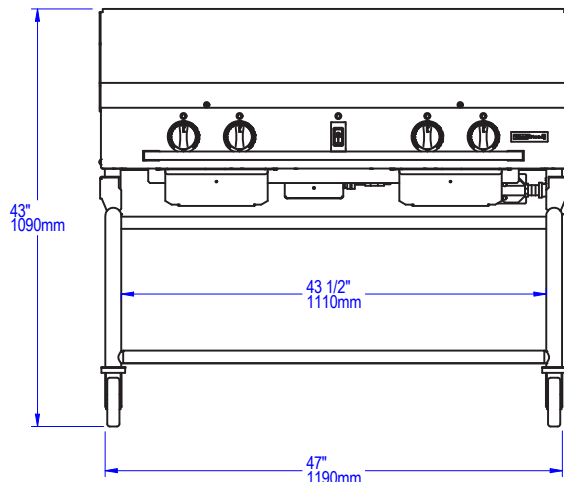


WS-GPL-4836-CT01 OPTIONAL STAND MODEL

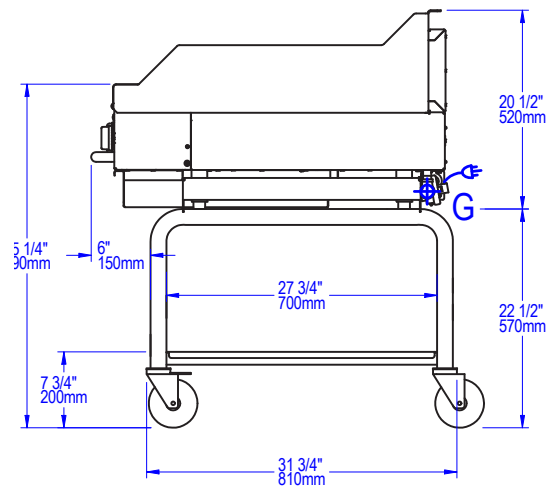
Plan view



Front view



Side view



Shipping weight: 660 lbs. Unit weight: 550 lbs.

UTILITIES SPECIFICATIONS

Gas  G

3/4 inch FNPT gas inlet
110,000 BTU/hr Natural Gas (NG)
100,000 BTU/hr Solaronics models
OR
118,000 BTU/hr Propane (LP)
100,000 BTU/hr Solaronics models
Maximum gas inlet pressure
1/2 psi (14 inches W.C.)

Electrical 

120 VAC, .5 A, 50/60 Hz
Equipped with a NEMA 5-15P plug
for use with a standard 120 VAC
15 A or 20 A outlet.
Refer to data plate when installing.

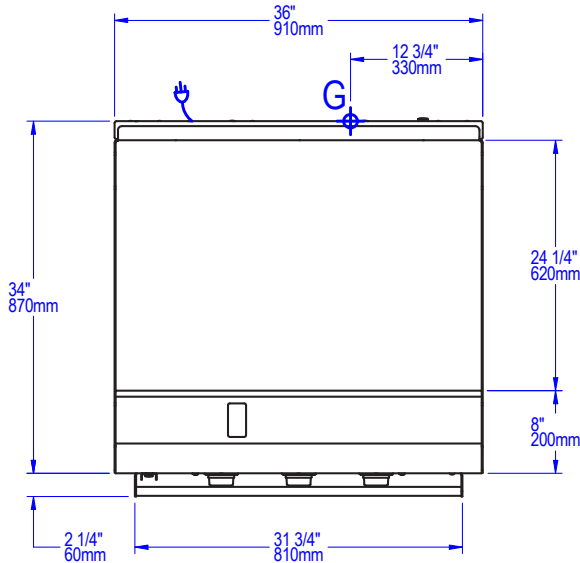
Venting

The Wood Stone Gas Plancha must be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The appliance must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

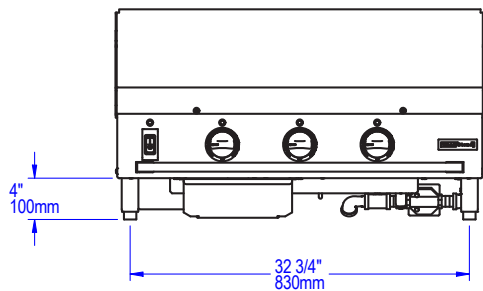


WS-GPL-3636-CT01 COUNTERTOP MODEL

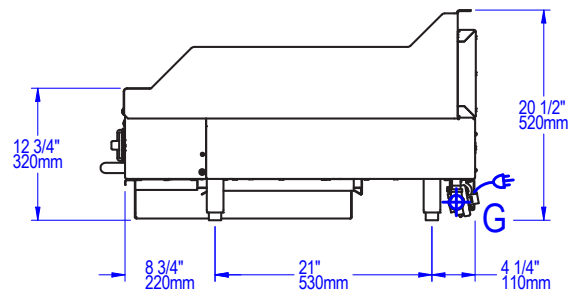
Plan view



Front view



Side view



Shipping weight: 490 lbs Unit weight: 390 lbs

UTILITIES SPECIFICATIONS Refer to data plate when installing.

Gas 

3/4 inch FNPT gas inlet
85,000 BTU/hr Natural Gas (NG)
75,000 BTU/hr Solaronics models
OR
85,000 BTU/hr Propane (LP)
72,000 BTU/hr Solaronics models
Maximum gas inlet pressure
1/2 psi (14 inches W.C.)

Electrical 

120 VAC, .5 A, 50/60 Hz
Equipped with a NEMA 5-15P plug for use with
a standard 120 VAC 15 A or 20 A outlet.

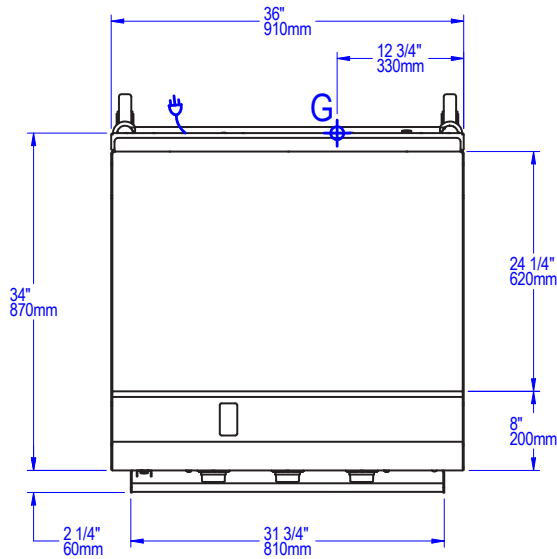
Venting

The Wood Stone Gas Plancha must be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The appliance must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

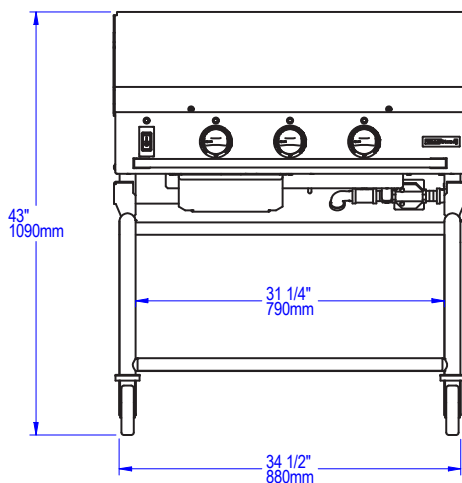


WS-GPL-3636-CT01 WITH OPTIONAL STAND

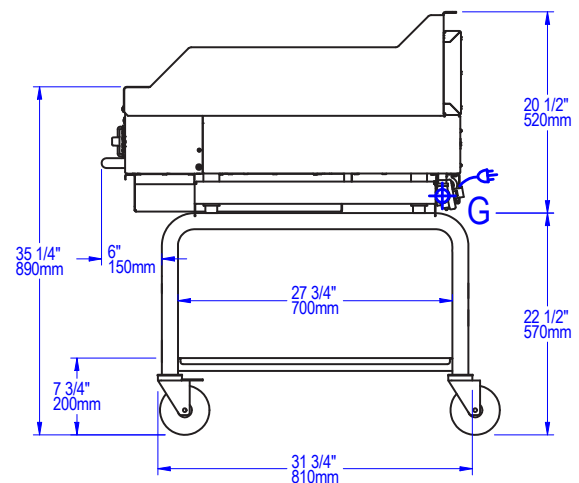
Plan view



Front view



Side view



Shipping weight: 570 lbs. Unit weight: 445 lbs.

UTILITIES SPECIFICATIONS Refer to data plate when installing.

Gas 

3/4 inch FNPT gas inlet
85,000 BTU/hr Natural Gas (NG)
75,000 BTU/hr Solaronics models
OR

85,000 BTU/hr Propane (LP)
72,000 BTU/hr Solaronics models

Maximum gas inlet pressure
1/2 psi (14 inches W.C.)

Electrical 

120 VAC, .5 A, 50/60 Hz
Equipped with a NEMA 5-15P plug for use with
a standard 120 VAC 15 A or 20 A outlet.

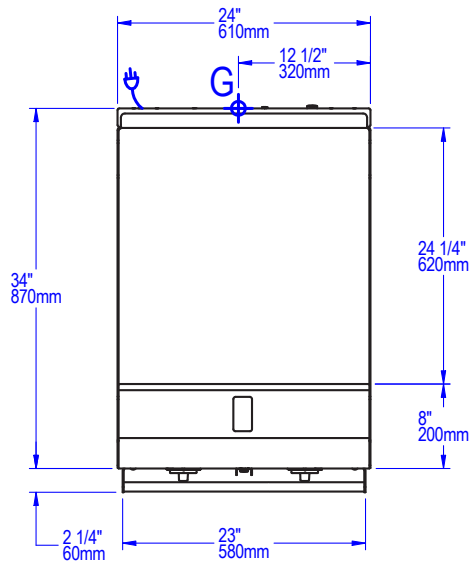
Venting

The Wood Stone Gas Plancha must be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The appliance must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

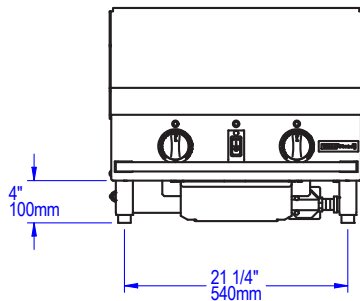


WS-GPL-2436-CT01

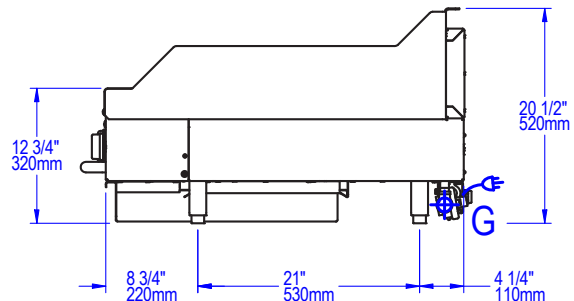
Plan view



Front view



Side view



Shipping weight: 335 lbs Unit weight: 265 lbs

UTILITIES SPECIFICATIONS Refer to data plate when installing.

Gas 

3/4 inch FNPT gas inlet
60,000 BTU/hr Natural Gas (NG)
50,000 BTU/hr Solaronics models
OR

60,000 BTU/hr Propane (LP)
47,000 BTU/hr Solaronics models

Maximum gas inlet pressure
1/2 psi (14 inches W.C.)

Electrical 

120 VAC, .4 A, 50/60 Hz
Equipped with a NEMA 5-15P plug for use with
a standard 120 VAC 15 A or 20 A outlet.

Venting

The Wood Stone Gas Plancha must be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The appliance must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.



COMMON SERVICE PARTS

002-GPL4835-56-NG	Solaronics Cassette Dual Burner NG-GPL
002-GPL4836-35-NG	Cassette Dual Burner NG-GPL
1532270	Reservoir Grease-Plancha
1552290	Gas Plancha Switch Guard
7000-0891-60	4 Channel Temp Control-GPL Hidden Knob
7000-0891-61	4 Channel Temp Control-GPL External Knob
002-PL4836-50	Dual-Pot Subassembly
7000-0897	Panel Light 24V Red
7000-0919-1	Thermocouple Marlin-Plancha
7000-0946-1	Illuminated Rocker Switch
7000-0946-2	Illuminated Rocker Seal
7000-1321	Gas Solenoid Valve 1/4" x 1/4" NPT
7000-1375-1	Power Cord Assy w/ferrules- PL4836
7000-1687	Panel Light Assembly Green LED
7000-1945	Flame Igniter Sensor Assembly- Plancha
7000-1973	Ignition Cable 20-1/2" long
7000-1695	Ignition Module 24VDC Fenwal
7000-1833	Heyco Snap Mounting Pins for Ignition Module
7000-1974	Ignition Cable 12" - GEN 2 Plancha
7000-1763-1	PCBA Buffer 4-CH Gen 1 & 2 Service
7000-1929	Power Supply 24DC - 100W (GPL-6036)
7000-1370	Power Supply 24DC - 75W (GPL-4836)
7000-1394	Power Supply 24DC - 60W (GPL-3636 & GPL-2436)
002-GPL6036-4	Panel Assembly Control Hidden Knob- GPL-6036
7000-0744-SS	Blank Cover 2G WP SS
6100-0003-12	Sanitary Gasket-GPL

NOTE: See exploded diagrams beginning on page 21 for more information about replacement parts.



CLEARANCES

1. The Wood Stone Gas Plancha must have a **minimum 12 inch clearance to combustible construction from sides and back, and 0 inch clearance to non-combustible construction from sides and back.**
2. This appliance may be installed on a combustible or non-combustible surface.
3. **Combustion air:** Combustion air flows into the Plancha through vents in the bottom panel. The Plancha must be installed with the legs provided. **Do not block** the space between the appliance and the countertop.



IF THIS EQUIPMENT IS NOT PROPERLY INSTALLED A FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THESE INSTALLATION INSTRUCTIONS. A MAJOR CAUSE OF APPLIANCE-RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS APPLIANCE BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

VENTILATION

The Wood Stone Gas Plancha must be vented with a Listed Type 1 Exhaust Hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The appliance must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

Note: For proper ventilation, the unit should be level, or slightly raised at the rear (not more than 1/4"). The unit will not exhaust properly if the rear of the unit is *lower* than the front. See page 13 on how to adjust legs.

TEMPORARILY REMOVING CONTROL PANEL

The Control Box can be temporarily removed to allow unit to pass through narrower passageways.

- 1 Remove the 4 screws which secure the Control Panel to the unit.



- 2 Pull the Control Panel down, then come forward, and tilt down so it rests supported in the open position.

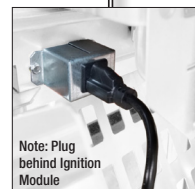
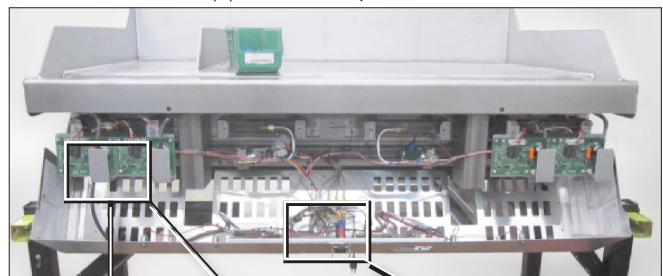


- 4 Lift Control Panel up and then off hinge pins to remove.

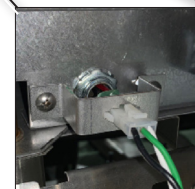


Note: When replacing Control Panel, make certain numbered Thermocouple Leads correspond to the numbers on connector.

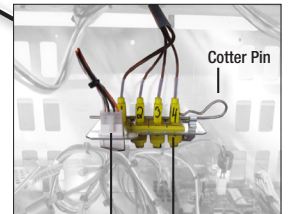
- 3 Disconnect (1) Power Cord, (2) Wire Harness at Molex connector and (3) Thermocouple Leads.



Note: Plug behind Ignition Module
Power Cord



6036 Power Cord Molex Connector



Molex Connector Thermocouples
Cotter Pin



GAS INFORMATION

BURNER MANIFOLD PRESSURE

Model	Natural Gas (NG) model	Propane (LP) model
WS-GPL-6036-CT01	4.0" W.C.	9.0" W.C.
WS-GPL-4836-CT01		
WS-GPL-3636-CT01		
WS-GPL-2436-CT01		

The Wood Stone Gas Plancha is equipped with a 3/4 inch FNPT gas connection located at the rear of the appliance. The installer should provide an appropriate quick disconnect fitting for connection to the gas supply.

BTU/HR INPUT RATE

Model	Natural Gas (NG) model	Propane (LP) model
WS-GPL-6036-CT01	150,000 BTU/hr	150,000 BTU/hr
WS-GPL-4836-CT01	110,000 BTU/hr	118,000 BTU/hr
WS-GPL-3636-CT01	85,000 BTU/hr	85,000 BTU/hr
WS-GPL-2436-CT01	60,000 BTU/hr	60,000 BTU/hr

SOLARONICS BTU/HR INPUT RATE

Model	Natural Gas (NG) model	Propane (LP) model
WS-GPL-6036-5-CT00S	125,000 BTU/hr	125,000 BTU/hr
WS-GPL-4836-CT00S	100,000 BTU/hr	100,000 BTU/hr
WS-GPL-3636-CT00S	75,000 BTU/hr	72,000 BTU/hr
WS-GPL-2436-CT00S	50,000 BTU/hr	47,000 BTU/hr

MINIMUM INCOMING GAS PRESSURE

Model	Natural Gas (NG) model	Propane (LP) model
WS-GPL-6036-CT01	5.0" W.C.	10.0" W.C.
WS-GPL-4836-CT01		
WS-GPL-3636-CT01		
WS-GPL-2436-CT01		

The Plancha is equipped with a gas pressure regulator that is preset at the factory. Depending on the plancha model, the regulator may be located on the rear of the unit or in the control box area. If incoming gas pressure is less than 1/2 psi (14 inches W.C.), no additional regulator is required or recommended. If incoming gas pressure is greater than 1/2 psi (14 inches W.C.), an additional regulator, by others, must be installed on the gas line serving the appliance. Do not remove the factory supplied regulator.

ELECTRICAL RATINGS

Model	Voltage	Amperage
WS-GPL-6036-CT01	120 VAC	0.5 A
WS-GPL-4836-CT01	120 VAC	0.5 A
WS-GPL-3636-CT01	120 VAC	0.5 A
WS-GPL-2436-CT01	120 VAC	0.4 A

The Plancha is equipped with a NEMA 5-15P plug for use with a standard 120 VAC 15 A or 20 A outlet.

Electrical Grounding: This appliance must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical code, ANSI/NFPA 70 or the Canadian Electrical Code, CSA C22.1 as applicable.

ELECTRICAL SUPPLY CORD AND GAS CONNECTION SHOULD BE ROUTED SO THAT THEY ARE NOT SUBJECTED TO THE HEAT COMING FROM THE PLANCHA COOKING SURFACE.



CLEAN THOROUGHLY BEFORE FIRST USE

A vegetable oil cooking spray is applied to the cook surface at the factory to help protect from corrosion during shipping. The cook surface must be thoroughly cleaned before use. Follow these instructions:

1. Make sure the Grease/Debris Trays are in place.
2. Turn the Plancha ON and allow to heat for 5 minutes. Then turn the Plancha OFF and wait for 5 minutes.
3. Wipe the cook surface using a wet towel, dampened with a small amount of water and a mild dish detergent. Then rinse with a towel dampened with clean water 3-4 times. Wipe the surface down with a dry towel and the Plancha is ready for service.

CAUTION: THE COOKING SURFACE WILL BE HOT! USE CAUTION WHEN WIPING SURFACE, PAYING PARTICULAR ATTENTION TO AVOID STEAM FROM DAMP TOWELS.

BASIC OPERATION

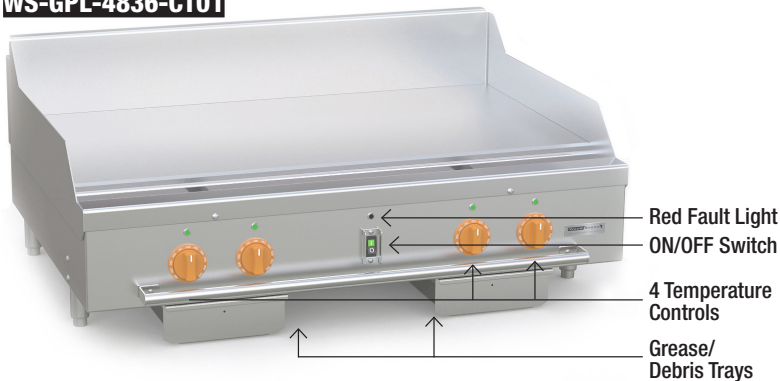
Use the Power Switch on the Front Panel to turn ON the Plancha. The switch will illuminate Green. This appliance utilizes an automatic ignition system. **Note:** There are NO standing pilots to manually light. Press the Power Switch to the OFF position to turn OFF the Plancha.

At start-up, the red Fault Light on the front panel will illuminate for a few seconds when the unit is first switched ON. The purpose is to allow the operator to confirm the light is functional. If the red light comes on any other time in the operation of the unit, turn the Power Switch to the OFF position, wait 5 minutes, then restart the Plancha. Notice if the red light is on steady or is blinking, as this will be useful information if calling in for service assistance.

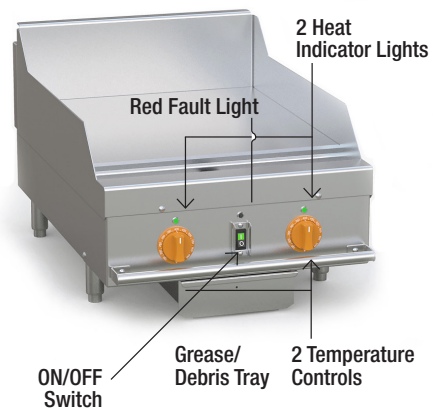
When the Plancha is first turned ON, the Heat Indicator Light for each zone will be illuminated until its zone reaches the temperature set on the Temperature Control Knob. The green Heat Indicator Lights in each zone correspond to the burner state of each zone. If the light is on, the burner should be on.

The Plancha Controller automatically controls the burners supplying heat to each zone to maintain the set point temperature.

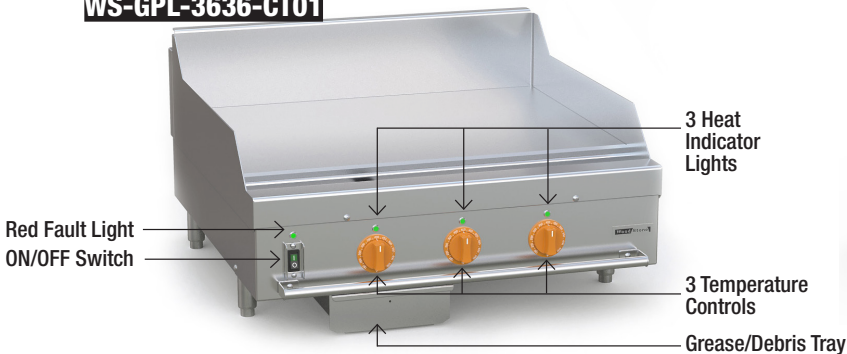
WS-GPL-4836-CT01



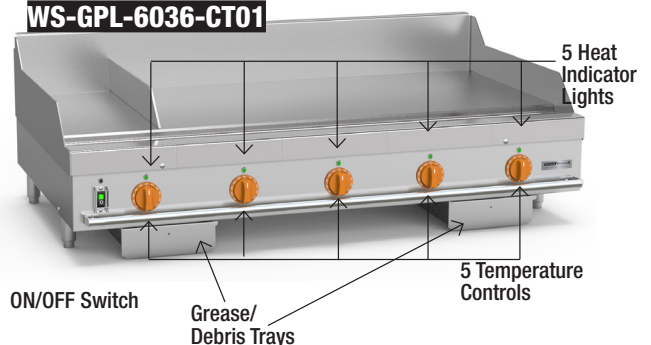
WS-GPL-2436-CT01



WS-GPL-3636-CT01



WS-GPL-6036-CT01



**DAILY USE AND MAINTENANCE**

1. Check and empty the Grease/Debris Trays frequently throughout the day. Keep the drain clear and do not allow the trays to overflow.
2. The cooking surface should be scraped frequently throughout the day using a grill scraper.
CAUTION: COOK SURFACE IS VERY HOT!
3. When using chemicals to clean the grill surface, first shut down the Plancha and allow it to cool. If the Plancha is too hot, the chemical may tend to boil or burn off immediately and not work as effectively. Do not pour water onto a hot Plancha to cool it as this can warp the cook surface. If using chemical grill cleaners, follow the instructions provided with that product.

DO NOT USE EXCESSIVE AMOUNTS OF WATER TO CLEAN THE PLANCHA. Be careful when using scrapers on the cook surface to avoid scratching or gouging the top. Be aware that the cook surface is made of mild steel—it will not clean to a shiny silver-like surface. Do not use heavy duty degreasers or oven cleaners on the Plancha as these are not generally intended for use on hot surfaces.

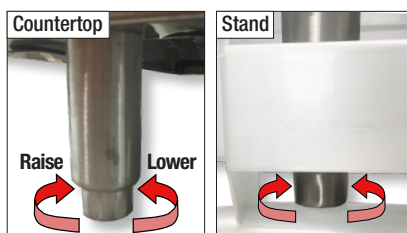
Never use a grill cleaning brick in the area of the rear exhaust flues, as dust and debris from the grill brick can enter the flues and damage the Plancha burners.

NOTE: Damage caused by using spray hoses or excessive water, or scratching or marring of the cook surface, is not covered by the warranty.

4. The front, sides and back may be wiped down with a cloth and mild detergent if needed. Do not use abrasive cleaners or scouring pads as these will scratch the stainless steel.
5. Take care to avoid getting debris and liquids into the exhaust flues at the rear of the Plancha, as this can damage the burners. The flues are easily removable for cleaning. They should be inspected daily and cleaned as necessary.

NOTE: The Plancha must be turned OFF before removing the flues. NEVER run the Plancha with the flues removed. Do not touch, or attempt to clean the burners.

CAUTION: FLUES ARE VERY HOT!

ADJUSTING LEG HEIGHT

Using an adjustable crescent wrench, turn the bottom of the leg clockwise to raise, or counterclockwise to lower the unit.

**PLANCHA SEQUENCE OF OPERATION**

Main Rocker Switch is pressed past “ON” to the momentary Start position.

24 volts is applied to the Green Lamp in the Rocker Switch and to the Coil of the Power Latching Relay.

The Power Latching Relay pulls in and applies DC voltage to the Relay Coil, the Rocker Switch Lamp and all of the Control Circuits.

The temperature of each zone is maintained near its individual Set Point by reading the Zone Thermocouple and applying a PID Control Algorithm to manage the burners based on the Thermocouple Temperature and history.

- The heating of each zone is accomplished when the Main Board signals the Buffer Board to apply power to the TH terminal of the respective Ignition Module for that zone.
- After a one second self check delay, the Ignition Module turns ON the Gas Valve and provides a spark to light the burner.
- The Ignition Module verifies that the flame is lit.
- The burner stays lit until the Main Board determines that enough heat has been applied and removes the heat signal from the Buffer Board.
- Current is interrupted to the Gas Valve and the Ignition Module goes into standby.

The Temperature and Set Point values are constantly monitored and the PID algorithm is updated as long as the unit is running.

- There is NO standing pilot: Each zone’s burners are lit every time there is a renewed call for heat.
- If the burner should fail to light for three successive tries, the Ignition Module will “Lock Out” and the red “Fault” lights on the Front Panel AND respective Ignition Module will be illuminated.

When the unit is switched to the “OFF” position current is interrupted to the coil of the Latching Relay so that all heating and control processes are terminated.

**PLANCHA CONTROL SYSTEM - FIRMWARE 210x**

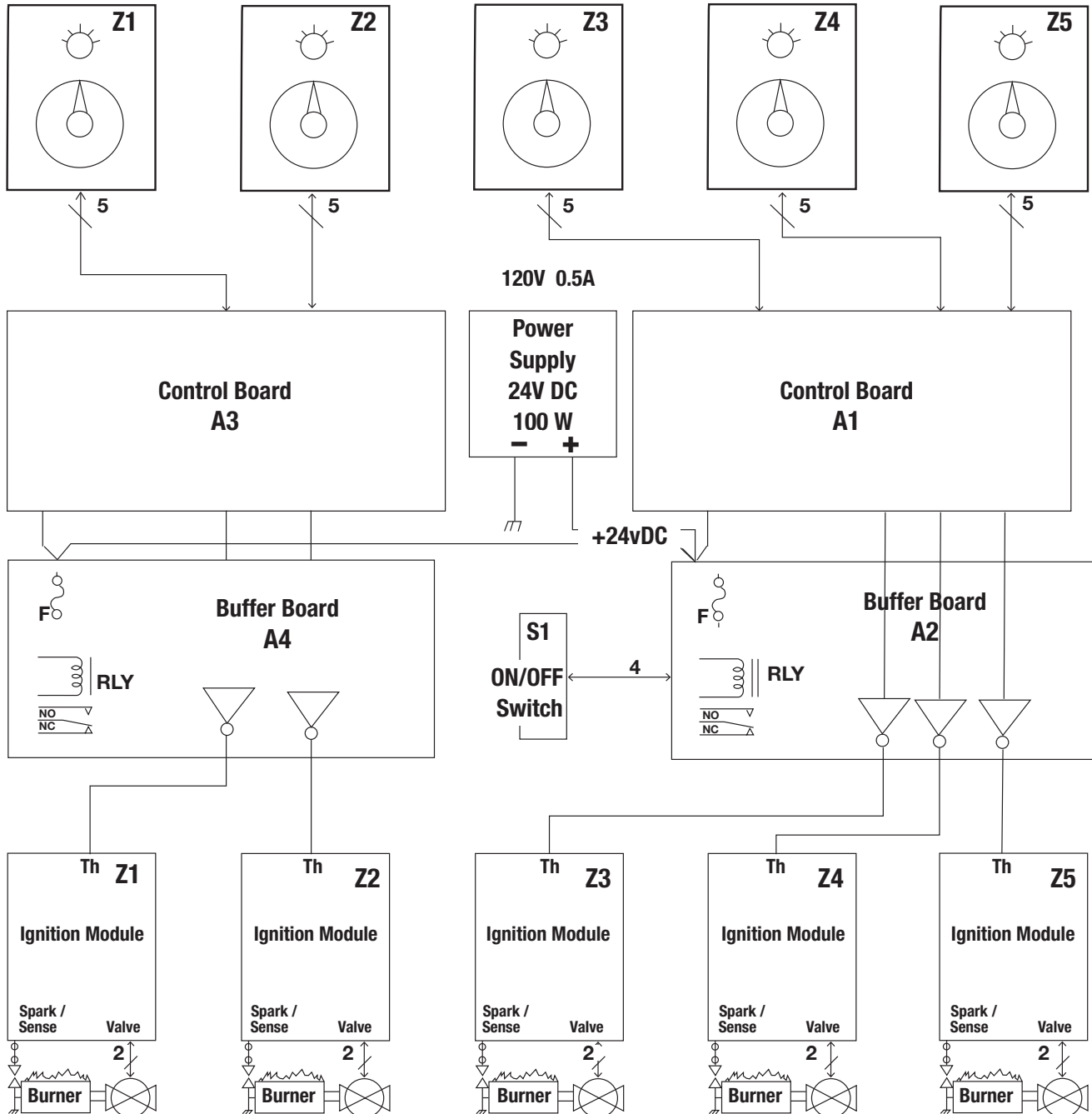
For the GPL-2436, GPL-3636, and GPL-4836, the temperature of the cooking surface is controlled by the Main Board (A1). Outputs from the Main Board are routed to the BUFFER Board, (A2), which supplies 24 VDC power to the respective ignition module for each zone as needed. For the GPL-6036 model the temperature of the cooking surface is controlled by two Main Boards (A1, A3). Outputs from the MAIN boards are routed to two BUFFER boards (A2,A4). The BUFFER boards then switch the 24 VDC power to the respective ignition modules when heat is called for.

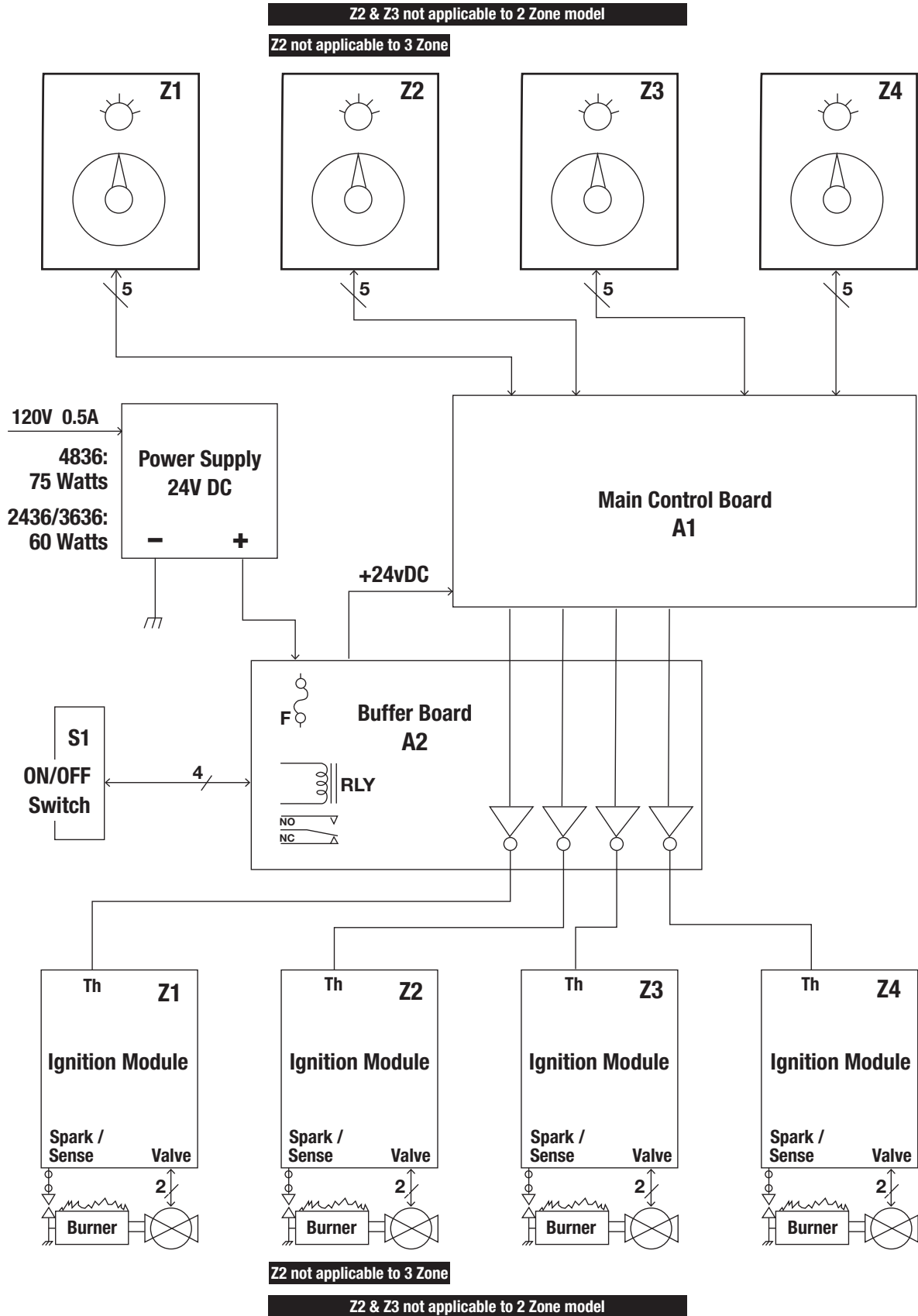
The cooking surface is divided into Temperature Control Zones, each with its own Thermocouple, Gas Valve and IR Burner assembly. Each temperature control zone is 12 inches wide and runs from the front to the rear of the cook surface. For units with visible knobs on the front, each knob controls the setpoint for its respective zone. For 'Hidden Knob' models, the 2 hidden control knobs may be configured to control the setpoint for multiple zones. Each zone also has an individual green LED status light on the front panel to show when the zone is heating, or flash when there is a zone-specific error. Each zone runs a completely independent control loop to maintain temperature and respond to cooking loads. Each control board and buffer board can control up to 4 zones, (hence the additional boards required on the 5 zone plancha). The far left and far right cook zones run a modified algorithm to adjust for edge losses. Zone 1 on the control board will always reference the farthest left zone on the cook surface, and Zone 4 will always reference the farthest right zone. The Control Scheme on the Wood Stone Gas Plancha is an advanced algorithm to ensure the fastest response to a changing load while preventing undesirable temperature overshoot. Each of the Temperature Control Zones runs a separate and independent instance of the control algorithm.

Any zone may come on at any time and run as long as necessary. The only restrictions (based on time) are two: Once a Burner is lit, it will run at least 12 seconds to optimize combustion gas quality. Second, once a Burner is lit, it cannot be restarted—after turning OFF—in less than 30 seconds from the previous START. In practice this rapid cycling does not occur normally, but the time restriction in the firmware exists to prevent excessive wear of the gas valves. The minimum ON time is generally 20 seconds or more and the shortest repetitive cycle time is generally a minute or longer.

If a Thermocouple fails due to an open circuit, or becomes disconnected, the software will detect this condition, turn OFF the associated gas valve, and cause the matching status LED (Green, on the front panel) to blink. If a Thermocouple shorts out and give an erroneously low reading, the software cannot detect the condition.

If the Thermocouples or Valve controls are cross wired, one zone will stay cold and the other will run away open loop. The maximum temperature that the cooking surface will reach with burners in a locked-ON condition is about 850 °F. Care should be taken, when reattaching or replacing thermocouples, that they are inserted in corresponding zones and jacks to prevent this condition. Although the equipment will probably not be substantially damaged, such conditions may pose a hazard, especially if the required clearances to combustibles are not adhered to.







NOMENCLATURE AND PARTS DESCRIPTION

Note: Terms in parens are alternative references.

1. Plancha (Unit)

Names which may be used to refer to the entire Plancha. This document describes the second-generation Wood Stone Gas Plancha. Applicable units will have a model number that starts with “WS-GPL-”.

2. Zone

A zone is the smallest cooking area on the Plancha that has independent temperature sensing and burner (Valve) control. Each zone runs the full depth of the Plancha and about 12 inches in width. Each zone has a gas Valve, burner pair, Thermocouple, Ignition Module, and independent control output from the Main Board via a dedicated channel on the Buffer Board. Each zone runs on an independent instance of the control algorithm. The algorithm inputs include temperature input and set point input for every zone. **[Hidden Knob:** There may not be a knob or pot for every zone—a pot may be shared among zones—but, the set point input is required for every zone.] There is a single open-collector output per zone used to switch one channel of the Buffer Board’s power transistors. The output of the Buffer Board feeds the “Th” input of the Ignition Module and supplies current for the gas Valve (gated by the Ignition Board). Each zone has a green status light on the front panel that is illuminated any time the Main Board has switched on power to the corresponding Ignition Module. The status light and ignition status control signal are not electrically common, but the outputs are tied together in firmware.

3. Main Board, A1/A3 (Temperature Control Board, CPI Board)

The Main Board (2 boards in GPL-6036) in the plancha contains a micro controller and various input and output circuits used to interface the controller to the rest of the Plancha. It has analog inputs for measuring the Thermocouples to determine the temperature of the cooking surface (on J4) and voltage inputs to measure the position of the potentiometers behind the temperature setting knobs (J2 and J3). It has outputs to control the gas Valves (via the Ignition Module Th input) on J5 and four pairs of LED drivers for the front panel zone lights (pins 1, 2, 9, and 10 on both J2 and J3); the outside pins (1 and 10) pass raw 24vDC to the LEDs and the inner pins (2 and 9) are active low, switching the LED cathode to ground to turn it on. An additional pin (J5-8) is used to blink the red fault LED on the front panel for error conditions that are recognized by the Main Boards.

4. Buffer Board A2 /A4 (Buffer) LEDs: red, input; green, output

These are the printed circuit boards that contain the relays for latching incoming power, the DC fuse, and multiple channels of 24volt high current drive (~600mA) for the gas Valve solenoids. Each channel also has status LEDs for the input (red), output (green), and test buttons that can be used for engaging each gas channel (zone) independently of input from the Main Boards (unit power still must be ON). The lights and buttons on the Buffer Boards are a central part of the diagnostic strategy for troubleshooting a broken Plancha. The red LEDs indicate the presence of a command input (call for heat). In normal operation, that occurs when the Main Board pulls that input line to ground (within about 1.2 volts). Pressing the test button has the same effect. The second set of LEDs are green; again, one per channel. Under normal conditions there is always a green LED illuminated for every (corresponding) red LED (they are paired sequentially from left to right). If a green LED is not on when its matching red LED is illuminated, it is likely due to a short or overload on the output. Each channel has a large green (surface mount) PTC “reset-able fuse” just below the 8-pin transistor package. Normally, there should be very little voltage across this package, but if the output LED is not ON when the input is, the PTC fuse may have tripped. If it is tripped, there will be a substantial voltage across the package. It will reset when the overload is removed. Sometimes unit power will also need to be cycled to reset the PTC. On the other hand, if the output (green) LED is ON with no corresponding input LED, it is a strong indication that the transistor has been compromised by a high voltage on the Buffer Board output. In this case, the output drive



to the Ignition Module is stuck ON, so the corresponding zone will likely overheat.

5. Ignition Module (A3 - A6)

The Plancha contains one of these per zone. Each of these is completely independent of the others. This board manages the gas Valve switching and burner ignition. It also monitors the presence of flame on the burner while the gas Valve is open. The gas Valve is opened by the Ignition Module and can be closed, as well, in the event of a fault condition. Normally, the gas Valve is closed by the Buffer Board when it removes the current from the Th input (P1-4) of the Ignition Module (after the Main Board determines that the desired temperature has been reached).

6. Ignition Cable

This is the “spark plug wire”. It contains a resistive carbon conductor for EMI suppression. It has a nominal resistance of about 6K ohms or less. Either end should be removed ONLY by grasping the terminal, not pulling on the wire. There is one per zone. Flame sensing also takes place through this conductor, so it must show continuity. Lighting the burner is NOT evidence of continuity since the higher spark voltage can easily jump small gaps that will stop the sensing voltage.

7. Igniter

This is a two-electrode device that provides a gap (0.148 inches, nominal) for ignition and immersion in the flame plasma for flame detection. If the electrodes are bent, or the position is wrong the Ignition Module may be unable to detect a flame. If electrodes are bent, replace the igniter.

8. Direct Spark Ignition

There are no pilot lights on the second-generation gas Plancha. Every burner has an igniter that operates each time the burner is lit. The spark comes from the Ignition Module via the ignition cable.

9. Power Supply

This Power Supply converts AC line voltage into 24vDC. It is usually adjusted to 22 volts to save power and reduce aging of the solenoids and other components. The incoming 120 volts AC comes ONLY to the Power Supply. Everything else using electric power runs off of the 24vDC output of the Power Supply; nothing will work without it. It has a green LED near the terminal board to indicate normal output level.

10. DC Voltage (24vDC, (21.5 - 24.5; usually ~22v))

All of the electronics and the Valves run on 24vDC. 120vAC is provided only to the input of the Power Supply. The output of the Power Supply is adjustable over a small range. The adjustment is normally set to approximately 22 volts to reduce component heating, particularly of the gas Valve solenoids.

11. Burner

This refers to a pair of infrared burner modules mounted to a single manifold and fed from a single gas Valve. The burner is of Infrared type for efficiency and quick heating. There is no pilot; each burner is automatically lit via a spark igniter under the control of the Ignition Module.

12. Pots

The potentiometers are adjustable voltage dividers that provide an output voltage (at the wiper) proportional to the temperature set on the front panel temperature knobs. Each pot has three pins: 5 volts, ground, and the wiper (output). There are provisions on the Main Board for 4 pot connections (pins 3, 4, 5 and 6, 7, 8 on both J2 and J3). **[Hidden Knob:** Sometimes one pot is daisy chained to multiple wiper inputs (pins 4 and 7 of J2 and J3 on the Main Board so that all of those zones are set to the same temperature by only one knob adjustment.) The software version and dip switch settings during calibration determine the overall temperature range available, but the calibration sequence aligns the pot with the scale for better accuracy. If the calibration is done incorrectly, temperature settings will be unreliable. Unless the Main Board



or a pot has been replaced, it is rarely necessary to run the calibration sequence.

13. Thermocouples

There is one K-type Thermocouple for each zone. Each Thermocouple is inserted and spring loaded into a cavity in the bottom of the cooking surface. Each Thermocouple has a disconnect at the panel interface to allow panel removal without unscrewing the Thermocouple wires from the Main Board. All TC cables are the same length; they are the same P/N. The source impedance of the Thermocouple will affect the temperature accuracy. Only Wood Stone replacement Thermocouples should be used.

14. Panel, Front Panel, Control Assembly, Control Panel

This is the removable front assembly that contains all of the electronics and electrical parts, except the Valves and Ignition Modules.

15. Gas Valve / Solenoid

The gas Valves are electrically operated. It is a poppet Valve and is either ON or OFF. The solenoid has a built-in rectifier and will accept AC current or DC current of either polarity. Because of the diodes, it cannot be tested with an ohmmeter but the continuity can be checked with the diode drop function found on most good DMMs. The expected value is 1.1 volts. The Valve solenoid will draw just under 500mA when driven with 22–24 volts. In use, it gets very hot to the touch; this does not usually indicate a problem.

16. Wiring Diagrams

A wiring diagram is included with the unit (attached inside the front panel) and in the Service and Installation Manuals. It is essential when diagnosing problems with the Plancha. Additionally, a block diagram is included in the Service manual for a high level view of the electronics.

17. Status Lights (DS1 - DS4 and DS5 (Red fault light))

These are LED panel lights that indicate when the burners are ON or, in some cases, that there is some operational anomaly. A green status light will flash if the corresponding Thermocouple is detached or goes open circuit. All four zone lights will flash together if the Main Board gets too hot, or if all four Thermocouples are unplugged. The red “Fault” light will flash if the Main Board detects a fault or will remain ON steadily if one or more of the Ignition Modules “locks out”. The steady condition will override the blinking condition if they both occur simultaneously. The Ignition Module can only be reset by cycling power to the board (usually by turning the Plancha OFF and back ON again).



This section contains narrative descriptions of Plancha serviceable components. For a step-by-step Troubleshooting Guide, see [pg 31](#).

Things That Can Break	Ignition Modules (One per zone)
Function	<p>A single Ignition Module can impact ONLY ONE zone. It does not sense or control temperature; it only manages the gas Valve and flame detection. If the Ignition Module isn't working, the corresponding zone will not light, or possibly will light and shut OFF if the flame is not detected.</p> <p>Note: Lack of flame detection and lockout is not usually a fault with the Ignition Module, but with the ignition cable, air in the gas line, the igniter gap, or the position of the igniter.</p> <p>If the Ignition Module recognizes an internal fault condition or locks out because it cannot sense flame, it will blink a code on its red LED. It will also cause the red LED on the front panel to go on.</p> <p>In normal operation, its green LED should go on when the output of the Buffer Board goes high (shown by corresponding green LED on the Buffer Board) driving the Th input (pin 4) high on the Ignition Module. If you push the test button on the Buffer Board for the matching output, the green LED on the Ignition Module should come on immediately, and the Valve should open ~1 second later, followed immediately by sparking at the igniter. Lack of sparking could be due to a faulty ignition cable or ignitor in addition to the Ignition Module.</p> <p>Ignition Module fault (red LED) blink code: Steady = Internal Control Fault Two flashes = Flame Sense Fault Three flashes = Ignition Lockout Five flashes = Standby Six flashes = Burn Mode</p> <p>NONE of these conditions is normal. The red LED should be OFF during normal conditions except for a second or two when the Plancha is first switched on (when +24vDC is first applied to Pin 2—this is different from the Th signal on pin 4).</p> <p>These red LEDs are somewhat visible looking up from the bottom of the panel (maybe with a mirror), or, more easily, when the panel is open. It is not usual for the burner to not light the first time, but it is normal for the Ignition Module to try three times to light and sense flame before locking out if the burner does not light. The sequence is as follows: Buffer Board applies 24vDC Th signal; 1 second later the Ignition Module opens the gas Valve and begins the ignition spark; if it does not light AND detect the flame in 7 seconds, it shuts OFF the Valve and waits 15 seconds before trying again; the second trial is also 7 seconds, followed, if necessary, by another 15 second delay and another 7 second trial. If it fails to detect a flame on the final (3rd) trial, the Ignition Module locks out and will never try again until the whole Plancha is turned OFF and back ON. If you observe that sparking continues at the igniters after the flame is established, it indicates that the Ignition Module is not reliably detecting the flame and is trying to "relight" the burner. If this condition persists, it will lock out even though a person could see that the burner was lit.</p> <p>In addition to the Th input (call for heat), the Ignition Module must have +24 volts on pin 2. This voltage is expected to be present any time the unit is switched on, whether or not the burner should be on. When the unit is FIRST switched on (24 volts on pin 2) the red LED on the Ignition Module will illuminate briefly, one time only.</p>
Suggested Checks	<p><input type="checkbox"/> Verify Buffer Board output with test buttons. <input type="checkbox"/> Verify 24vDC signal reaches Th input on Ignition Module pin 4. <input type="checkbox"/> Verify green LED when Th signal is present. <input type="checkbox"/> Verify 24-volt Power Supply is present on pin 2. Note that the Red LED on the Ignition Module is illuminated momentarily when the Plancha is FIRST switched on (this is when +24 volts is applied to the Ignition Module at pin 2). <input type="checkbox"/> Swap two Ignition Modules to see if the problem follows the module. <input type="checkbox"/> If in doubt, swap the ignition cables first as they share some symptoms and the lead is faster to change. Pull only on the terminal, not the wire when removing the ignition cable (pull back the boot to grasp the terminal).</p> <p>When troubleshooting a no-gas/Valve not open situation, it is useful to know that the Ignition Module pretests the ignition circuit for conditions that could falsely indicate the presence of flame. If, for instance, there is debris across the igniter gap or some other cause of conductivity around the gap, the Ignition Module will not even turn on the Valve and try ignition.</p>
Confusion	Ignition Cable; Igniter; Valve.



Things That Can Break	Thermocouples (Th)
<p>Symptoms</p>	<p>The Thermocouples are inherently very reliable. The two most likely problems are:</p> <ol style="list-style-type: none"> 1. Being improperly seated into the griddle plate, or the bayonet mounting is not engaged or loose. This often results in a too hot Thermocouple causing the zone to be controlled to a too cold state. If the Thermocouple drops all of the way out of the tube to the bottom of the unit, it will be cold and the zone will overheat significantly. 2. A wire loose in a connector. This may be intermittent, but if it is open, the Main Board will recognize the problem and flash the corresponding zone burner light. <p>Another problem, sometimes created during service, is plugging in the Thermocouple plugs to the wrong zone. This leaves the Plancha “cross controlled” and one of the two confused zones will get hotter and hotter, while the other stays very much too cool.</p>
<p>Suggested Checks</p>	<p>The Main Board will recognize an unplugged connector or open circuit Thermocouple and cause the appropriate zone light to blink. Other faults will just cause erratic temperature control. Plugging the suspect Thermocouple into a type K Thermocouple thermometer and comparing the readout to the surface plate temperature will give a good indication of what is causing the problem. If the reading is reasonable, but wrong, look first for mounting problems. If it is very wrong, the TC may be completely out of its mounting tube, or may have a loose wire. The wire/connector problem is the best place to start if the reading is erratic when the TC cable is moved, bent or twisted.</p>

Things that Can break	Igniters
<p>Symptoms</p>	<p>1. No spark, 2. Spark fails to ignite burner. or 3. The flame detection fails (even with the burner lit) and the Ignition Module shuts OFF the gas valve after three tries (about 45 seconds).</p>
<p>Suggested Checks</p>	<p>You can observe the burner, the igniter and the spark through the gap around the igniter at the front, or, with the plancha pulled out, through the observation ports at the back of the unit. The burner should be on a one second delay any time the green zone light on the front panel is illuminated. When you hear the Valve close, sparking should commence. If the sparking continues after the flame is established, the Ignition Module is having difficulty detecting the flame. This could be due to igniter position, or the ignition cable could have a small gap, bad connection or discontinuity. The high voltage spark can jump a small gap, but the flame test signal cannot. Test first by swapping ignition cables. If the igniter is to be adjusted, it is best to pull the burner pair out of the chassis by about 10 inches. TURN OFF THE GAS BEFORE disconnecting the burner feed pipe. The burners are removed straight out after taking OFF two upper outside nuts (leave the manifold attached) with a 7/16" socket and extension. The igniter is manufactured with a nominal gap of 0.148". The high voltage spark should jump from the tip of the ground electrode. The ground electrode may touch the mesh, the center electrode may not be within 0.25", including any metal strands extending up from the mesh. If present, these may be pushed down. If igniter is still not sparking correctly at the tip, or sensing properly, replace the igniter.</p>

Things that Can break	Unit Wiring, Connectors, Contacts
<p>Symptoms</p>	<p>The possible effects of a bad wire or connection are too numerous to list, but a bad connector is among the MOST likely cause for a problem.</p>
<p>Suggested Checks</p>	<p>When troubleshooting any component, look first at the connections and make sure they are in place, tight, and unstressed.</p>



Things That Can Break	Control Board (A1 & A3)
Trouble Subdivision	Process Control
Symptoms	This is the main controller. It has four ports from which to read the potentiometers to determine the desired operating temperature (or Set Point) and four ports to measure the Thermocouples for up to four control zones to determine the actual plate temperature near the center of each zone. It controls the burners by sending a command via the Buffer Board to the appropriate Ignition Module which, in turn, opens the Valve, lights the gas, and monitors the flame. It is the Main Board that removes the signal from the Ignition Module via the Buffer Board to turn OFF a burner when the set point temperature is reached. The temperature control algorithm is a sophisticated PID calculation that runs simultaneously and independently on each zone to respond quickly and minimize overshoot.
Suggested Checks	The software always illuminates the zone status lights at the same time as it energizes the respective Ignition Module. The connection is in software; they do not share a common wire. You should always be able to hear a Valve opening about 1 second after the zone light comes on. This delay is due to the Ignition Module doing its safety checks before energizing the Valve. If the zone needs to be warmer, the green zone light is ON, and there is no flame, the problem is probably AFTER the Main Board in the control chain (Buffer Board–Ignition Module–Gas Valve, with wiring between). When turning OFF a zone’s burners, the Valve should close simultaneously with the green status light going out. Make sure the voltage signal from the wiper pin of the pots is getting to the Main Board or the set point will be wrong and temperature control erratic. A diagram and procedure is available in paragraph A.2.a.ii.2.a, pg 35 .
Confusion	Cross controlled zones (Thermocouples and output drive not correctly paired); Unplugged Thermocouples; Potentiometer issues
Trouble Subdivision	EMI Latch-Up: Blinking Red Light on the Front Panel
Symptoms	The wire routing and location of EMI ferrites has been carefully chosen to eliminate faults on the Main Board due to coupling in the wiring harness with the EM fields produced when the Ignition Module generates a high voltage spark to ignite the burner. In the event this wiring has been significantly disturbed, it is possible for the op amps on the Main Board to have excessive voltage applied via a ground loop or the Thermocouple wires. If this transient is frequent enough or large enough, it will latch the op amp into a state that provides erroneous Thermocouple temperature information. The error is so large that the firmware can detect the condition. The Main Board will blink the red “fault light” on the front panel and disable the offending zone. It is unlikely for this to ever happen on an unmodified Plancha, but if it does happen, it may not be limited to a single zone. In the case of a blinking (front panel) fault light, the Ignition Modules are not involved and their fault lights will not illuminate.

Things That Can Break	Buffer Board (A2 & A4)
Symptoms	The Buffer Board is very robust and unlikely to cause trouble. The majority of the board (and, indeed, the Plancha) can be tested by pressing the on-board push button switch for each channel and observing the input LED (red) and the output LED (green) for the corresponding channel. This board has exactly 4 channels. (If an older 5 channel board has been used to replace the Buffer Board, it will not power the Ignition Modules properly; it must be replaced by the correct 4 channel version.) The current out of each channel goes to an Ignition Module, which then switches on a Valve. The Buffer Board supplies ALL of that current. The Buffer Board also provides a relay in a self-latching configuration that is used in conjunction with S1 (the main front panel Rocker switch) to turn the Plancha ON and OFF. There is also an on-board glass-type fuse for the 24vDC. If the fuse is blown or the relay doesn’t operate, the Plancha will not run.
Suggested Checks	If the unit won’t start and there is 24vDC out of the Power Supply, check the fuse, then use the wire diagram to check that S1 and the relay are working together to power the remaining circuits. If one zone won’t run, use the push buttons on the Buffer Board to test each zone through the Ignition Module to the Valve. The Ignition Module has its own green LED, and the Valve will open about 1 second after power is applied to the Ignition Module. If the zones fire and run when the buttons are pressed, it is the inputs (Main Board / cable) that may be at fault.



Things That Can Break	Power Supply
Symptoms	Nothing will work if the DC Power Supply has no output (22 to 24 volts DC).
Suggested Checks	First check the input. There should be approximately 120 Volts 60Hz between the Line & Neutral (terminals L & N). If the input is good, disconnect all wires attached to the (+) terminal(s) on the Power Supply. Output should measure 21–24vDC & the green LED near the terminal board should be illuminated. If there is the required input, but no output without load, replace the Power Supply.
Confusion	Fuse on Buffer Board; a short that causes the Power Supply to fold back.

Things that can break	Latching Relay
Symptoms	If K1 on the Buffer Board doesn't pull in, or doesn't stay in when the momentary (start) switch is released to the "run" position, it may be because the relay, the switch, or the wiring and/or connectors are faulty or loose. If the relay (only) is bad, the lamp in the S1 Rocker switch will illuminate when pressed to the momentary "start" position and go out when the Rocker is released; the unit will continue to run while the Rocker is held in, but stop as soon as the Rocker is released. If K1 is bad, replace the Buffer Board.
Suggested Checks	The actual cause will have to be determined by inspection while referring to the wiring diagram. The momentary position of the switch makes the same circuit as the relay does when it is energized. If the light in S1 illuminates when the switch is held in the momentary position, but goes out when released, the relay OR wiring (including J1 contacts on the Buffer Board) could be at fault. If the lamp in S1 doesn't come on at all (and no other lights on the front panel come on), then the Power Supply or fuse is suspect.
Confusion	Wiring, switch S1

Things That Can Break	Potentiometers
Trouble Subdivision	Hardware
Symptoms	The zone or zones affected will go to an unexpected temperature.
Suggested Checks	There may be one pot per zone, or one pot for several zones; please refer to the wiring diagram for your model. In normal operation, the potentiometer is supplied 0 volts and 5 volts on its "end" terminals and returns, from its middle or "wiper" terminal, a voltage to the Main Board representing the position of the knob. The voltage division is linear and usually ranges from a little over 0.5 volt to 4.5 volts. There are several ways for this to go wrong, from a loose knob to a bad connection or worn out pot, but there is one end-to-end test that will show any hardware fault. Clip the (-) probe of a volt meter to ground (there is a handy test point on the Buffer Board). Use a very fine probe or a short piece of 20ga solid hookup wire to probe the contacts 4 and 7 of J2 and J3 on A1 (the Main Board). The silk screen shows that these are the wipers and shows which zone each corresponds to. Then watch the voltage at you turn the corresponding knob from low to high. If the voltage is 0 and unchanging, the +5 lead is likely disconnected or loose. Likewise, if it is stuck at 5 volts, the ground lead is suspect. If it moves smoothly in the wrong direction (higher voltage at lower temperature) the two end leads are reversed. And, if the voltage values do not line up with the indicated temperatures (especially with an unexplained gap and reversal), the knob may have slipped on the shaft.
Trouble Subdivision	Software Alignment (Potentiometer Calibration)
Symptoms	The zone or zones affected will seem not to have exact temperature alignment with the knob temperature scale. This is generally hard to quantify without factory diagnostic equipment, but the mid scale point should be dead on. Even with perfect calibration, non-linearities in the pot could cause up to 4 degrees error at some points on the scale. This is normal.
Suggested Checks	Once correctly calibrated, this cannot "slip" or degrade. However, if a new pot, a new Main Board, or new program on the Main Board is installed, the calibration procedure is used to align the pointer on the knob with the voltage provided to the Main Board. The procedure is found on pg 46 .



Things That Can Break	Ignition Cables
	<p>There are two distinctly different failure modes.</p> <p>The igniter end of the cable should always be removed by sliding the boot back from the connection and pulling only on the terminal—not the wire. If the cable must be removed from the Ignition Module, take care to support the coil while removing the cable; do not pull against the solder pins. Ignition cables are the same length except for zone 3 (2nd from the right), which is longer and has an orange boot.</p>
Trouble Subdivision	Open: High Resistance; Won't Pass Flame Detect
Symptoms	<p>If the ignition cable, which looks like a spark plug wire, has a poor crimp or a gap in the conductor, it will generally allow the high voltage “spark” current to flow, but will look open circuit to the flame detection excitation. The consequence is that the burner will light, but the igniter board will not sense the flame. After a 7 second trial, it will close the Valve for 15 seconds, then try again. It will try a total of three times before locking out permanently. The red light on the front panel will illuminate when one or more of the Ignition Modules is locked out. There will be no heat in the locked-out zone(s) until the main Plancha power is cycled OFF and on.</p>
Suggested Checks	<p>The normal resistance of the suppression type ignition cable is about 10K ohm. This is NOT a problem. Open circuit is bad for detecting the flame although the spark may still work and light the flame. A resistance reading that is variable when the end connections are pulled or twisted, or when the cable is bent or pulled, is indicative of a broken connector or crimp in the cable.</p>
Confusion	Ignition Module
Trouble Subdivision	Leaky Insulation / Short; Sparks in Wrong Place or Grounded
Symptoms	<p>If the boot is cracked or misplaced, or the insulation has become brittle and cracked, the current for the ignition spark may escape to ground before reaching the spark gap. You may even hear the spark, but will not see the fat blue spark at the igniters. It is visible though the edge of the igniter mounting aperture or through the small peak hole on the flue covers in the back.</p>
Suggested Checks	<p>Ensure the boot is correctly positioned to completely cover the terminal with room to spare. If the insulation is leaking, the ignition cable must be replaced.</p>



Things That Can Break	Gas Valves
	<p>There are two different failure modes.</p> <p>There are push buttons on the Buffer Board for testing the gas Valve/Ignition Module combination. You should not remove the connectors from the gas Valve to test them.</p> <p>The red LEDs on the Buffer Board indicate that the Main Board is calling for heat on the indicated zone (or you have pushed a button) and the green LEDs indicate that the output transistors have switched on. But, if there is a short on the output (wire or solenoid), the output green LED will NOT illuminate because the PTC is limiting current.</p>
Trouble Subdivision	Solenoid
Symptoms	<p>If the solenoid fails open there will be no current in the Buffer Board output. Normal current is just under 0.5 amps, DC. If the solenoid fails shorted, the PTC on the Buffer Board will limit the current to a safe level and the corresponding green LED on the Buffer Board will go out as soon as the Ignition Module tries to energize the Valve. The Ignition Module green LED will also go out. There are conditions when the Ignition Module will determine NOT to open the gas Valve (See Ignition Module section above.) When this happens, the Ignition Board will (in time) light its on-board red fault LED. Swap the solenoid from an adjacent Valve to test.</p>
Suggested Checks	<p>Be sure it is the solenoid and not a pinched wire or damaged insulation. The solenoid can be replaced alone if you have a spare. You cannot “ohm out” the solenoid unless your meter has a diode check function and it is selected, in which case you will read voltage drop (about 1.1) not ohms. This is because the solenoid has a built in diode bridge.</p>
Confusion	Ignition Module, Wire harness
Trouble Subdivision	Plunger
Symptoms	<p>The poppet (seal) head can come free from the armature, in which case the Valve will not open since the seal is held to the seat by a spring. Should the Valve jam in some way that it fails to close or should the spring fail, the unit must be disconnected from the gas supply until the Valve has been replaced with a new one. In either case, replace the complete Valve. If a replacement for a leaking Valve is not immediately available, the unit will operate on all other zones if the faulty Valve is removed and the open manifold port is capped or plugged. The corresponding Ignition Module should be unplugged to avoid having the red reset light always illuminated. Leave a note where it will be seen when the Valve is replaced.</p>
Suggested Action	<p>Make sure any quick disconnect at the gas supply is clean and fully engaged.</p>



The table below may assist in zeroing in on specific areas to investigate based upon observable symptoms. See the referenced page after determining your issue.

START & LATCH PROCEDURES				
Problem	Symptom	Possible issue(s)	Remedy	Troubleshooting Section
One or more zones not heating	Red Reset light blinking	EMI	Turn OFF, Turn ON	pg 33: 1
	Red Reset light steady	Air in system	Turn OFF, Turn ON	pg 33: 2
		Burner, Gas, Ignition, Venting	Check Exhaust Flues, Ignition Spark, Buffer Board, Ignition Module, Main Board, Jet, Valve	
	Red Reset light doesn't come ON, even after 2-3 min. — All green front panel Indicator LEDs blink	Main Board overheating	Check that unit is level	pg 34: 3
	Red Reset light doesn't come ON, even after 2-3 min. — Some, but not all, front panel Indicator LEDs blink	Thermocouple(s) improperly connected or installed	Check Thermocouples	pg 35: 4
Unit shuts down unexpectedly		Buffer Board Latching Relay drop out	Check Relay, Supply voltage from Power Supply too low	pg 35: 5
		Power Supply folds back	Check current, find cause	
		Power Supply faulty, or faults on Main Board, Buffer Board or one Ignition Module	Check possibility faulty components	
		Loose connectors. Contact not fully inserted into connectors. Bad Main Switch	Check P/S Terminal Block, J1 on Buffer Board, Rocker switch	
Temperature control or accuracy	One or more zones operating at wrong temperature	Temperature Set Point input from Potentiometers	Check voltage at resistors	pg 35: 6
		Temperature measurement input from Thermocouples	Test Thermocouples	pg 35: 4
Flame goes out while front indicator light lit	Valve can be heard operating — LEDs remain lit on Buffer Board & Ignition Modules	Problem with Ignition Module, Ignition wire, Spark assembly or Ground	Check components	pg 37: 7
	Valve can be heard operating — LEDs go out on Buffer Board & Ignition Module when valve cycles	Overload or short	Examine buffer Board and Ignition Module LEDs	pg 37: 8
	No valve sound can be heard	Gas supply, Gas pressure, Burner assembly	Check Gas supply, Gas pressure, Burner assembly	pg 38: 9
Slow heat-up or poor recovery		Bad Burner quality and/or low Gas pressure	Check Burner, Gas pressure	pg 38: 10
Poor temperature distribution from front to back, or side to side		Bad Burner quality, Jets, Un-level install	Check Jets for blockage, Unit level	pg 38: 10
TRIES TO START / DOESN'T LATCH				
Problem	Symptom	Possible issue(s)	Remedy	Troubleshooting Section Reference
Unit won't remain ON	Runs only as long as Rocker Switch is held down	Relay latching circuit	Check for shorted wire or component	pg 39: 11
TRIES TO START / DOESN'T LATCH				
Problem	Symptom	Possible Issue(s)	Remedy	Troubleshooting Section Reference
No outward signs of life	Rocker switch not lit, no code blinking on green front indicator light	Power delivery problem between: before circuit breaker up through & including internal fuse on Buffer Board	Test wiring and components	pg 40: 12



1 2 3 4 5 6 7 8 9 10 11 12

Note: At any time that an issue is found and corrected, re-start the troubleshooting tree from the top.

Initial Observation	Go to Section:	Range of Faults
Green lamp ON the S1 Rocker switch lights when pressed to START and as long as held down, but not when released to ON position.	B pg 39	Switch, wiring or latching relay.
No illumination in S1 Rocker when pressed OR released, no code blinking on D9, no RED reset light at startup.	C pg 40	Incoming power or wires, Power Supply or wires, switch, S1 or Buffer Board fault.
Anything else (i.e. starts and runs, at least for a while).	A pg 33	Not the Power Supply or incoming power—could be anything else.

Before starting the diagnostic trouble tree, do the following and write down the specifics of any deviation-from the expected conditions.

- Ensure the exhaust flues are not blocked (internally or externally—they are removable) and the gas disconnect is securely engaged so as not to restrict the flow. For proper ventilation, the unit should be level, or slightly raised at the rear (not more than 1/4"). The unit will not exhaust properly if the rear of the unit is lower than the front.
- Turn OFF the Main switch.
- Turn OFF Gas to the unit.
- Remove the two front and two side screws and drop the front panel down onto the hinges. The ignition spark can be seen through small gaps around the Igniter Mounting in the front, as well as through the inspection peep-holes in the back. We can verify the spark and observe the start sequence with the gas OFF and attempting to start each burner.
- Remove the connector from A2J2 (the center connector of the Buffer Board). This will prevent the Main Board from turning on any of the Ignition Boards, interfering with our manual tests, or shocking you if you are in the wrong place.
- Turn on the Plancha Main switch
 - Verify, on the Main Board (A1), that there is one steady green LED and one green LED blinking in sequence with the Firmware version being blinked out on the front panel.
 - There should be NO LEDs ON on the Buffer Board (A2) at this time. *The four white Buttons on the Buffer Board are ordered, from left to right, to match the 4 control zones on the Plancha from left to right. On the 24" (2 zone) and 36" (3 zone) models, only the first 2 or 3 buttons respectively are used.*
 - Press each white Button in turn and observe the following: ONE red LED (near the button) and ONE green LED illuminate on the Buffer Board; one green LED on the corresponding control board; followed (after a one second delay) by the sound of a Valve opening; then sparking at the igniter in the corresponding zone. *You can see the sparking by looking through the gap around the igniter mounting bracket. (You may also see the igniter by looking through the inspection holes on the rear covers.*
 - You may remove the back covers (no tools required; lift then pull) to familiarize yourself with the layout. *As long as the gas is OFF, you may leave the back covers off to make observations.* The spark must be between the electrodes—not to the bottom of the plate, to part of the burner, or through the cable insulation to some ground.
 - Continue holding the button until the sparking stops and the Valve closes (7 seconds).
 - Make these observations on each zone and record all anomalies before continuing.
 - Restore the gas supply, replace the back covers, and replace the connector on A2J2.

1 2 3 4 5 6 7 8 9 10 11 12



1 2

A. Starts & Latches

1 2 3 4 5 6 7 8

One or more zones not heating and the red 'Fault' light comes ON—blinking OR steady?

1. **Yes.** Red fault light is coming on.

Is it blinking?

a. **Red light is blinking.**

Turning OFF the unit, then back ON will clear the problem. *This is probably an electromagnetic interference (EMI) problem. If it happens more than once a year, it should be addressed.*

Has this become a regular occurrence OR was the unit serviced shortly before the problem started?

- i. **Yes.** Open front panel and take pictures of wire routing, then contact the Wood Stone Service Department.
- ii. **No.** If the problem does not recur, it can safely be ignored.

b. **Red light is steady.**

This is an indication of a burner / Gas / Ignition / or Venting problem. Specifically, it occurs when the Ignition Module has made three attempts to light the burners of a particular zone and has failed either to light them, OR to detect the flame if they did light. It will most often occur when there is air in the line after a new installation, or when the unit has been disconnected for service or cleaning. Usually the later burners will light after the purge intervals on the earlier ones have expelled the dilute gas. If some of the burners are running, simply turn the unit OFF and back ON and all of the burners should light on the next round.

Does the problem continue beyond startup air purging?

i. **Yes.**

Note: *This problem can be caused by a number of subtle electrical problems—by a bad Ignition Module, by the gas supply or venting abnormalities. In the sequence that follows we will take a few extra steps initially that may give some insights and allow shortcuts. Please gather all of the data before jumping to conclusions.*

You should have already performed the following steps. If not, do so now:

A.1.i.1

1. Ensure the exhaust flues are not blocked (internally or externally—they are removable) and the gas disconnect is securely engaged so as not to restrict the flow.
- Turn OFF the main switch.
- Turn OFF gas to the unit.
- Remove the two front and two side screws and drop the front panel down onto the hinges. *The ignition spark can be seen through small gaps around the igniter mounting in the front, as well as through the inspection peep-holes in the back. We can see and verify just the spark and observe the start sequence by working with the gas OFF and attempting to start each burner.*
- Remove the connector from A2J2 (the center connector of the Buffer Board). *This will prevent the Main Board from turning ON any of the Ignition Modules, interfering with our manual tests, or shocking you if you are in the wrong place.*
- Turn ON the Plancha main switch. Verify, on the Main Board, that there is one steady green LED and one green LED blinking in sequence with the code version being blinked out on the front panel. *There should be NO LEDs "ON" on the Buffer Board (A2) at this time (if there are, jump to **J9, page 44**). The four white buttons on the Buffer Board are ordered, from left to right, to match the 4 control zones on the Plancha from left to right. On the 24" (2 zone) and 36" (3 zone) models, only the first 2 or 3 buttons respectively are used.* Press each one in turn and observe the following:
 - ONE red LED (near the button on the Buffer Board) and...
 - ONE green LED illuminate on the Buffer Board and...
 - One green LED on the corresponding Ignition Module...
 - Followed in one second by the sound of a Valve opening, and finally...
 - Sparking at the Igniter.

Note: *The green "burner status" LEDs on the front panel will NOT be lit when using the Buffer test buttons;*

- You can see the sparking by looking through the gap around the igniter mounting bracket. (You may also see the igniter by looking through the inspection holes on the flues at the back of the plancha. *You may remove the flues—no tools required; lift then pull—to familiarize yourself with the layout. The spark should be horizontal between the electrodes. It must not go to the bottom of the cooking plate or through cable ends or insulation to ground. It is acceptable for the spark to go down to the burner AS LONG AS the burner lights without delay and the Ignition Controller reliably detects the flame. If there are issues with the burner lighting or staying lit, a vertical spark may indicate that the electrode and burner are in need of inspection.*
- Continue holding the button until the sparking stops and the Valve closes (7 seconds). Make these observations on all zones and record all anomalies before continuing.

1 2 13 24 35 46 57 68 79 810 11 12



1 2 3 4 5 6 7 8 9 10 11 12

- Next, with the plug on A2J2 reconnected, simply start the unit and observe the firmware version blink out on the Green LED in 4 spaced digits (e.g. **2-1-0-2**) followed by each zone starting one at a time from left to right. *(There is no gas, so the unit will not heat.)* Pay particular attention that the green lights on the front panel come ON in order from left to right matching the progression of the lights on the Buffer Board and the Valves opening. *For example, assuming a cold 4 zone Plancha, if the front panel lights come ON in the order 2, 1, 4, 3, the two connectors J2 and J3 on the Main Board have been interchanged.*

2. **Note:** If there was a failure of any of the expected conditions resolve the problem (working in the order presented below), then start again at the top of this paragraph **(A.1.i.1)**

- No Buffer red LED → go to procedure **J1** in the Jump section, **pg 42**
- No Buffer green LED → go to procedure **J2** in the Jump section, **pg 42**
- No green LED on Ignition Module → go to procedure **J3** in the Jump section, **pg 42**
- No Valve opening sound → go to procedure **J4** in the Jump section, **pg 43**
- No sparking at Electrodes → go to procedure **J5** in the Jump section, **pg 43**
- Connect a manometer in place of the Pipe Plug at the center of the gas distribution Manifold.
- Now, turn the gas back ON. Manifold pressure should be at least 4.0" W.C. for NG, 9" W.C. for LP.
- Repeat the sequence of button pressing as above, but observe that each zone lights, and stays lit, as long as the button is held (test for at least 10 seconds; if the Valve closes after 7 seconds, the Ignition Module cannot detect the flame). Also, observe the electrodes after the Burners light to confirm the sparking ceases. *It is abnormal for sparking to continue in the presence of flame and indicates that the Ignition Module is not detecting the flame.*
- After going through all Burners, simultaneously press and hold all Buttons at once. With all 4 Valves open (3 Valves on 36", 3 zone models, 2 Valves on 24", 2 zone models), the manifold pressure should be very near 4.0" W.C. Rectify any shortcomings and re-run the tests in this paragraph.
 - Gas pressure too low → go to procedure **J6** in the Jump section, **pg 43**
 - Fails to light → go to procedure **J7** in the Jump section, **pg 43**
 - Fails to stop sparking after lighting or fails to hold the Valve open after 7 seconds → go to **J8** in the Jump section, **pg 44**
 - Buffer Board LEDs stuck on → go to procedure **J9** in the Jump section, **pg 44**
- When you get this far with no errors, turn OFF the Plancha and the gas supply.
- Remove the manometer and replace the Plug in the Manifold.
- Replace the connector on A2J2 and check for anything else that may have been left open, lose, or untidy during the repair.
- Turn ON the gas and turn ON the Plancha.
- After Blinking out the Firmware revision number, the Plancha will begin to run the zones according to demand. As long as the zones are colder than the set points, the Burners will start and run. The first time after power up they will start from left to right with about a 5 second delay between them (ONLY at initial power up). The Burners should remain lit until the unit reaches the set point (approximately; there may be some overshoot or undershoot).* Watch for all of the same performance cues that were tested for above. If there are any abnormalities (particularly if the Valve starts cycling while the unit is still much cooler than the set point) follow the same trouble shooting sequence called out above. In particular, look for sparking (between the Igniter Electrodes) while the flame is present, indicating an issue with flame detection.***

ii. **No. Problem solved. *****

3 2. **No. Red "Fault" light does NOT come ON, even after 2 or 3 minutes.**

This is the broad "everything else" category. The unit starts, runs, and keeps running and the red fault light is NOT illuminated.

It might be useful to read the nomenclature section and review the list of parts that can break and how the fault presents itself, or you can simply continue with this stepwise sequence to find the most likely problems.

When, for each and every Zone, the front panel Indicator light is ON (green), the corresponding zone burner is lit, and stays lit, without interruption until the Indicator light goes out.

a. Yes, Flame Steady with demand.

After some time, do one or more of the front panel (green) status lights start to blink ON and OFF?

i. Yes, they blink.

The normal reason for a status light to blink is an open or disconnected Thermocouple. If all lights begin blinking together, it could be that ALL of the Thermocouples are disconnected OR that the Main Board has overheated.

Are ALL of the status lights blinking together?

1 2 3 4 5 6 7 8 9 10 11 12



1 2 13 24 35 46 57 68 79 10 11 12

4

1. Yes, all of the status lights are blinking together.

The usual reason for all indicators to blink simultaneously is an over temp condition on the Main Board. This may occur when a Burner or Burners backfire out into the electronics area and/or light and burn in the venturi. There should be ample visual evidence if this problem. Double check unit is level front to back. Unit will not exhaust properly if the rear of the unit is lower than the front. The combustion issues must be rectified before putting the unit back into service. A second possibility is that all Thermocouples are unplugged; it is possible, but unlikely, that they all failed simultaneously in some other way.

If unplugged, plug Thermocouples in and restart the test. ***

2. No, only one (or 2 or 3) are blinking.

For the Zone(s) blinking, check that the Thermocouple(s) are installed, that the wires are not broken and that the connectors and cables all the way to the Main Board terminal block (A1J4) are intact and making good connection.

Check for continuity through the Thermocouple leads with an ohmeter; if reading is "OPEN" replace Thermocouple.

As appropriate, repair the connectors or replace the Thermocouple. ***

ii. No blinking of the status lights.

Is the problem that the unit shuts down unexpectedly?

1. Yes, the unit runs for a while like it is going to work, and then just shuts OFF.

"Shutting OFF" means everything, including the green indicator LED in the Main Power Rocker Switch.

This is possible only when the power latching relay (A2-K1 on the Buffer Board) drops out. *This may happen if the relay is faulty or if the supply voltage from the Power Supply gets too low (like, 12 volts or below), even momentarily. An overload on the 24vDC Power Supply will cause it to "fold back" to prevent overheating and destruction of the Power Supply. In this case, the voltage will often drop low enough to release the K1 relay. Current output from the Power Supply should not normally exceed 2.5 to 3 amps.*

A load above 3 amps could cause the Power Supply to fold back. If the current is higher than this, find the cause, and fix it. *It may happen when a certain Valve comes on, which indicates that the Valve is drawing too much current.*

It may happen when ALL of the Valves become active, no matter which one comes ON last. *In this case, it is more likely that the Power Supply is faulty, or that there is another exceptionally heavy load that pushes the current over the limit when all of the Valves are also on. That fault may be on the Main Board, the Buffer Board, or one of the Ignition Modules.*

Other causes of K1 drop-out are: loose connectors, contacts not fully inserted into connectors, a bad switch (S1), broken or shorted wiring. The locations involved are the P/S terminal block, J1 on the Buffer Board, and the Rocker switch, S1.

If the load is not excessive and there are no opens or shorts, the Power Supply should be replaced. If an excessive load is suspected, remember to use the push buttons on the Buffer Board to enable each channel individually, or all together. *If J2 on the Buffer Board is disconnected, there will be no input from the Main Board, so only the push buttons will turn ON the outputs; they can be operated in any order or combination to isolate the problem.*

2. No, the unit does not quit, it has some other erratic behavior.

Is the problem primarily one of temperature control or accuracy over an entire zone or zones?

A.2.a.ii.2.a

a. Yes, one or more zones is operating at the wrong temperature.

We have, to arrive at this point in the troubleshooting tree, determined that there are no fault or blinking indicators and the burners light when called and stay lit until commanded OFF.

If the Burner does not light immediately when called and run hot and evenly (bright red glow over all of the burner surface), skip to the "No" path (**A.2.a.ii.2.b**), below.

From here, this is likely a control problem caused by either of two unrelated faults. They are: 1) a problem with the temperature set point input from the potentiometers, or 2) a problem with the temperature measurement input from the Thermocouples to (or on) the Main Board. Sometimes it is possible to tell which it is by the problem's grouping. *For instance, if the three zones that all share the same pot on "hidden control knob models" with a divider are all equally high or low, it is more reasonable to look, first, at the wires and connectors to the pot, than to assume that three simultaneous and identical faults happened to three different Thermocouples, or their input circuits.*

5

6

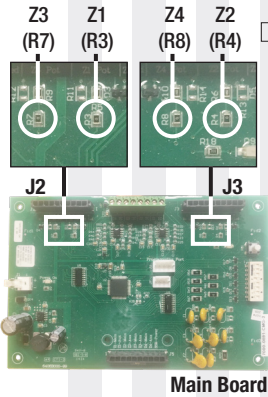
1 2 13 24 35 46 57 68 79 10 11 12



1 2 3 4 5 6 7 8 9 10 11 12

- A third problem type which is serious, but rare, is “cross control”. This is not a wear out or break down kind of problem and cannot happen spontaneously, but can result after an attempt at service, or if a unit is miswired. Cross control happens when either the temperature input OR the control output is swapped between two zones. The potentiometer input is not a part of this problem whether it is switched, or not. The problem usually occurs in pairs, for example, like this: the Main Board channel with output to Zone 2 gets wired to the temperature source from Zone 1 and the channel with output for Zone 1 gets its input connected to the Thermocouple from Zone 2. When the real Zone 2 gets hot, the Main Board sees that temperature applied to Zone 1 input, thinks that Zone 1 is hot and turns off the heat to Zone 1. As Zone 1 gets cooler, the Main Board sees that falling temperature on the input to Zone 2 and keeps the heat output enabled on Zone 2. This never ends: Zone 1 gets no heat and Zone 2 runs forever. If you have a pair of Zones that act this way, make very sure the Thermocouple inputs come from the correct Zone (most likely problem) and that the outputs to the Ignition Modules and Valves are not interchanged.

- We will start by verifying that the potentiometer signals make it all of the way to the Main Board. For the typical 4836 setup with 4 knobs (thus, 4 pots), each knob corresponds to a single Zone, running from left to right, 1–4. On a 3 zone unit, you will not find a pot for Zone 2. A 2 Zone model has neither Zone 2 or 3.
 - You will be measuring the DC voltage between ground and a specific Resistor on the Board while the Pot is rotated from minimum to maximum. Ground is conveniently found at the (-) terminal of J1 on the Board.
 - The correct Resistor to probe on the Main Board—that corresponds to each Zone—is shown in the table below. Refer to the illustration to the left or the silk screen to locate each Resistor. Be certain to penetrate the conformal coating when contacting the resistor. The plancha must be turned ON for this measurement, but does not need gas.



Main Board

	Near J2	Near J3
Zone 1	R3	
Zone 2		R4
Zone 3	R7	
Zone 4		R8

- The voltage measured should range from about **0.75 to 4.25** as the corresponding knob is turned from low to high. As long as it increases smoothly as the temperature setting is increased and doesn't skip about, the exact values at the endpoints are not critical and will vary somewhat among units.
- Other models (2- and 3-Zone planchas, and hidden control planchas with fewer knobs than zones, are all tested between the same points for the same zones. The added difficulty, however, is in knowing which zones correspond to which knobs. In some cases, one pot may be shared among multiple zone channels requiring a rotation of the setting knob for each zone resistor to be probed.

Measurements on the hidden knob units are only valid when the knob index points to where the temperature scale is marked and may be undefined elsewhere.

	Zone 1	Zone 2	Zone 3	Zone 4
2-Zone External Knob	Left Knob	-	-	Right Knob
3-Zone External Knob	Left Knob	-	Center Knob	Right Knob
3-Zone Hidden Knob	Only Knob	-	Only Knob	Only Knob
4-Zone Hidden Knob: Left Divider	Top Knob	Bottom Knob	Bottom Knob	Bottom Knob
4-Zone Hidden Knob: Right Divider	Top Knob	Top Knob	Top Knob	Bottom Knob
4-Zone Hidden Knob: NO Divider	Top Knob	Top Knob	Bottom Knob	Bottom Knob

Did all of the voltages (measured at the 0 ohm resistors, to ground) move smoothly through the range, in the direction expected, and without gaps in the labeled temperature range?

- i. **Yes, the Pots and Zones were matched as described and the voltages were correct.**

Unless there is reason to suspect a bad Pot calibration (that is, no one tried to do one and messed it up and the unit has worked correctly up until this time) we'll leave the Pots and proceed to look at the Thermocouples.

1 2 3 4 5 6 7 8 9 10 11 12



1 2 3 2 4 3 5 4 6 5 7 6 8 7 9 8 10 9 11 12

ii. No, the voltages or groupings were not correct.

Were the zones and pots correctly grouped?

1. Yes, the grouping matches the Plancha layout.

Were the voltages stuck high or low, or going the wrong way?

a. Yes.

This is generally due to faulty wiring or a poorly inserted contact between the Pots and the Main Board. Check that J2 and J3 connectors are fully inserted and that none of the contacts can be pulled out. **If the voltage is stuck at 5 volts:** One of the ground (white/black) wires is probably loose or broken. **If the voltage is always near ground:** Look for a disconnected 5 volt wire to the Pots (white / red). **If the voltage floats in the middle, but doesn't respond to Pot rotation:** Look at the wiper wires and the bullet connectors. **If the voltage moves through the correct range, but goes up when it should go down:** The ground and 5 volt wires are reversed at the Pot. Use the Wiring Diagrams at the end of this manual to get this all correct.

b. No, the voltages had the correct range.

Did the voltage range begin & end on the wrong part of the dial or start over in the middle of the temp range?

i. Yes. Pot faulty; knob is rotated on pot shaft or rotated in bracket. Replace or rotate if necessary.

2. No, the grouping doesn't match the Plancha layout.

The grouping is achieved with bullet type connectors that are near the pots on the front control panel. Refer to the wiring diagram and ensure that these are correct. If you discovered above that the front panel status LEDs (green) were running out of order, be sure, FIRST, that J2 and J3 connectors on the Main Board are not interchanged: Trace the wire from A1J2-4 to the wiper of the potentiometer.

A.2.a.ii.2.b

b. No, sometimes the flame goes out while the Indicator light is lit.

Can you hear the Valve close when the flame goes out (while the Indicator light remains lit)?

i. Yes, I can hear Valve operate.

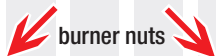
Do the corresponding channel indicator LEDs on the Buffer Board and Ignition Module stay illuminated while the Valve is OFF?

1. Yes, illuminated constantly.

The Ignition Module is failing to sense the flame. The problem may be the Ignition Module, the ignition wire, the condition or position of the spark gap assembly, or (possibly) a poor ground. Check that the ground wire is secure, connected, and routed like the other zones. **If that is OK:** Swap the ignition wire with one from another zone and see if the problem follows the wire, or not. **If it is not the wire:** Swap complete Ignition Module.

If it is none of the above: Remove the two nuts indicated and pull out the burner and manifold assembly and inspect the spark gap assembly for condition and alignment. ***

7



8

2. No, the Ignition Module, or the Ignition Module AND the Buffer Board indicators go out when the Valve cycles.

The Buffer Board has two LEDs and a test button for each channel (zone). The switches allow each channel to be tested independently of any input from the Main Board (unplug the connector from J2 on the Buffer Board if it is desired to remove the Main Board inputs). The red LED illuminates when the Main Board brings the input control line to ground (or when the test button on the Buffer Board is pressed). That (active low) input causes 24 volts to be switched to the channel output and then the green LED comes ON UNLESS the load is so high (like a short at the Valve) that the PTC resettable fuse trips. In this case the green LED will be OFF, or very dim. If the fault is beyond the Ignition Module (in the wiring or the Valve), the green LED (on the Buffer Board) will stay ON for about 1 second after the red indicator comes on, before it goes out as the Ignition Module tries to turn ON the Valve.

If the Buffer LEDs show input (red), but no output (green), unplug the cable from J3 on the Buffer Board (this removes the output load); if the green LED then comes on, there is an overload somewhere beyond the Buffer Board. It could be a wire shorted to ground, a fault on the Ignition Module, or a short in the Valve.

If the green and red Buffer LEDs are on, but the Ignition Module red LED is OFF or intermittent, there is possibly an OPEN or bad connection between the Buffer and Ignition Modules, or a bad Ignition Module. If the exact source of the problem is not immediately obvious, it may be expedient to swap some components between working and non-working channels to isolate the fault.

Continue >

1 2 3 2 4 3 5 4 6 5 7 6 8 7 9 8 10 9 11 12



1 2 3 4 5 6 7 8 9 10 11 12

Lastly, **if the input control LED (red) on the Buffer Board is not constant, but the corresponding Indicator light on the front panel is**, there is likely a problem with the wiring or connections between the Main Board and Buffer Boards. If a problem cannot be found with a contact or wire, it will be necessary to replace the Main Board and perform the pot calibration procedure (pg 46).***

9

ii. No, there is no Valve sound.

If the flame starts and stops without a Valve sound, the problem may be with the gas supply, gas pressure, or burner assembly. It is also possible that the Valve fails to open completely causing intermittent combustion. Remember, temperature control is back in the Main Board, not the Ignition Module. As long as the Buffer Board LEDs show continuous demand, the Ignition Module should have continuous output (flame stays lit). The Ignition Module will only shut OFF the Valve if it cannot sense the flame or loses the external Th command from the Buffer Board. Flame sense failure will result in an attempt to re-light the burner (renewed sparking at the spark gap). If the sensing failure lasts for 7 seconds, the Valve will be closed for 15 seconds, then the lighting sequence will be repeated up to two more times. If there is any doubt about being able to hear or feel the Valve actuation, use a voltmeter to monitor for voltage across the Valve. ***

c. No, something else.

Is the problem speed; slow heat up or poor recovery under load?

Yes. Explore bad burner quality and/or low gas pressure

Is the problem one of poor temperature distribution from front to back (or side to side) within a zone?

Yes. Again check burner quality and consistency. If bad, replace. Check that jets are not blocked. Check that the plancha is level.

10

If problem has not been resolved at this point, go to Component Essentials section, pg 25

1 2 3 4 5 6 7 8 9 10 11 12



B. Tries to Start; Doesn't Latch

When the Power Switch on the front panel is pressed to the momentary position, does the green light in the switch come on, but as soon as the switch is released, it goes OFF and the Plancha does not start? *If the Power Switch is held in the momentary position, the Plancha runs normally as long as the Rocker is held down, e.g., the code version is blinked out, then the front-panel status lights come ON and the Valves are opened for burner lighting, etc.*

11

1. Yes.

This situation indicates that the 24V DC Power Supply is working, the unit is plugged into a good receptacle, and that the (internal) fuse is good. The lamp in the switch may go out because the switch, the relay, or the wires are faulty.

This problem is straight forward to trouble shoot using the wiring diagram, or follow the sequence below.

Turn OFF the Plancha. Remove the two side and two top screws from the front panel and drop it down onto the hinges. *We want to confirm the problem is with the relay latching circuit.* With the unit plugged in, but not turned ON, find the green "output O.K. LED" on the Power Supply. While watching this LED carefully, push the front panel Rocker switch past "ON" into the spring loaded "Start" position and hold it (the green LED in the Rocker switch should be "ON" at this time). While watching the PS1 LED, release the switch. It is expected that the green LED in the Rocker switch now goes OFF.

Did the LED on the Power Supply go out or flicker when the Rocker was held or released?

a. Yes, the Power Supply (PS1) LED went out at some time during pressing and releasing the Rocker switch.

This implies a shorted wire or component. Follow the trouble shooting sequence starting at **(C.1.a.i)**, except that you must press the Start button at each test.

b. No, the Power Supply (PS1) LED was steady.

When you press the Rocker switch (starting from OFF) can you hear or feel the K1 relay on the Buffer Board engage?

If you have to go to the "OFF" position to feel it release, it is latching, but (apparently) the power is not getting to the rest of the unit.

i. Yes.

Unplug the Plancha and test the continuity between PS1(-) and pin 5 of K1 on the Buffer Board with the Power Switch Rocker in the "ON" and "START" positions. *It should measure about an ohm or less (the anode of D3—pin 1, on the small trace going to pin 10 of J1—is the same node and easier to reach from the front of the board).* Test again with switch "OFF". *The circuit should now be open (megaohms).* If faults were found, repair them (switch, contacts, wires) before starting again. Plug the Plancha back in.

If nothing else was found, there may be a faulty relay on the Buffer Board (A2). Try to actually verify that before replacing the board. Check that 24vAC is present on pin 4 of A2K1 when the Power Switch is pressed. Check GND on A2K1 pin 5. If power and GND are present but relay does not engage, then replace Buffer Board.

ii. No

Check the continuity from J1 on the Buffer Board to the terminals of the main switch, using the Wiring diagram or this continuity table.

1. Continuity table method.

Terminal at S1	Buffer Board (A2J1)	Signal
1 and 8	J1-2	DC rtn; gnd
3	J1-6	Fused 24 DC
4	J1-9	24vDC, switched
9	J1-10	Coil (-)

2. Also check the ground circuit as in "bi" above. ***

2. No. This isn't the proper procedure for your situation. ***

If problem has not been resolved at this point, go to Expert Section, page 36.

**C. No Sign of Life**

1 2 3 4 5 6 7 8

No illumination in Rocker Switch when pressed OR released, no code blinking on DS3, no red Fault light at startup—no sign of life.

This problem is with the power delivery somewhere from before the circuit breaker up through and including the internal fuse on the Buffer Board or the wiring between the Buffer Board and the switch (S1).

- 1. Yes, the Plancha is plugged into a functioning receptacle and the circuit breaker is “ON”.** When power is confirmed, remove the 4 machine screws from the top and sides of the front panel, swing it down, and plug the Plancha back in. *The top of the Power Supply should have an illuminated green LED any time the unit is plugged in—whether or not it is turned ON.*

Is the green LED on top of the Power Supply illuminated?

- a. No, the LED is NOT illuminated.** Test for voltage (120vAC) across the L and N terminals of the Power Supply.

Is there AC voltage?**C.1.a.i**

- i. Yes, there is AC voltage.** Remove the connector from J1 on the Buffer Board and observe the P/S LED.

Is the P/S LED ON?

- 1. Yes, the Power Supply (PS1) LED is ON.** There may be a short on the Buffer Board or wiring from/to the Buffer Board.

 Unplug both J2 and J3 from the Buffer Board. Plug J1 back in and observe the P/S LED.**Does the LED stay ON?**

- a. Yes.** Re-insert J3 on the Buffer Board and observe the P/S LED.

i. No, the LED goes back OFF. *This is very unlikely since the Buffer Board outputs are protected by self-resetting PTC fuses. Make certain the Buffer Board has only 4 white push buttons, not the older style 5 buttons.* Find short / Bad Ignition Module / Replace Buffer Board. **xxx**

ii. Yes, the LED stays ON. Insert J2 on the Buffer Board. Wait for the Main Board board to initialize. Observe the P/S LED.

1. If the LED goes OFF as soon as J2 is inserted. There is likely a problem on the Main Board or with the circuits wired to it. A good first place to look would be the four 24 volt wires to the green zone status lights corresponding to each zone on the front panel. These wires come from J2-1, J2-10, J3-1 and J3-10 on the Main Board. Refer to the appropriate wiring diagram for your model.

2. If the Power Supply folds back only after the software rev has blinked out and the outputs on the J5 have started to switch the Ignition Modules via the Buffer Board: It is possible that there is a short in the harness wiring to the Gas Valves. *However, this is not likely, because the Buffer outputs will limit current to a small fraction of the available output current.* Each output can be tested individually or in combinations by using the white push button switches on the Buffer Board.

2. No, the P/S LED is OFF. *With this Power Supply status, the fault lies in the wiring to the main Rocker switch (S1) or on the Buffer Board itself.* First, check that there is no foreign matter on or under the Buffer Board causing a short. Then methodically eliminate each potential cause from the switch through the wiring. Then check the Buffer Board from the fuse output back to the input at J1-7 for an unintentional path to ground. *The test point on the Buffer Board near K2 is tied to the ground plane on the board and can be used for testing continuity to ground.*

Is the LED still OFF?

a. Yes. *Either the Power Supply is bad or it is miswired.* To determine which, remove all the wires from the (+) terminal of the Power Supply.

 If the Power Supply has the correct input and no output now, it should be replaced. If removing the wire from terminal (+) allowed the output to come up, there must be a wiring error or defective part pulling too much current from the Power Supply.

b. No. *If the Power Supply comes on now, the wiring between it and J1 of the Buffer Board, or to S1, must be faulty.* Verify the wiring against the wiring diagram and ensure there are no shorts (or cut/burned insulation). *The switch might be bad, too, but that is relatively unlikely.*

- ii. No, there is NO AC voltage.** At the Power Supply input, check the plug and wire between the main chassis and the control section, then all of the wires and terminals as necessary to eliminate the open circuit. Refer to the wiring diagram as required. **Be certain to unplug the unit before removing covers.** Remedy the fault and start the procedure over.



1 2 3 4 5 6 7 8 9 10 11 12

C.1.b

b. Yes, the LED is illuminated. Check for 24V DC between the (-) terminal of the Power Supply and each side of the fuse on the Buffer Board.

i. If the fuse is blown (voltage available on fuse input, but not output): Determine why (foreign objects lodged under a circuit board, pinched wire or melted insulation, etc.) before replacing it. Watch carefully to see if the new fuse blows when the unit is plugged in, or when it is turned ON.

Does the new fuse blow?

1. Yes.

a. As soon as it is plugged in?

This implies a wiring problem between the Power Supply and the Buffer Board or between the Buffer Board and the switch. It is most likely pinched or melted insulation or, possibly, a failed switch. Find and repair the problem then return to **C.1.b**.

b. Immediately when turned on?

This could still be the switch or Buffer Board, but also may include wiring to the Main Board, the Main Board itself, or wiring to the front panel indicators. The power wires to the Ignition Boards (not the Th signal) are also energized at this time. Normally, each Ignition Board will illuminate its lower (red) LED for 1 second when power is first applied.

c. When turned on, but after some delay?

If the fuse blows after the firmware version finishes blinking out on DS3, the problem likely lies in a gas Valve solenoid or the wiring between the Buffer Board and the gas Valve. Normally, the Buffer Board should limit current to the gas Valve and the fuse would not blow; if it is, then it is likely that the Buffer Board will need to be replaced in addition to the gas Valve.

2. No. ***

ii. If there is no voltage to either end of the fuse: Look for bad connections or broken wires (refer to the wiring diagram) between the Power Supply and J1-7 of the Buffer Board or for damage to the Buffer Board between J1-7 and the fuse input. Directly test between the (+) and (-) terminals of the Power Supply to confirm that there is 22–24 volts at the output. If there is no output voltage, but the input is present, remove all wires from the (+) terminal and test again.

1. If there is still insufficient voltage: Replace the Power Supply.

2. If the voltage then appears: Go to **C.1.a.i.1** above to look for a short in the wiring or the Buffer Board.

iii. If there is a 24 volt potential on both sides of the fuse: *The fault may lie with the relay on the Buffer Board, the Switch, S1, the wiring between these, or the return (ground) wire from the Buffer J1-1 to PS1-Terminal (-).* Verify that the shorting bridge is in place between the GND and (-) terminals of the Power Supply. Replace the defective component.

2. No, the receptacle is faulty. Have the receptacle repaired by a qualified electrician.

If the circuit breaker is OFF, turn it ON. *Be sure that interlocks to the hood or other fire safety equipment are appropriately energized.*

When these items are corrected, start the procedure again from the beginning.

1 2 3 4 5 6 7 8 9 10 11 12

**J. “Jump-To” Procedures**

1 2 3 4

J1. Failed red Buffer Board LED on button push, power good.

- Verify 24 volts on both sides of the fuse on the Buffer Board and make sure the wire at A2J1-1 is connected to the Power Supply (-) terminal.
- Ensure the unit is still switched ON (green power light in main switch and green LED pilot light on Power Supply).
- If only one of the input LEDs (red) fails to come on:** The likely fault is an LED, resistor, or switch in that channel on the Buffer Board.
 - If so, the Buffer Board will need to be replaced. *It is remotely possible that only the test switch is bad and the input from the Control Board would still work.* This can be checked by plugging A2J2 back in (gas not required), starting the unit, and watching (after the delay for flashing of the version) the green lights on the Front Panel, and the matching red and green LEDs on the Buffer Board to see if the Control Board can activate the output. Ensure the set point is at least 50 °F over the current plate temperature so the zone will call for heat.
 - The output is activated if the green light on the Ignition Board comes ON and the gas solenoid is energized. You can hear and feel the Valve change state; there is no need for gas at this time. If the matching buffer output LED and the corresponding Ignition Module green LED illuminate, the Buffer Board is not keeping the unit from working, though it should still be replaced when convenient so that the complete diagnostic functionality is available.
 - If the input LED test fails on ALL channels:** Suspect power wiring.
- When ready to continue with the test sequence, unplug A2J2 before going on. ***

J2. Passed Buffer Board red LED, failed green

The most likely cause is an overload on the output that causes the PTC “fuse” to trip. The green LED is connected AFTER the PTC, so if the fuse trips, the output will be isolated from the power source and the LED will remain dark. If the green output LED on the Buffer Board comes ON for one second and then goes out, that still counts as “not ON”, but does indicate the problem is likely between the Ignition Module and the Valve since the switching of the Valve on the Ignition Board occurs 1 second after the Th signal is asserted.

Test by unplugging the Buffer output connector (J3 on the Buffer Board (A2J3)) and try the test button again.

- 1. If the green LED comes ON now:** *We need to find the overload.* Start by disconnecting the (9 pin) connector at P1 on the Ignition Module and re-plugging the connector at A2J3. Test again with the button.
 - a. If the green LED comes ON now:** Unplug the corresponding gas Valve (either wire) and plug the 9-pin connector back into the Ignition Module. Press the test button again. ***
 - i. If the green LED on the Buffer Board comes ON (and stays ON):** The gas Valve solenoid or the wiring to it is the problem. ***
 - ii. If the green LED now does NOT come ON:** Check the wiring between the Buffer Board and the Ignition Module. Make sure that there is not a screw or other foreign object lodged behind the Ignition Module or Buffer Board. Before replacing the Ignition Module, try swapping it (and/or the cable or igniter) with one that works to be ascertain whether the problem follows the swapped hardware or stays with the zone. ***
- 2. If the green LED still doesn't come ON when the red LED is ON:** *It is possible that the LED is faulty, but the channel works.* If the green LED on the corresponding Ignition Module comes ON and the Valve opens when the corresponding channel test button on the Buffer Board, the Buffer Board may be replaced at your convenience. Otherwise, it MUST be replaced to resolve the problem. ***

J3. Passed Buffer Board green LED, failed green LED on Ignition Module.

- In addition to the “Th” signal from the Buffer Board, the Ignition Module requires +24 volts (present any time the unit is ON) on pin 2 of the 9-pin connector and (DC) ground on pin 5.
- Verify, too, that the +24 volts Th signal is reaching pin 6 on the Ignition Module 9-pin when the test button is pushed.
- If all of these signals are present, the on-board fault light (red) is OFF, and there is still no green status light on the Ignition Module, you can make a final test by swapping the Ignition Module with one that works to confirm the Ignition Module is bad before replacing it.



1 2 13 24 35 46 57 68 9 10 11 12

J4 Ignition Module green light pass; no Valve opening sound.

This could be because the Valve or wiring is open circuit, or the Valve solenoid is stuck.

- Verify proper orientation of the Valve.
- You should be able to detect the two small relays on the Ignition Module engaging to power the Valve (1 second after the green LED comes ON), and you should be able to measure about 1/2 amp of current going through the solenoid (this is DC, so you cannot use an AC ammeter).
- You should be able to measure the Valve voltage on pin 6 of the Ignition Module connector, and across the Valve solenoid.
- If the Ignition Module relays are not opening, look to the next item, below.
 - After isolating a wiring or solenoid problem, replace the defective parts.
 - OR it could be because the Ignition Module chooses not to open the Valve (no 24 volts on pin 6).
 - In this case, the small relays on the Ignition Module will not click and there will be no output voltage or current.
 - Be sure, first, that the Th signal is present when the test button is pushed (24 volts on pin 4) and that pin 2 also has 22 to 24 volts when the Plancha is “ON”. If there is already a flame, or there is a short across the electrodes of the igniter, the Ignition Module will not even try to light the burner or open the Valve.
 - If this condition persists, the Ignition Board should light its Red LED and set the alarm output, which will light the Fault light on the front panel. The Ignition Board will flash its on-board red LED a different number of times for different faults. See the **Component Fundamentals Section, pg 25** for a summary of the blink codes.
 - Another possible, but rare, condition is a burned resistor on the Buffer Board that limits current into the Th pin. When the Valve drive relay is closed on the Ignition Board, the Th voltage drops and the Ignition Board recognizes this as a fault and, after two or three tries, blinks the fault light and stops trying. This looks like an Ignition Board fault because the green output LED on the Buffer Board never goes out. Swapping Ignition Boards will show that the fault stays with the channel, not the board. This damage to the Buffer Board can happen if the output is asserted, the gas solenoid is ON and a direct short occurs across the solenoid terminals. **Do not test ANYTHING by shorting it!** In this fault, the Buffer Board will have to be replaced.

J5 Ignition Module green light pass, no spark at ignitor.

When the Th signal is first applied to the Ignition Control Board, there should be sparking for 7 seconds, or until the flame is detected. After 7 seconds, there will be a 15 second “rest” before another 7 second lighting trial, followed by one last rest and additional trial. If the flame has not lit (or merely not been detected), the Ignition Board will “lock out” and no longer attempt to light the burner.

- In this step, we are asking if the initial 7 seconds of sparking occurs. If it does not, the high voltage could be leaking to ground through a fault in the insulation of the high voltage wire or tracking along some contamination at either end of the cable, or the insulator of the igniter electrode.
- As long as you have confirmed that the Valve is opening and the on-board fault light is not ON, the problem is probably in the ignition cable or the ignitor. *Be sure you are looking/listening to the correct zone.* Cleaning insulators and swapping cables should reveal the problem. As a last resort, swap Ignition Modules to rule out a failed module.

J6 Gas pressure too low.

This is most commonly due to a damaged, dirty, or poorly seated gas disconnect fitting. Other possibilities include low pressure of the incoming supply, or a bad or mis-adjusted regulator.

J7 Fails to light.

We have already found that the gas pressure is O.K., the Valve is making a sound when commanded, and the ignition is sparking in the correct place.

- Check for a blocked jet, damaged or blocked burner, mechanical failure in the Valve, or a physical problem with the venturi / burner assembly.
- If there is any doubt about the location or strength of the spark, refer to J5 and the Component Fundamentals Section (**pg 17**) for more information. The Valve can be operated manually using the test button on the Buffer Board, provided that the Ignition Board is working (J1 – J5).
- Replace the Valve, jet, or burner as required.

1 2 13 24 35 46 57 68 9 10 11 12



1 2 3 4 5 6 7 8 9 10 11 12

J8 Fails to stop sparking after lighting or fails to hold the Valve open after the 7 second trial.

We have reached this step after getting the burner lit. This symptom indicates that the Ignition Board is not detecting the flame even though you can see that it is burning.

There are four ways this can happen: **1.** Bad ignition cable connections or ignition cable, **2.** Poor burner/flame combustion, **3.** Poor ground connection, or **4.** A failed Ignition Board. *There are multiple ground paths, so this is least likely. It is possible for an open in the cable to allow the ignition spark to jump, but completely block the sensing current.*

- Test by swapping ignition cables with a working zone. The rectification current can be read on the Ignition Board with a uA meter at the two pin FC connector. Normal values would be in the range of 1.2 – 2.5 uA and the Valve will be closed at values under 0.8 uA. If the rectification current is low, the problem is more likely at the cable or burner than the Ignition Board.
- Verify the ignition spark is happening across the igniter/flame rod, and not to the chassis.
- Swap ignition cable with a working zone or a new cable, if available. If this solves the problem, replace ignition cable. ***

J9 Buffer Board LED(s) stuck on.

If the output (green) LED is ON (and the burner will usually be lit if there is gas) when there is no demand for heat (the corresponding RED LED is OFF), the output transistor on the Buffer Board may have failed in a conducting state.

- Remove connector J2 from Buffer Board.
 - If a green LED stays ON when no buttons are pushed, replace the Buffer Board. ***
- If a red LED (probably red and green together) is ON when there is no call for heat (from the Main Board), the problem could be a wire shorted to ground between the Main Board and the Buffer Board, or a failed output on the Main Board.
- If J5 is removed from the Main Board and the problem is resolved, the Main Board has failed output (assuming that it wasn't legitimately calling for heat)—make this test in the first 20 seconds of turning ON the Plancha to be sure.
- When it is first switched ON there should be NO burners ON while the firmware version is blinking out.
 - If this checks out, remove J2 from the Buffer Board.
 - If the LED goes out, there is a fault in the harness between the two boards.
 - If not, look for foreign material behind or on the Buffer Board.
 - Lastly check the white push button test switch for the affected zone. If necessary, replace the Buffer Board.

1 2 3 4 5 6 7 8 9 10 11 12



SURFACE TEMPERATURE MEASUREMENT PROCEDURE

- Carefully verify all Temperature Knobs are set exactly at the same temperature. Make certain grill surface is clean.
- From a cold start:** Turn on the Plancha and wait at least 60 minutes before taking temperature measurements.

If Plancha is heated up / in use: Allow 15 minutes of inactivity to stabilize after last cooking run. Make certain grill surface is clean.

- Using a surface probe intended for griddles, condition the test probe before each measurement by placing it on the cook surface, away from the Measurement Point (•). Once the reading has stabilized, THEN slide the probe over the Measurement Point. Wait for Heat Indicator Light to cycle OFF, then note temperature.
- Temperature reading at each point should be within the range of the Set Point (shown below). If the temperature reading is outside of this range, wait for the green Heat Indicator Light to come on again and recheck the temperature. If the temperature is still out of range, contact Wood Stone.

FOR FIRMWARE v2101*

Temperature range: **+/- 15°F**

FOR FIRMWARE v2103 and later

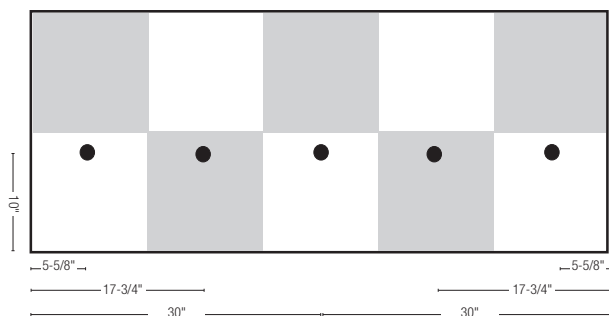
Temperature range: **-5/+25 °F**

- * The firmware version blinks on the Heat Indicator Light (2nd green light from right on front panel) AND D9 (green light on Main Board) when the unit is first turned ON. For example, for Firmware **v2103**, the light will quickly blink **two** times, slight pause, then **one** blink, then a longer **pause** for zero, then **three** blinks.

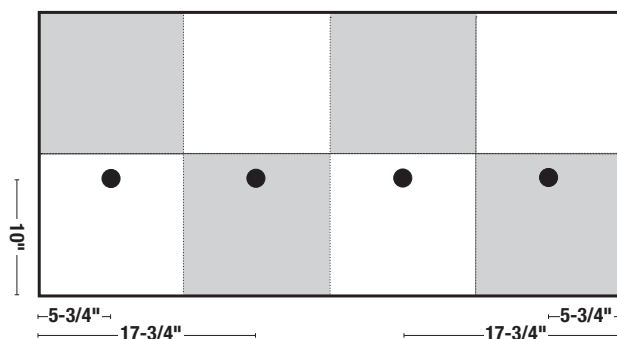
Please contact Wood Stone at 1-800-988-8103 should service be necessary, or if you have any questions about your Plancha. Our service hours are 8am to 5pm Pacific time. Follow the recorded instructions for Emergency Service if you require assistance during non-business hours. A Wood Stone technician will promptly respond to your call.

GPL-6036

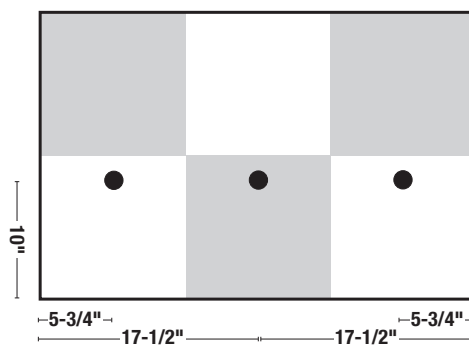
• Measurement points



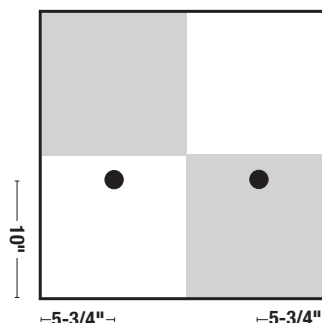
GPL-4836



GPL-3636



GPL-2436





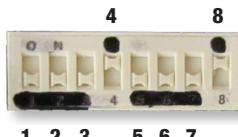
POT CALIBRATION FOR THE MAIN BOARD (A1) ON THE GAS PLANCHA – FIRMWARE 210x

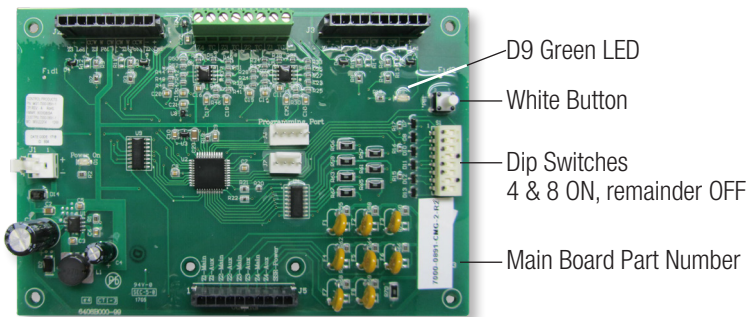
For location, see 4-Channel Main Board in CONTROL BOX ASSEMBLY sections, **pgs 4 Zone: 25, 3 Zone: 32, 2 Zone: 39.**

*Calibration is only necessary if the Main Board or one of the potentiometers has been replaced.
The DIP switches on the board are also read and stored during the calibration sequence,
so if a board is reconfigured by altering the switch settings, it must be re-calibrated.*

PREPARATION

- The power should be OFF, and the Control Panel opened. It is not necessary to have gas for this procedure.
- Locate the Main Board with its White Push Button, Green “Ready” LED (D9) and DIP switches.
- Firmware version blinks on the Heat Indicator Light (2nd green light from right on front panel) AND D9 (green light on Main Board).
- View Knobs straight-on, not at an angle, for best accuracy.
- There are no time limits between steps, but if you are interrupted, start over to be sure it is right.
- Verify the Main Board part number and DIP Switch settings.

Part Number	7000-0891-61 (Knob) 7000-0891-60 (Hidden Knob)
Description	Main Board (GEN2) All models
Dip Switch Settings	<div style="text-align: center;">  <p>4 8</p> <p>1 2 3 5 6 7</p> </div>



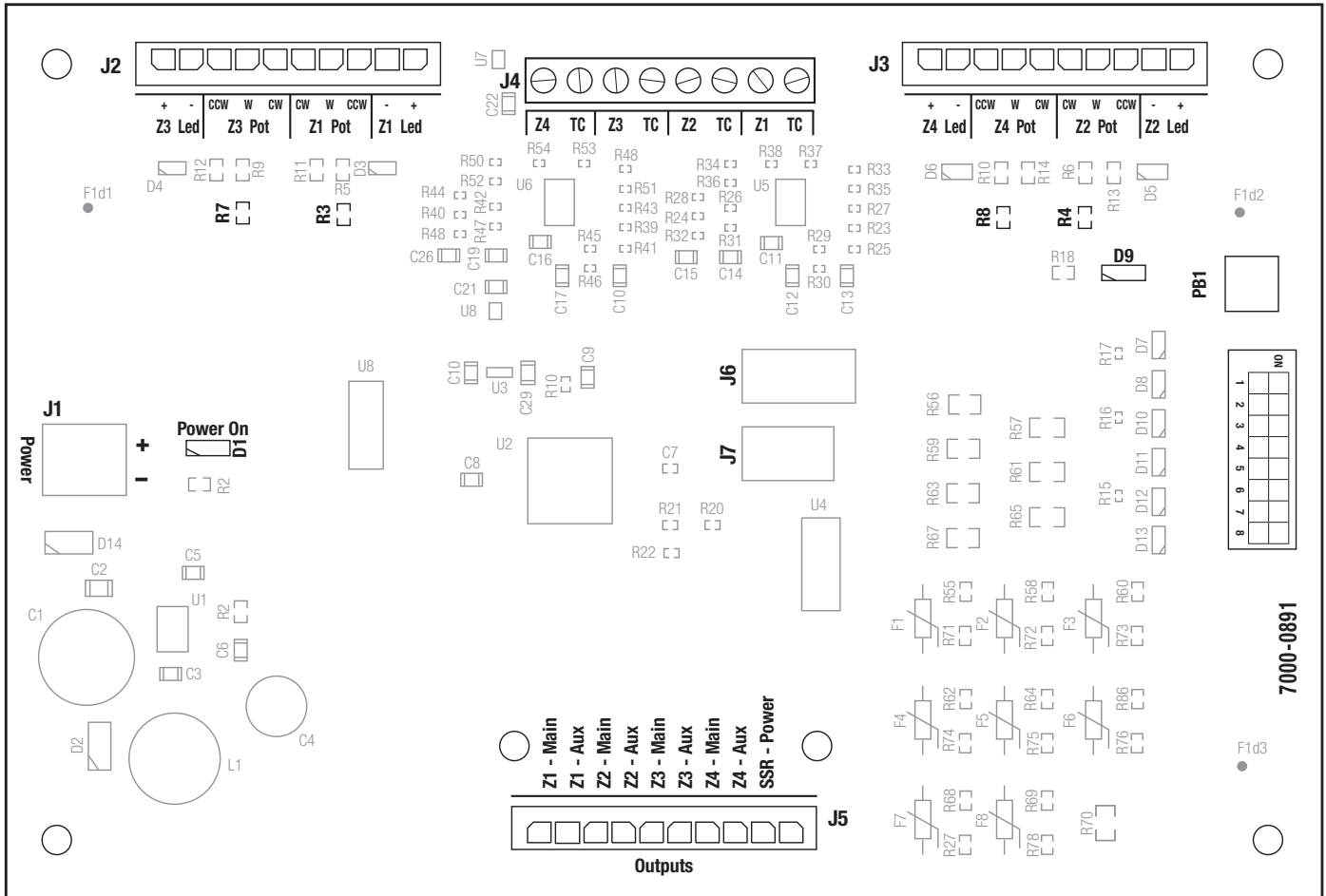
POT CALIBRATION PROCEDURE

1. Set all pots to exactly the **highest** Temperature Set Point LESS 25 °F (**625 °F**).
2. While holding down the white Button on the Main Board: Turn ON the Plancha power.
3. Release the white Button and confirm that Calibration Mode has been entered.
 - Observe the Firmware code is NOT blinking out and D9 is ON steadily.**
4. Re-adjust all of the Pots to exactly the **middle** Temperature Set Point (**400 °F**).
5. Press and release the white Button on the Main Board.
 - Observe that D9 goes out while the button is depressed.**
6. Re-adjust all of the Pots to the **minimum** Temperature Set Point PLUS 25 °F (**175 °F**).
7. Press and release the white Button on the Main Board.
 - Observe that the Code version blinks on D9 and front Panel DS3.**
8. Turn OFF the Plancha
9. Set the desired Set Points with the Front Panel knobs.

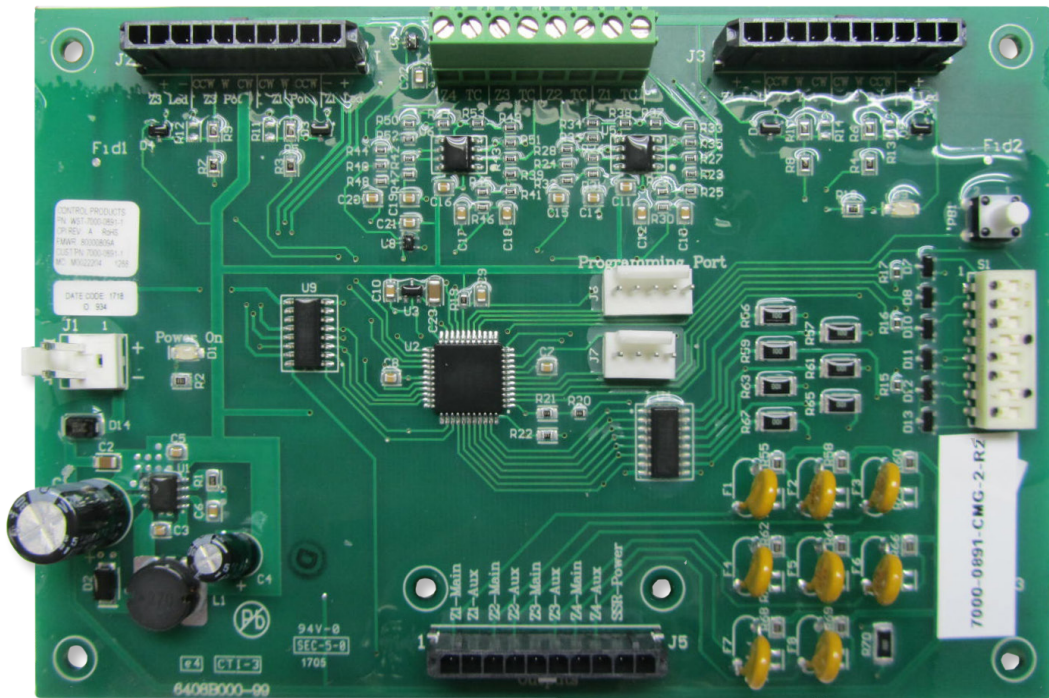


MAIN BOARD (A1)

7000-0891-61



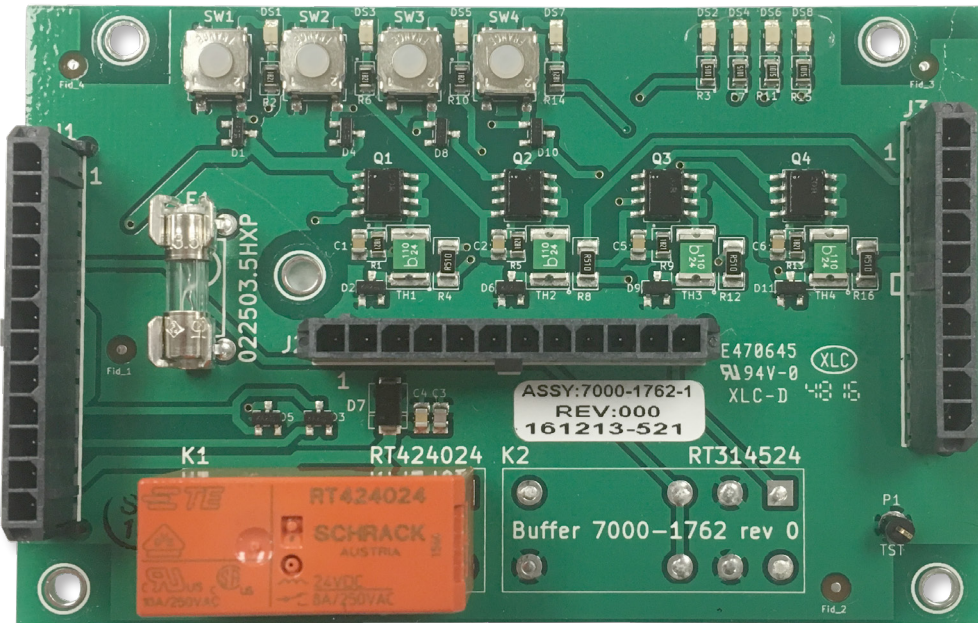
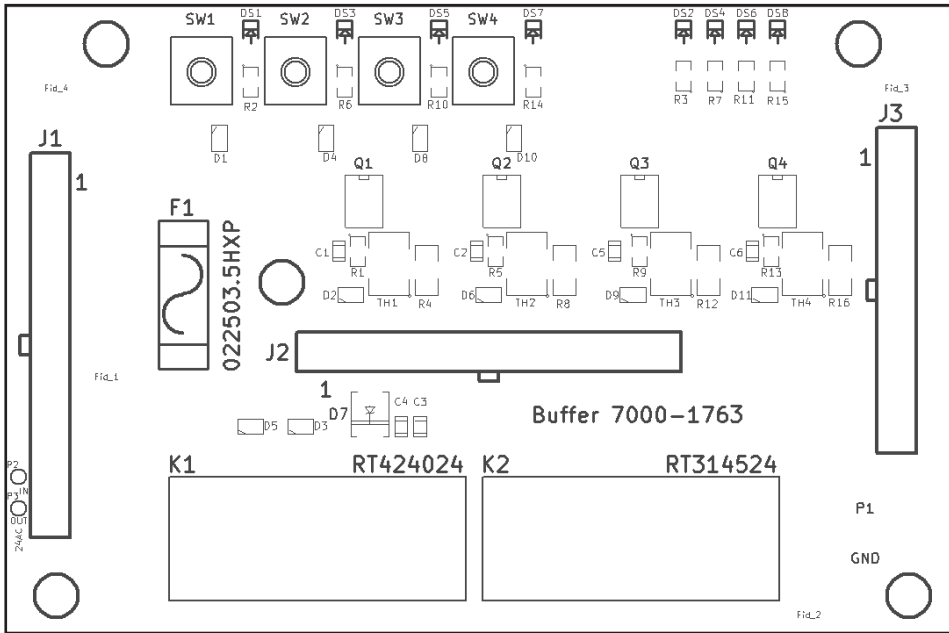
7000-0891





BUFFER BOARD (A2)

7000-1763-1





IGNITION AND POWER DISTRIBUTION

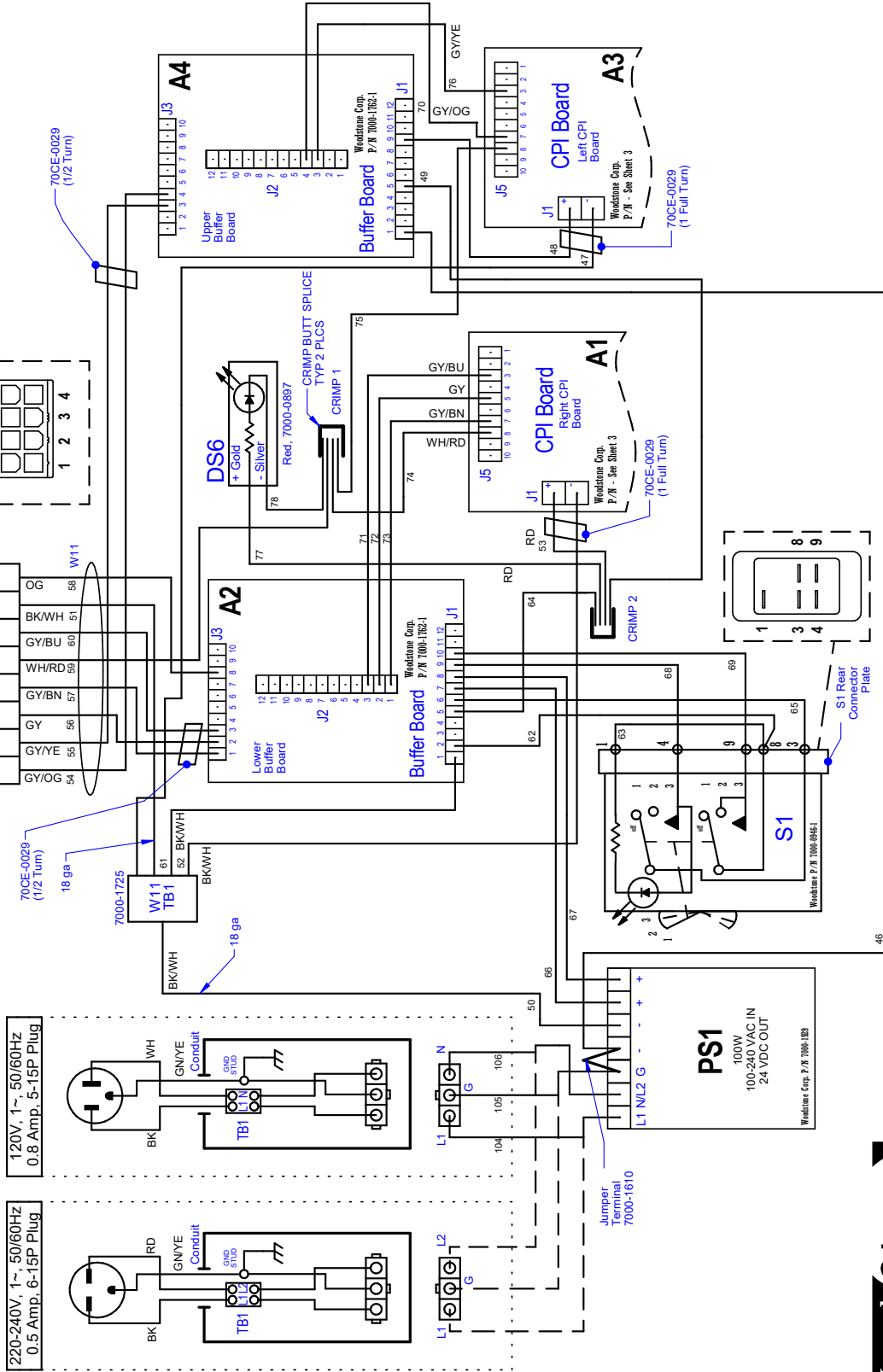
Sheet: 2 of 4

DIAG #: WD423 Rev. 1
DATE: 3/22/2023

WS-GPL-6036
2nd Generation - 5 Knob

W11P1

MATES TO W6P6
Wiring side view of chassis jack

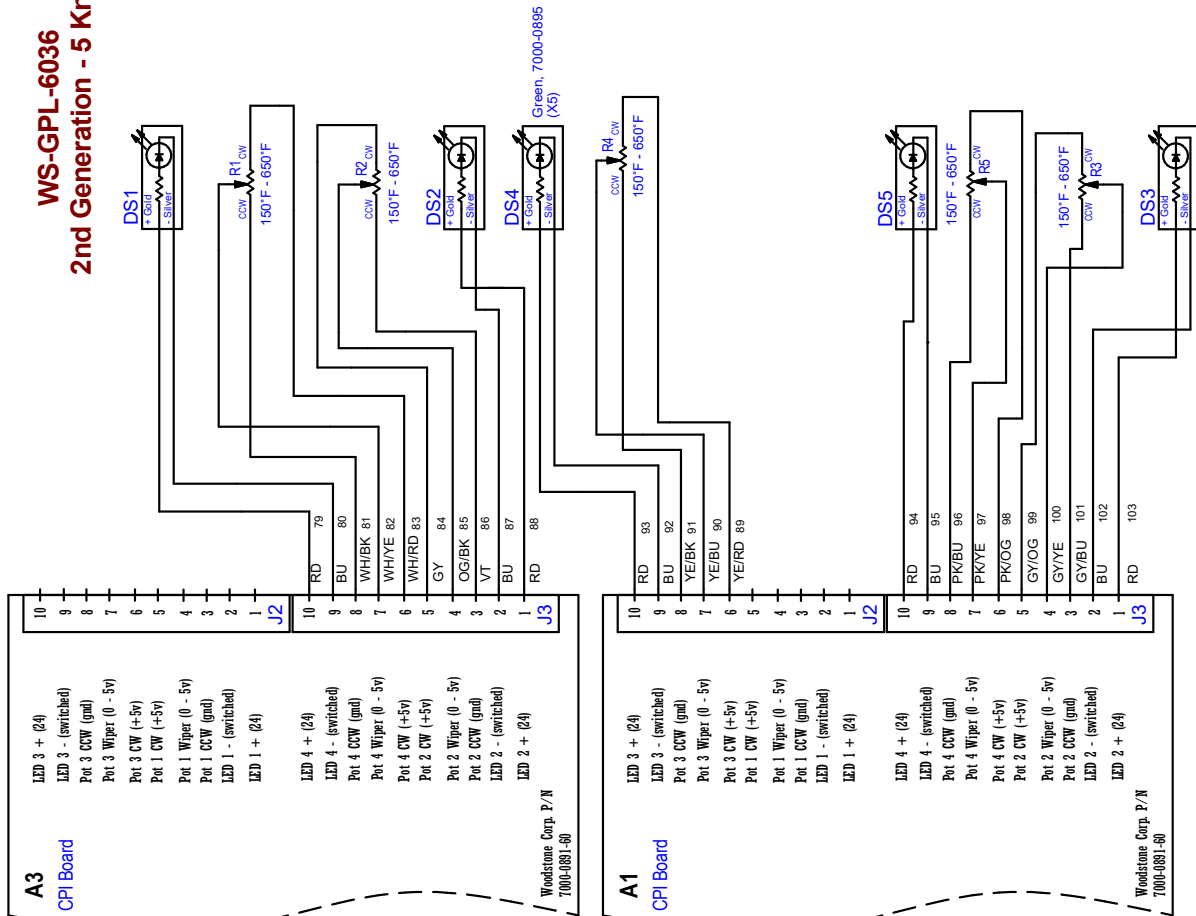




INDICATORS AND POTENTIOMETERS

Sheet: 3 of 4

WS-GPL-6036 2nd Generation - 5 Knob



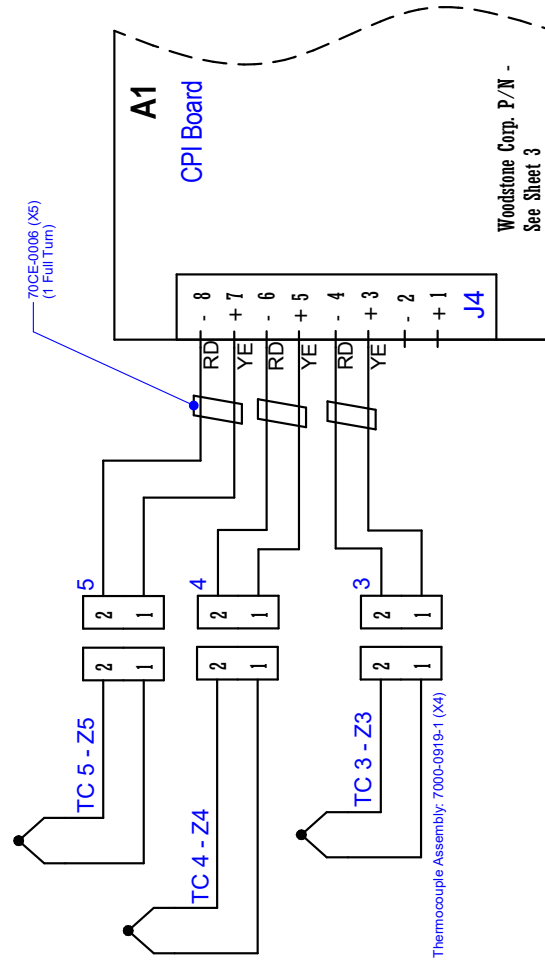
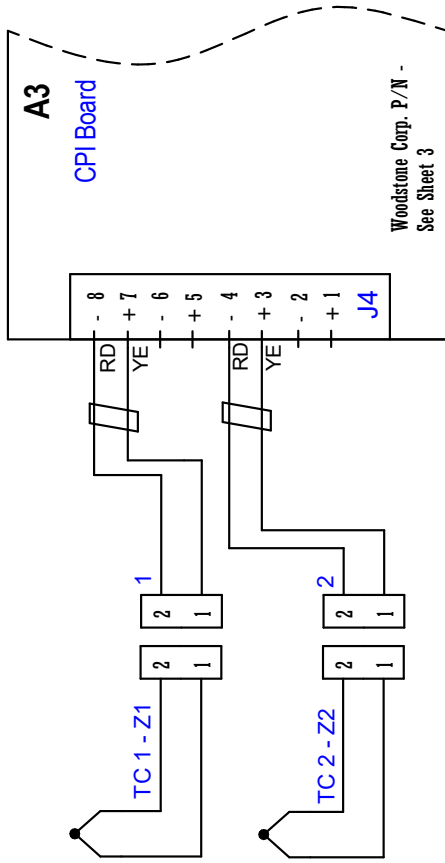
DIAG #: WD423 Rev. 1
DATE: 3/22/2023



THERMOCOUPLE CONNECTIONS

Sheet: 4 of 4

**WS-GPL-6036
2nd Generation - 5 Knob**



DIAG #: WD423 Rev. 1
DATE: 3/22/2023

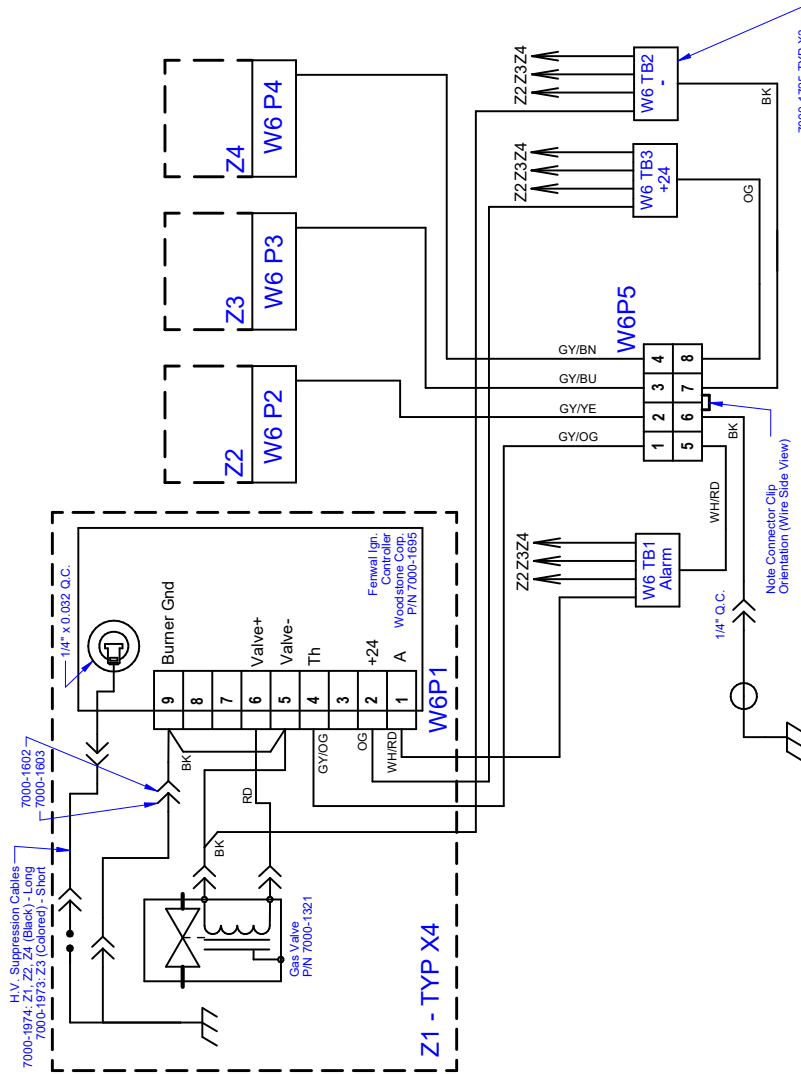


IGNITION MODULE INTERCONNECT HARNESS - W6

Sheet: 1 of 4

WS-GPL-4836
Gas Plancha - 4 Knob, 2-Pole
Ignition Module Interconnect Harness - W6

DIAG#: WD418 Rev. 1
DATE: 3/22/2023



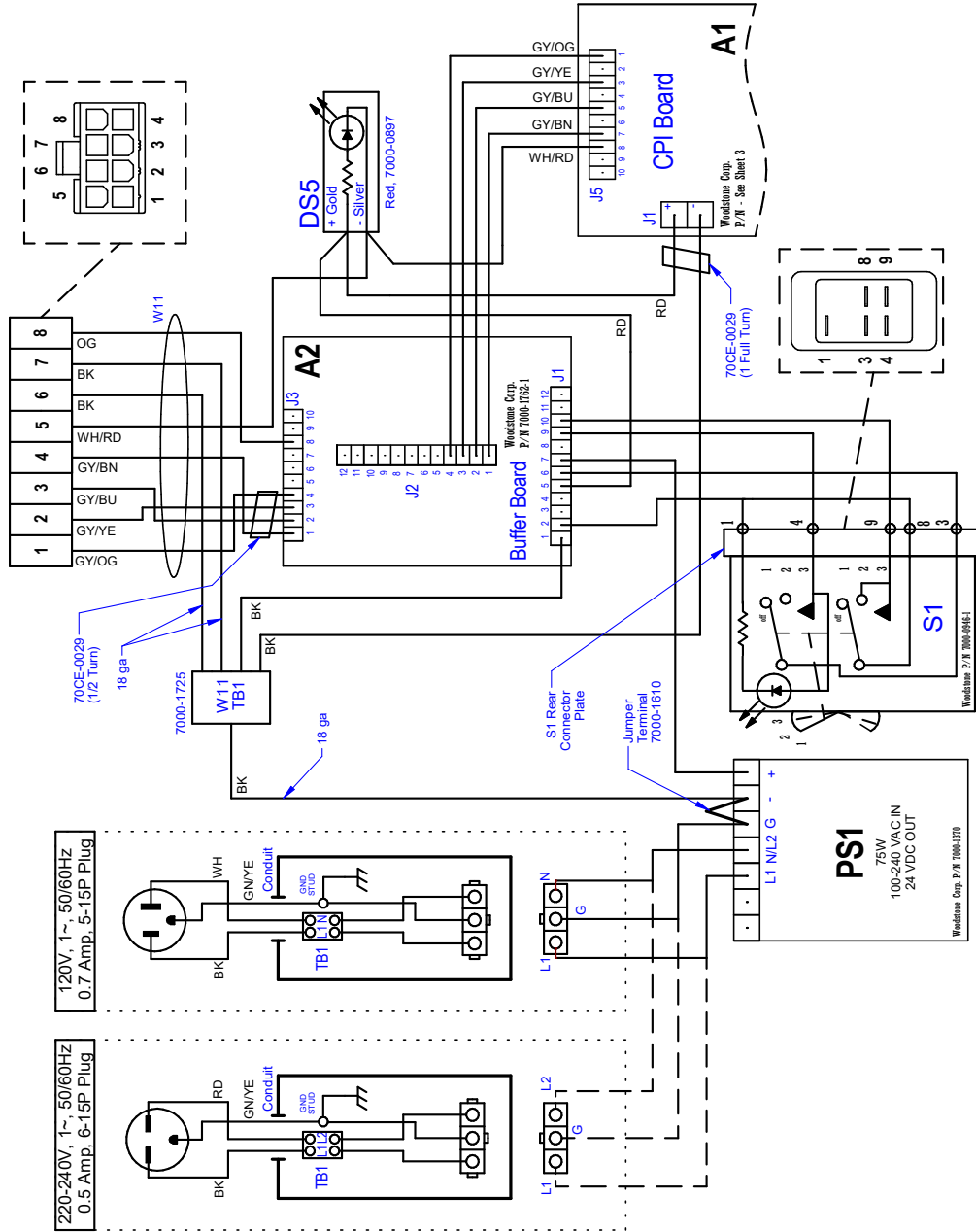
Bellingham, WA +1(360)650-1111 www.woodstone-corp.com
Woodstone\dfs\CAD\0 PartW_ Wiring\Wiring_Diagrams\W0400\WD418_Plancha\W0418_WS-GPL-4836_4_Knob_Gas_Plancha_2pole-1.dft



IGNITION AND POWER DISTRIBUTION

Sheet: 2 of 4

WS-GPL-4836
Gas Plancha - 4 Knob, 2-Pole
Ignition and Power Distribution



DIAG #: WD418 Rev. 1
DATE: 3/22/2023

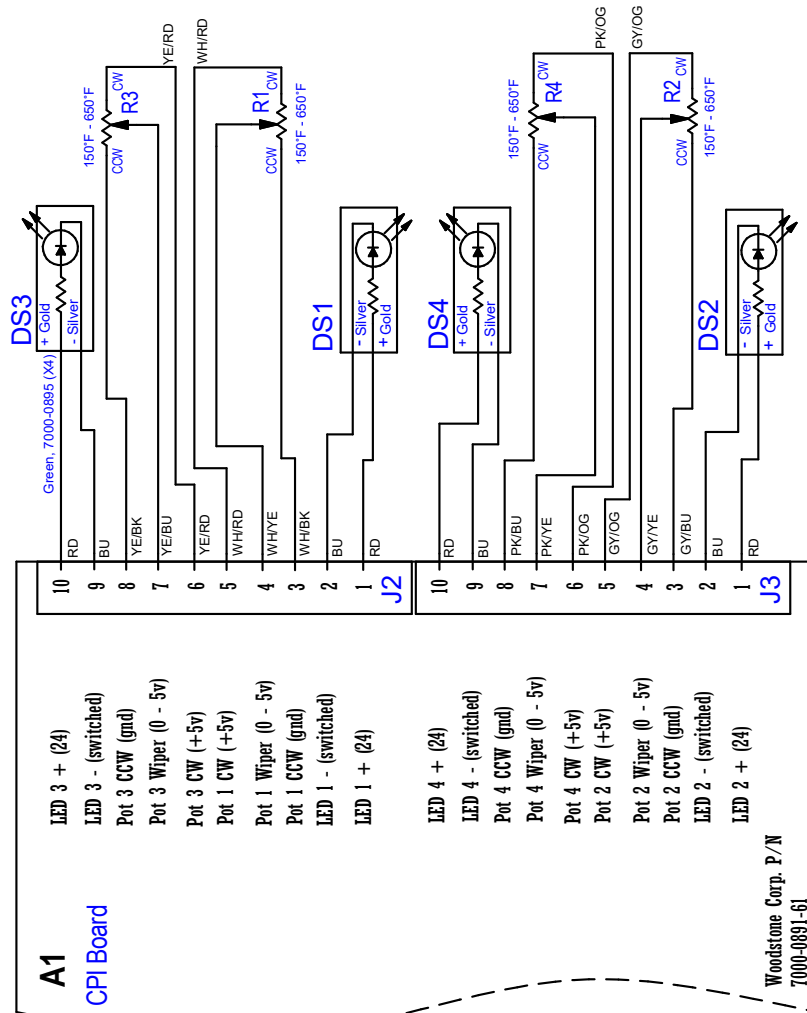
Wood Stone
Bellingham, WA +1(360)850-1111 www.woodstone-corp.com
\\woodstone\dfs\CAD\IO P\NW_Wiring\Diagrams\WD400-WD499 Plancha\WS-GPL-4836_4_Knob_Gas_Plancha_2Pole-1.dft



INDICATORS AND POTENTIOMETERS

Sheet: 3 of 4

WS-GPL-4836
Gas Plancha - 4 Knob, 2-Pole
Indicators and Potentiometers



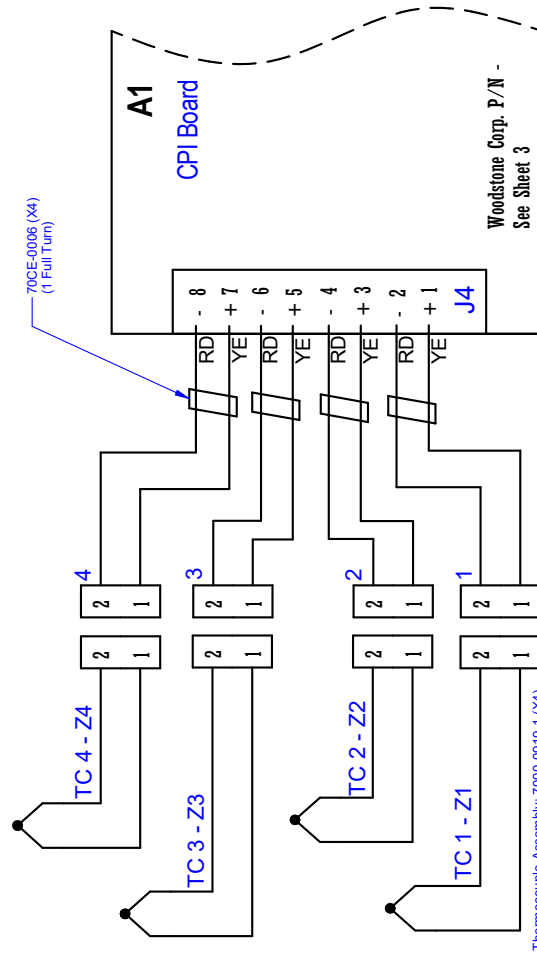
DIAG #: WD418 Rev. 1
DATE: 3/22/2023



THERMOCOUPLE CONNECTIONS

Sheet: 4 of 4

WS-GPL-4836
Gas Plancha - 4 Knob, 2-Pole
Thermocouple Connectors



Thermocouple Assembly: 7000-0919-1 (X4)

DIAG #: WD418 Rev. 1
DATE: 3/22/2023



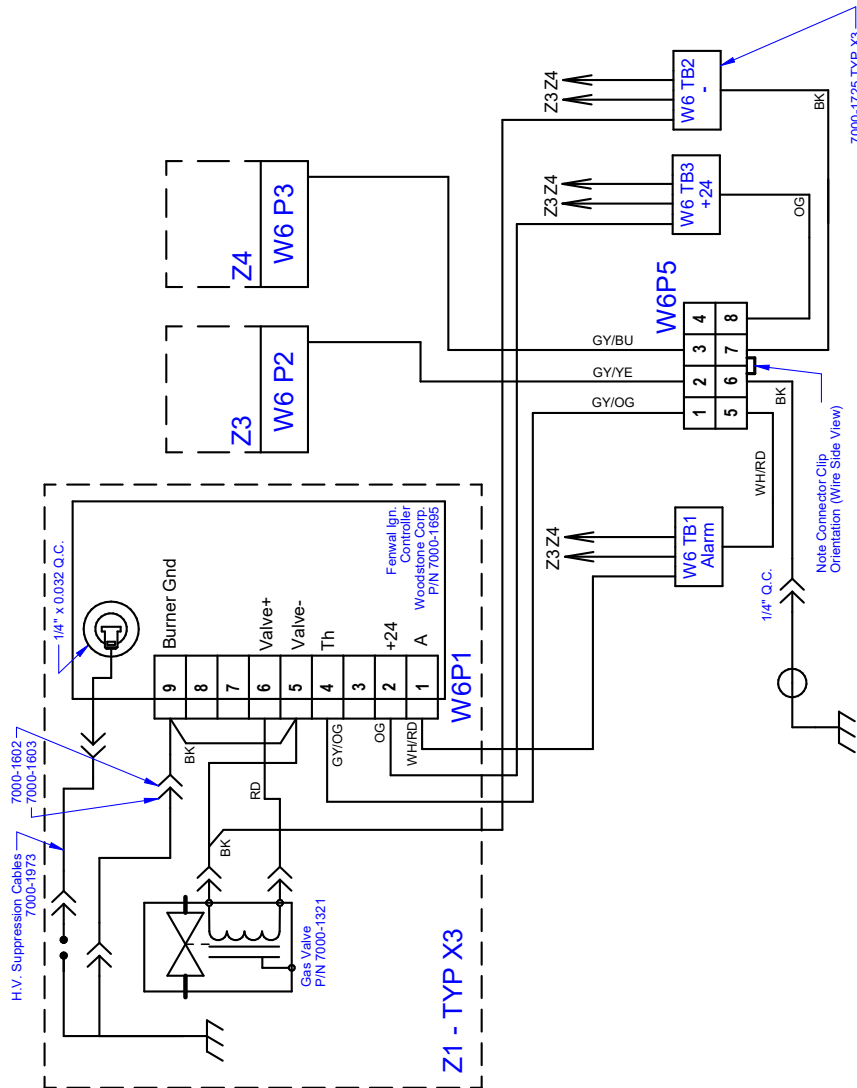
Bellingham, WA +1(360)650-1111 www.woodstone-corp.com
\\woodstone\dfs\CAD\0 Prod_Wiring_Diagrams\WD41899 Planchas\WD418_WS-GPL-4836_4_Knob_Gas_Plancha_2Pole-1.dft



IGNITION MODULE INTERCONNECT HARNESS - W6

Sheet: 1 of 4

WS-GPL-3636
Gas Plancha Electrical Diagram - 3 Knob, 2-Pole
Ignition Module Interconnect Harness - W6



DIAC #: WD420 Rev. 1
DATE: 3/22/2023

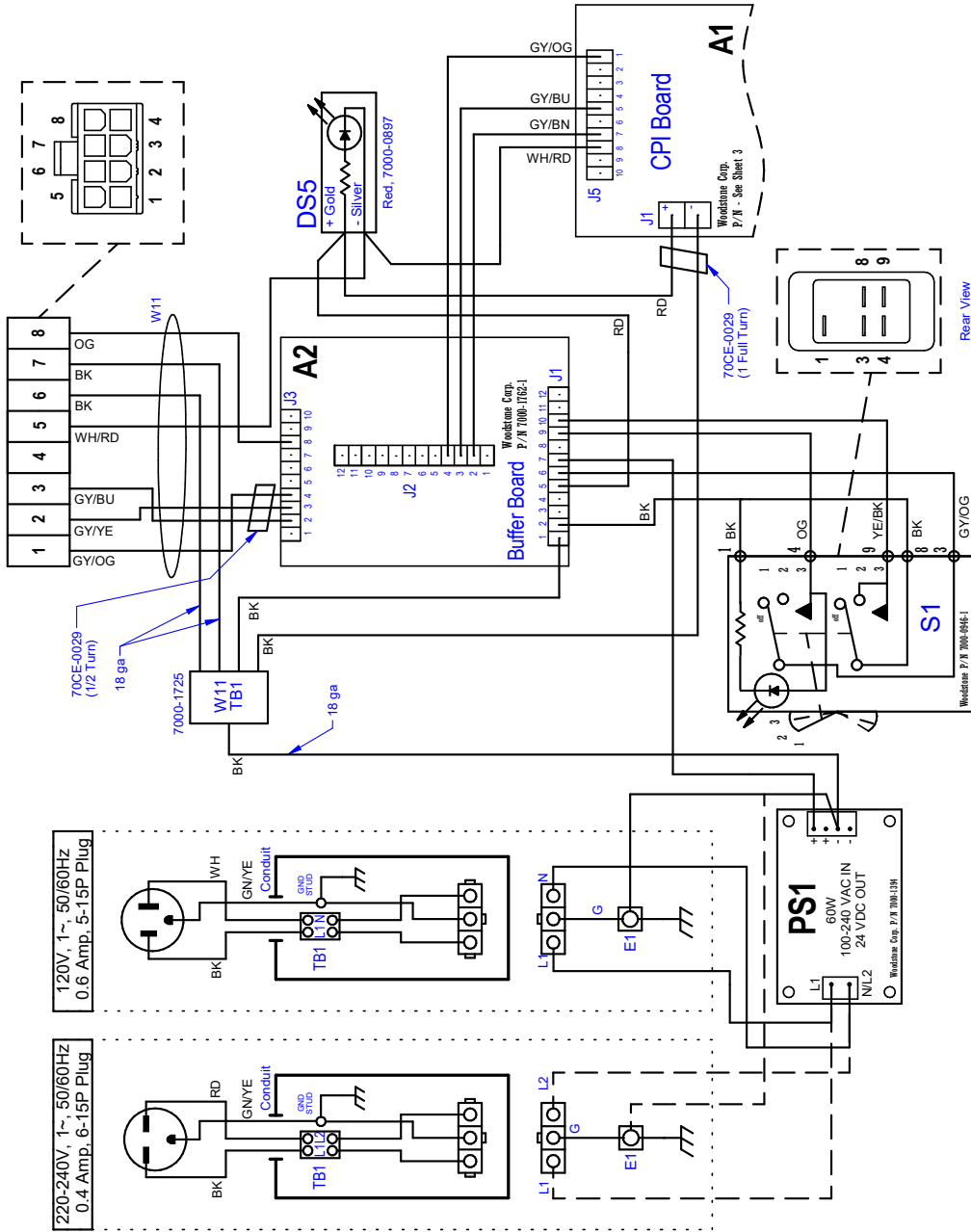
Wood Stone
Bellingham, WA +1(360)650-1111 www.woodstone-corp.com
\\woodstone\dfs\CAD\00 Prt\Wiring\WD_Wiring_Diagrams\WD400-Plancha\WD420_WS-GPL-3636_3_Knob_Gas_Plancha_2Pole-1.dft



IGNITION AND POWER DISTRIBUTION

Sheet: 2 of 4

WS-GPL-3636
Gas Plancha Electrical Diagram - 3 Knob, 2-Pole
Ignition and Power Distribution



DIAG #: WD420 Rev. 1
DATE: 3/22/2023



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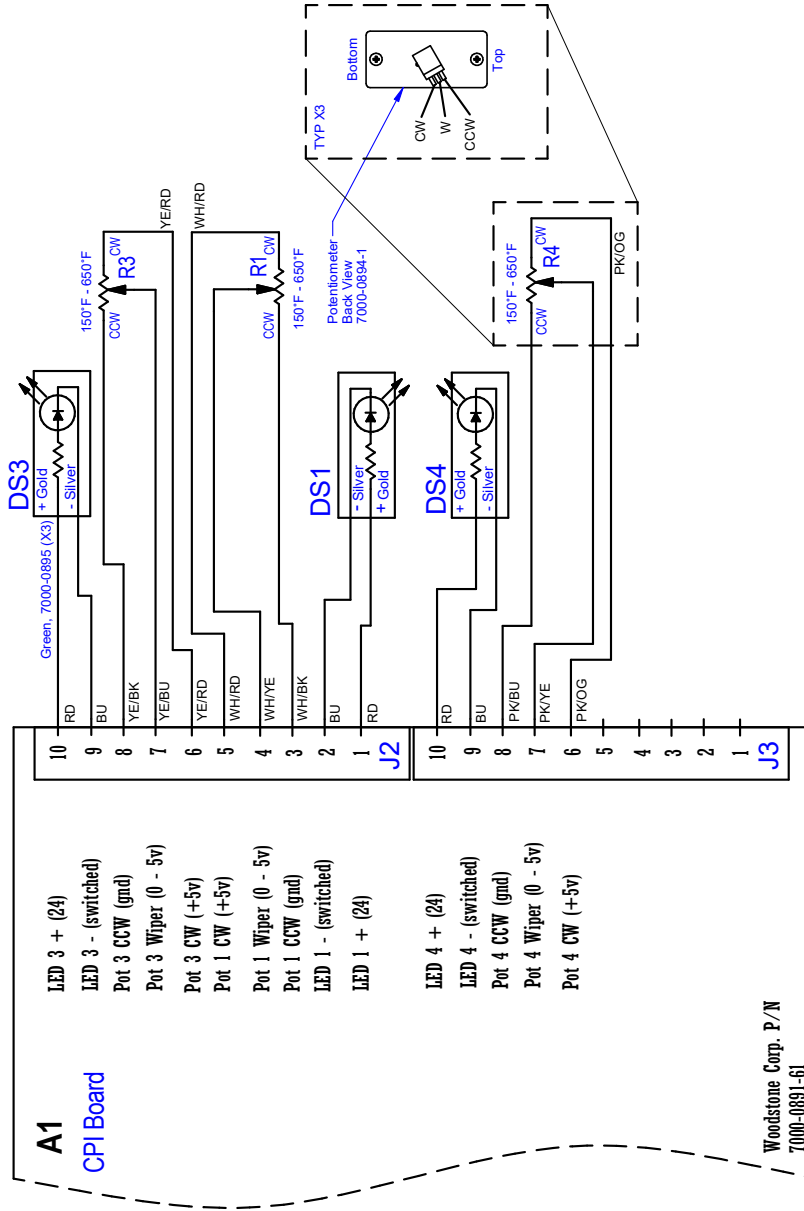
woodstone\dfs\CAD\PHW_Wiring\Diagrams\WD400-WD499 Planchas\WD420_WS-GPL-3636_3_Knob_Gas_Plancha_2Pole-1.dft



INDICATORS AND POTENTIOMETERS

Sheet: 3 of 4

WS-GPL-3636
Gas Plancha Electrical Diagram - 3 Knob, 2-Pole
Indicators and Potentiometers



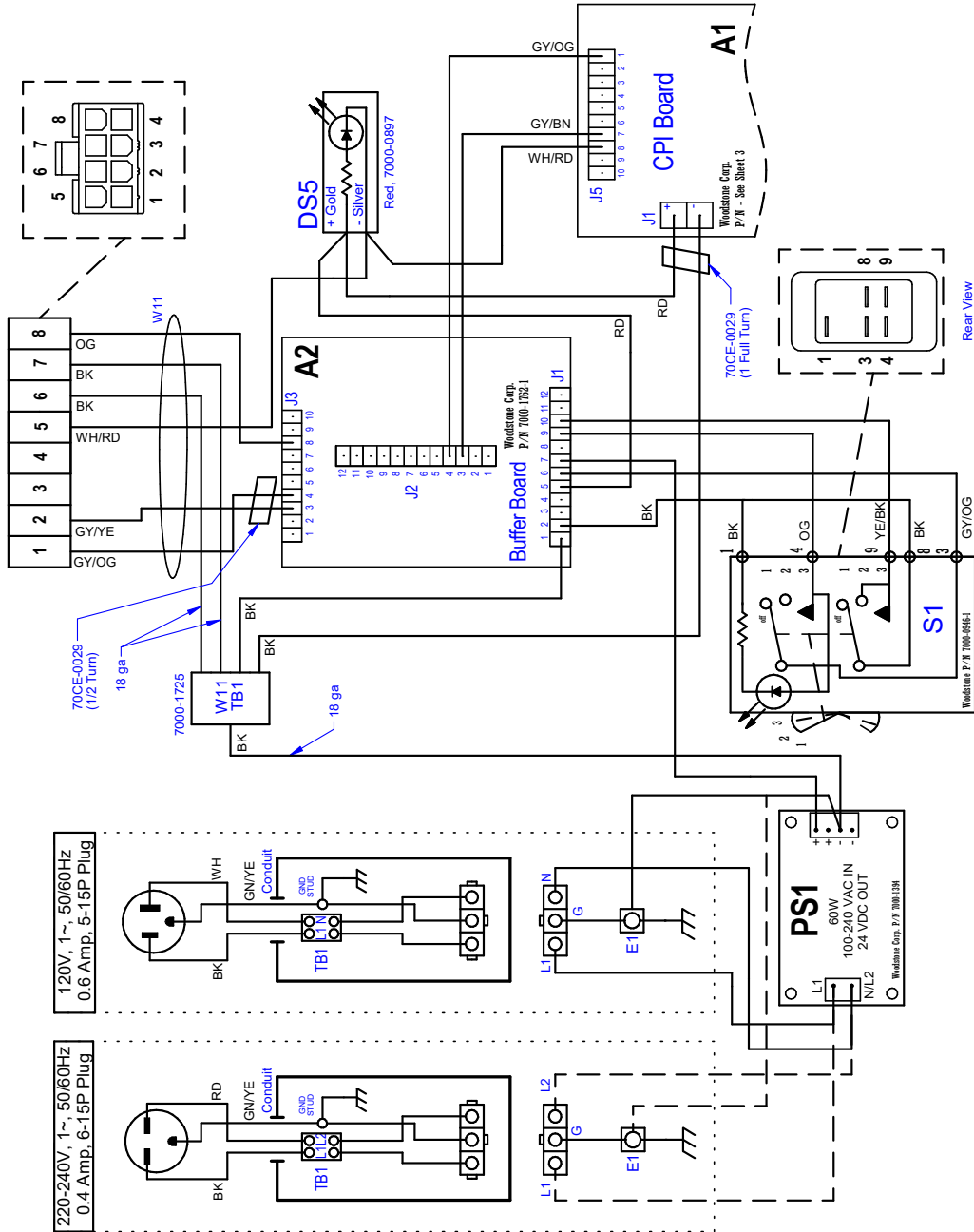
DIAG #: WD420 Rev. 1
DATE: 3/22/2023



IGNITION AND POWER DISTRIBUTION

Sheet: 2 of 4

WS-GPL-2436
Gas Plancha Electrical Diagram - 2 Knob, 2-Pole
Ignition and Power Distribution



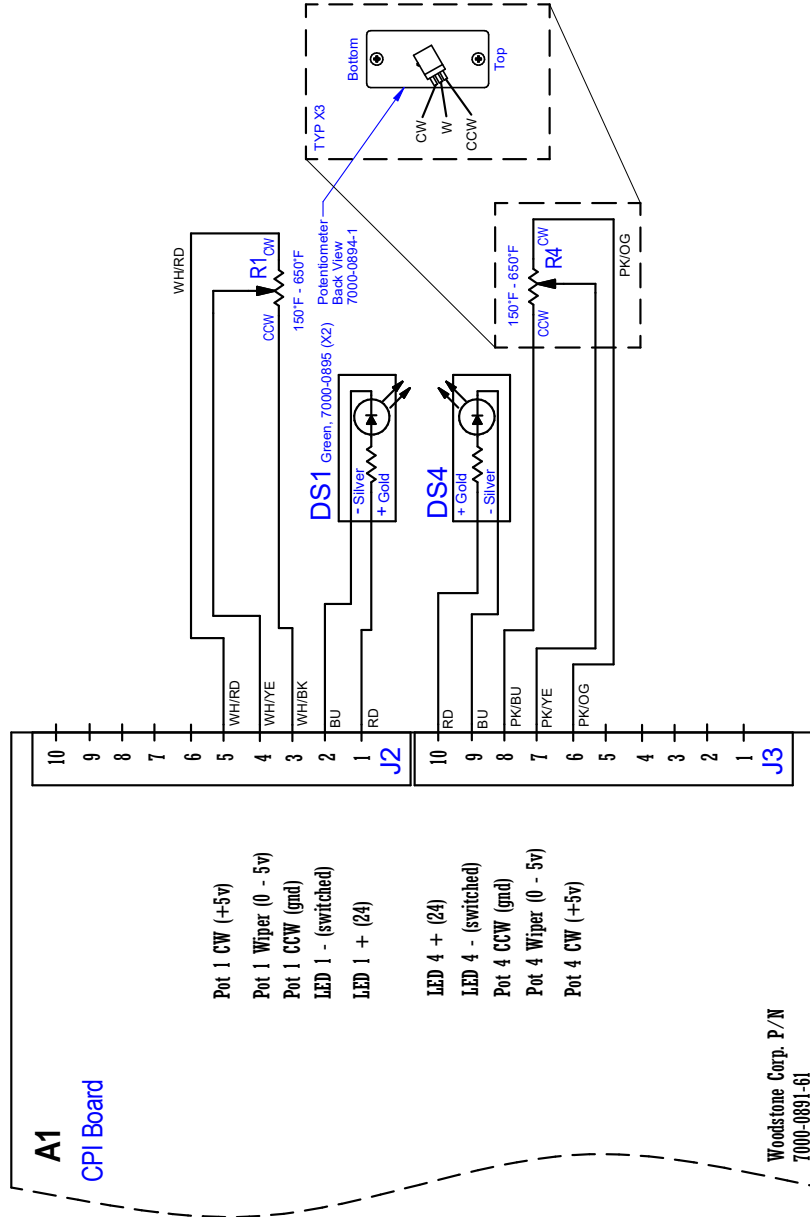
DIAG # WD421 Rev. 1
DATE: 3/22/2023



INDICATORS AND POTENTIOMETERS

Sheet: 3 of 4

WS-GPL-2436
Gas Plancha Electrical Diagram - 2 Knob, 2-Pole
Indicators and Potentiometers



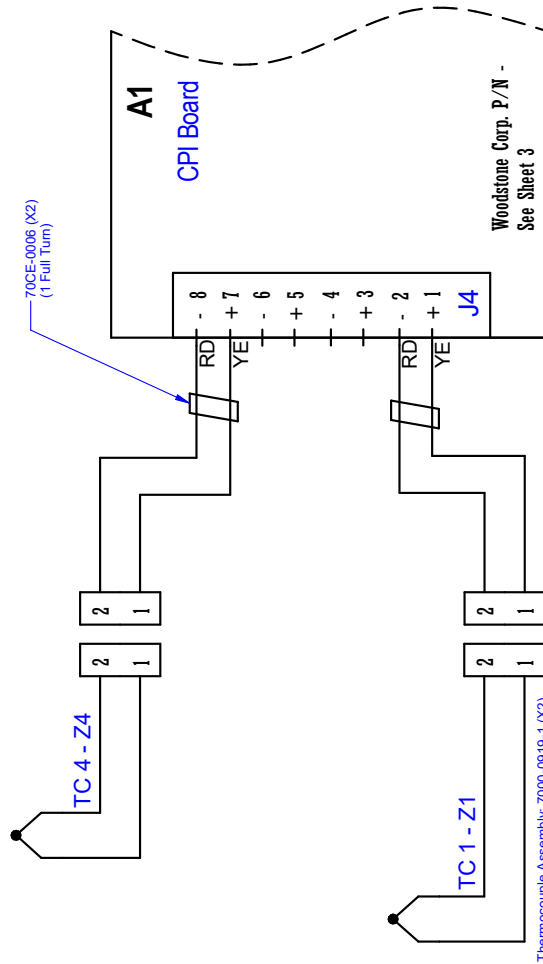
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DATE: 3/22/2023



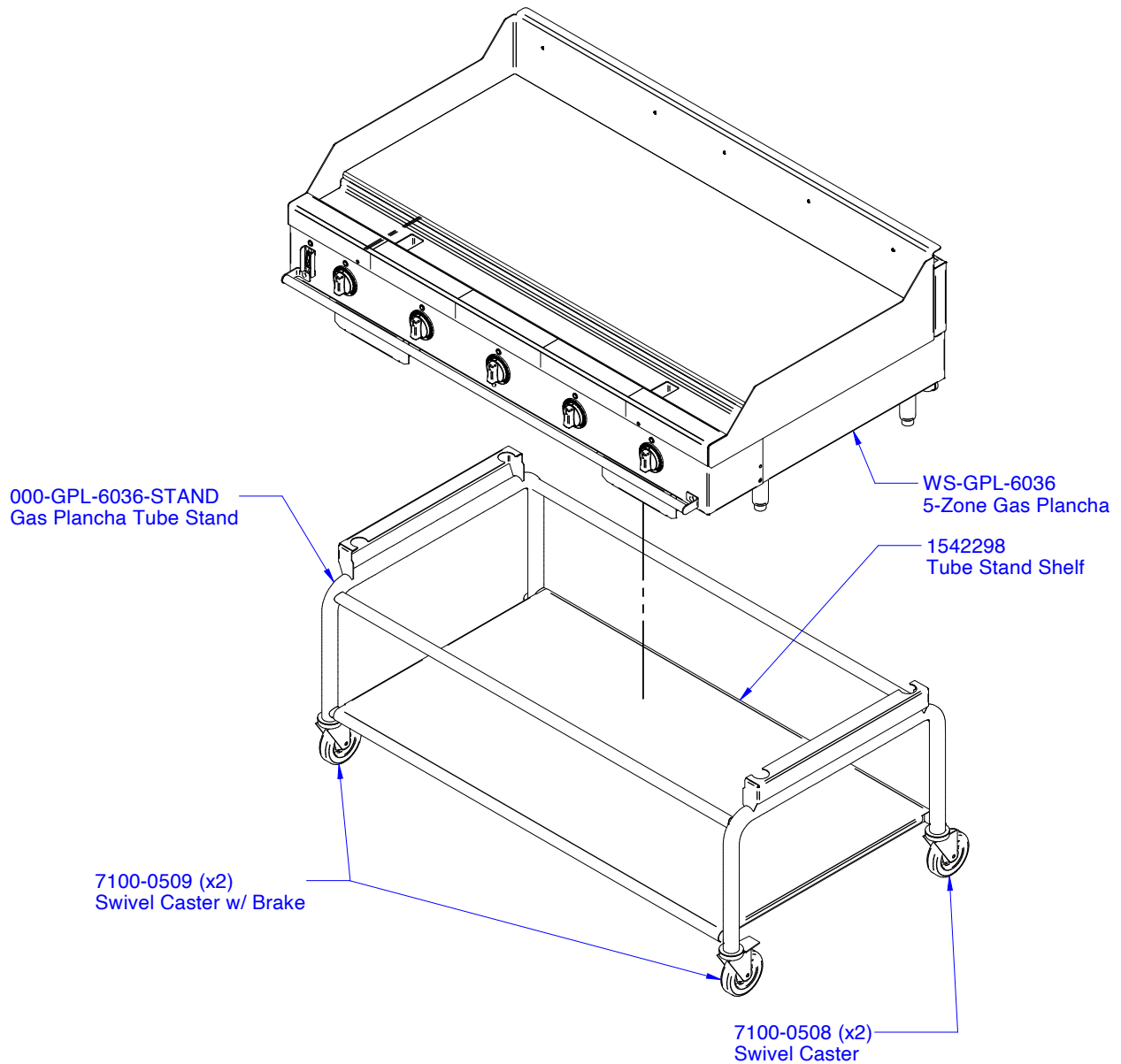
THERMOCOUPLE CONNECTIONS

Sheet: 4 of 4

WS-GPL-2436
Gas Plancha Electrical Diagram - 2 Knob, 2-Pole
Thermocouple Connectors

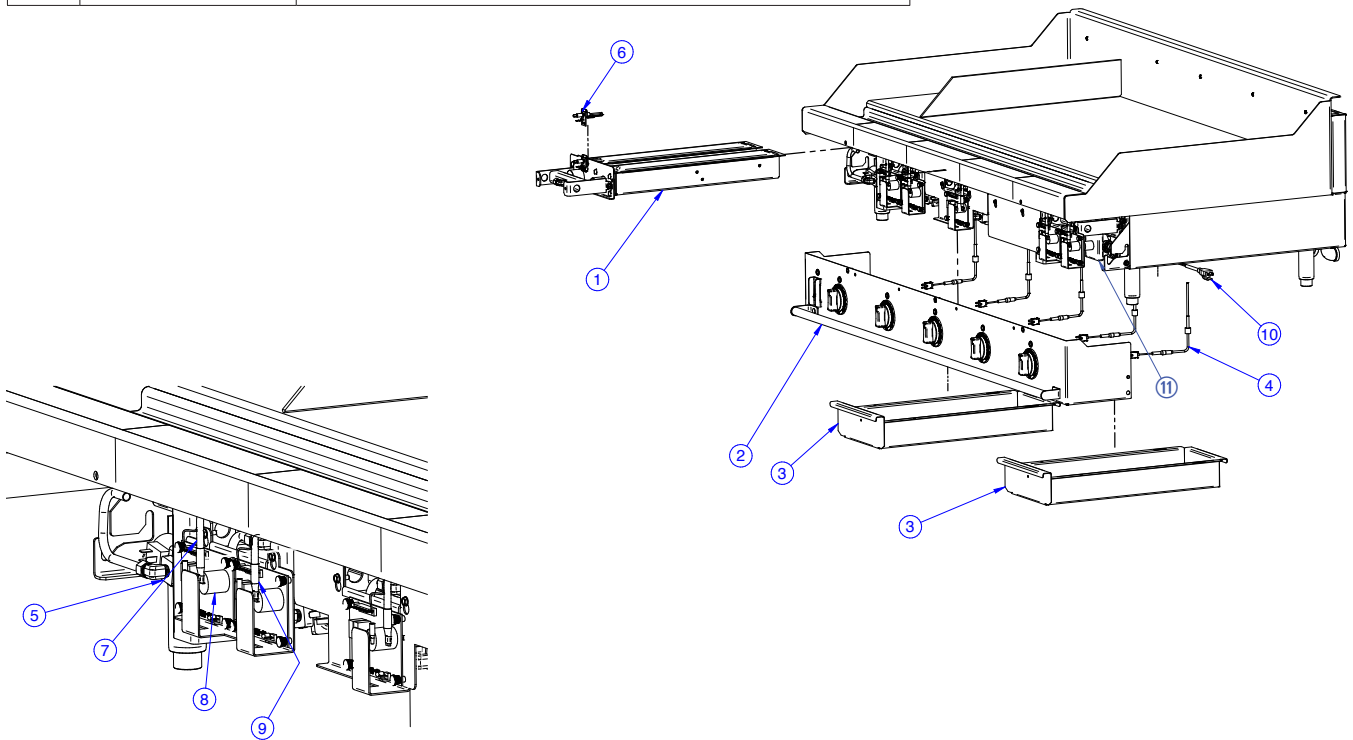


DIAG #: WD421 Rev. 1
DATE: 3/22/2023



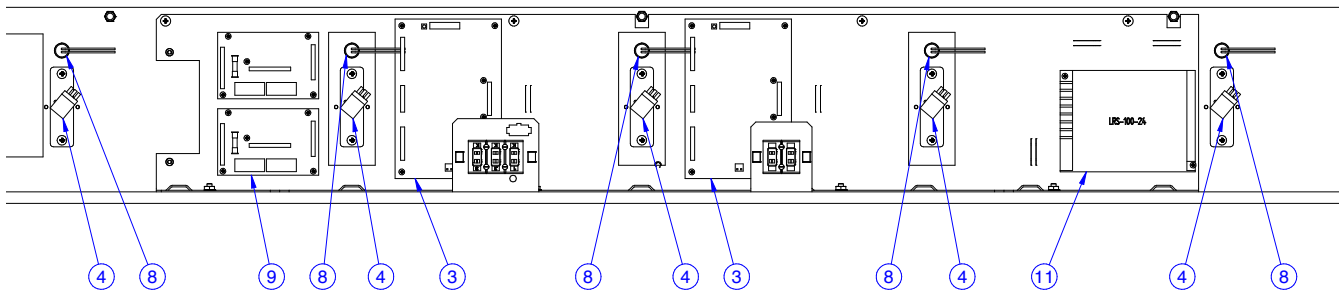
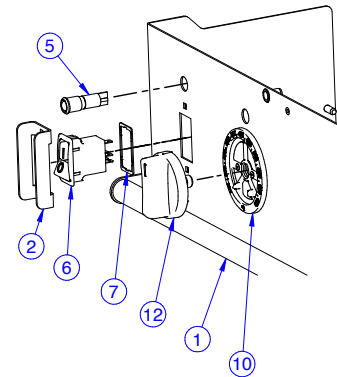


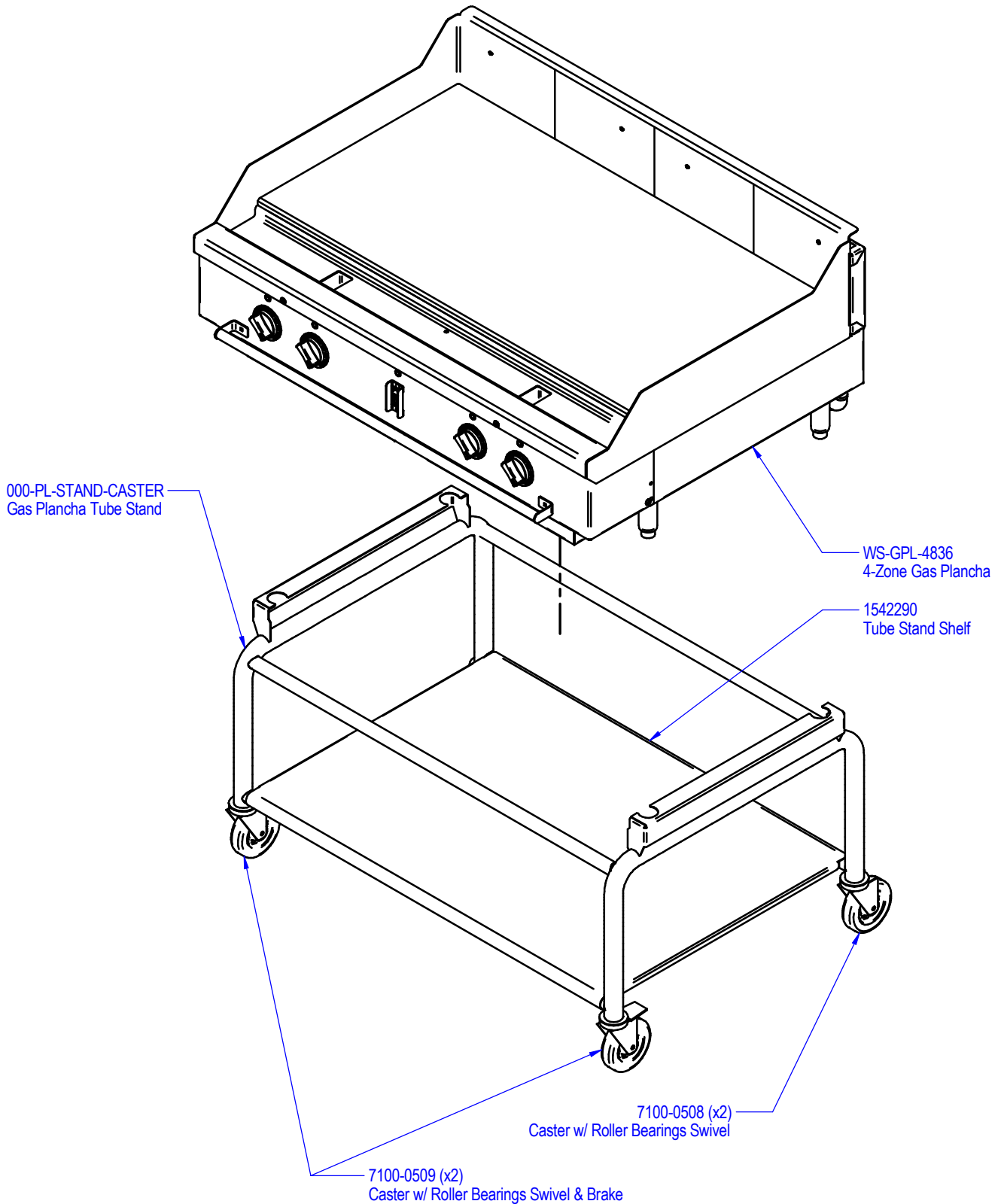
Item	Part Number	Description
1	002-GPL4836-56-NG	Solaronics Dual Burner Cassette - NG
2	002-GPL6036-7	5-Knob Control Panel Assy
3	1532281	Grease Reservoir - Large
4	7000-0919-4	Thermocouple
5	7000-1321	Gas Valve, 1/4" NPT 25VDC Solenoid
6	RP-7000-2087	Ignitor Spark -GPL
7	7000-1973	Ignition Cable Assembly - Long - w/ground strap
8	7000-1695	Ignition Module
9	7000-1974	Ignition Cable Assembly - Short - w/ground strap
10	7000-1836	Power Cord Assembly w/Ferrules & Ring Terminal
11	7000-1775	Regulator RV48L - NG
11	7000-1776	Regulator RV48L - LP





Item	Part Number	Description
1	002-GPL6036-10	Bump Bar Weldment
2	1552290	Switch Guard
3	7000-0891-61	4-Channel Temperature Control - Multi Knob
4	7000-0894-1	Potentiometer
5	7000-0897	Panel Light 24V Red
6	7000-0946-1	On/Off Switch Body, OTTO, Lighted
7	7000-0946-2	Gasket, OTTO On/Off Switch
8	7000-1687-1	Panel Light 24V Green - 14mm x 22mm
9	7000-1763-1	Buffer Board - PCB - Gen 2
10	7000-1788-1	Cast Escutcheon with GPL °F Scale
11	7000-1929	Power Supply 24VDC - 100W
12	RP-GPL-KNOB	Replacement Knob



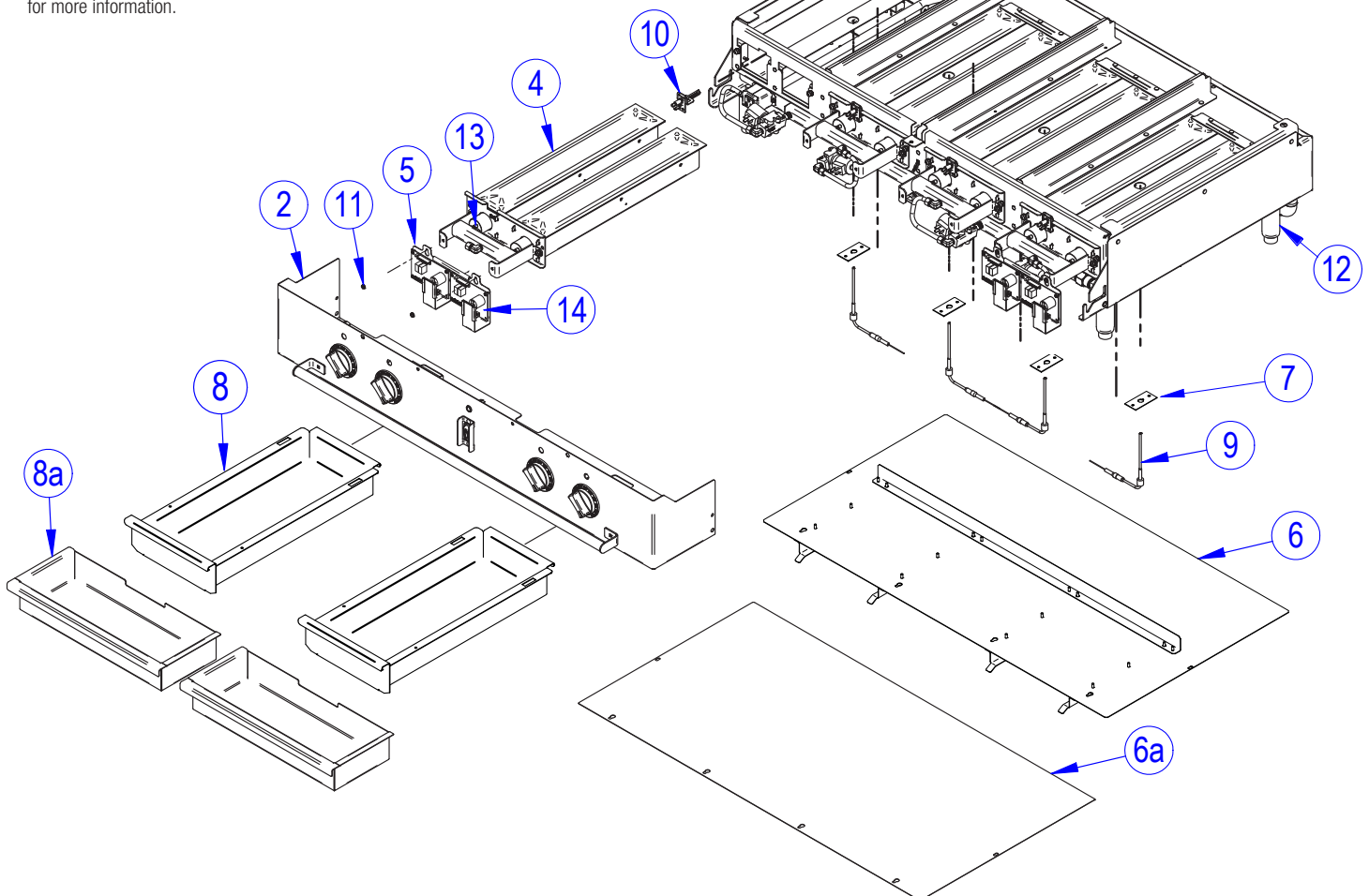
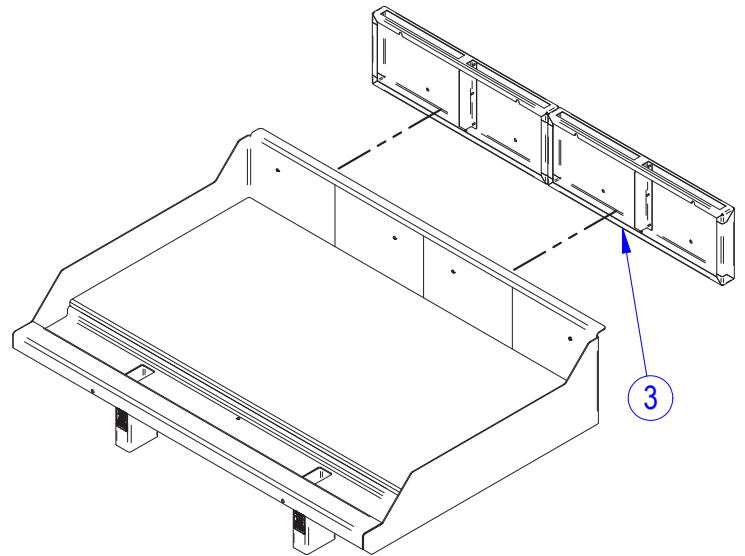




Item	Part Number	Description	Qty
2	002-GPL4836-41	Control Panel Assembly- 4 Knobs	1
2	002-GPL4836-24	Cntrl Panel Assy- 4 Knobs	1
3	002-GPL4836-34	Exhaust Flue Assembly	2
4	002-GPL4836-56-NG	Solaronics Dual Burner Cassette- NG	4
4	002-GPL4836-56-LP	Solaronics Dual Burner Cassette- LP	4
5	2532312	Dual Ignition Module Mounting Bracket (only)	2
5	2532280	Dual Ignition Module Mounting Bracket (only)	2
6	002-GPL4836-27	Bottom Cover Assembly	1
6a	1412201	Bottom Cover	1
8	1532281	Grease Reservoir	2
8a	1532270	Grease Reservoir	2
9	7000-0919-4	Thermocouple**	4
9	7000-0919-1	Thermocouple**	4
10	RP-7000-2087	Ignitor Spark -GPL	1
11	9000-1144	Screw, NYLOK, 10-32 x 1/2", SS	4
12	7000-1840	Adjustable Leg	4
13	7000-1975	Orifice Jet- MV series- #52- LTR "CQ" -NG	2
13	7000-1976	Orifice Jet- MV series- #57- LTR "CR" -LP	2
14	7000-1695	Ignition Module *	2

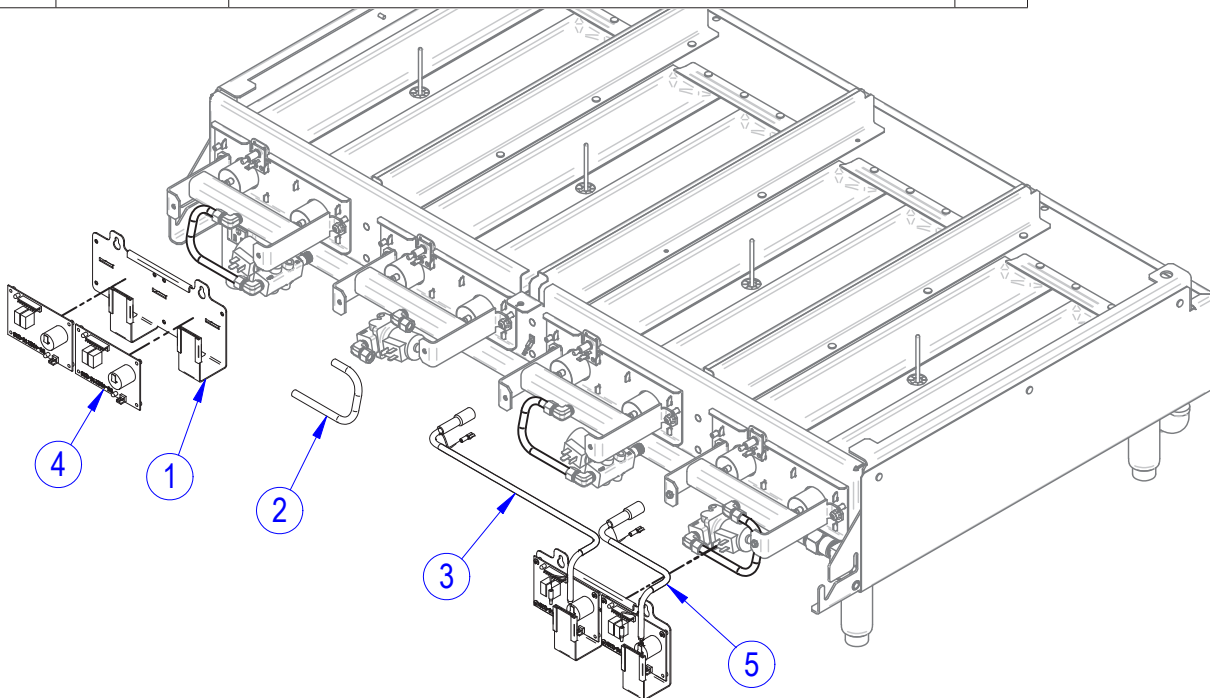
*See Ignition Module Assembly Exploded Diagram included in this manual.

**Note: Thermocouple part number depends on manufacture date. Call Wood Stone for more information.

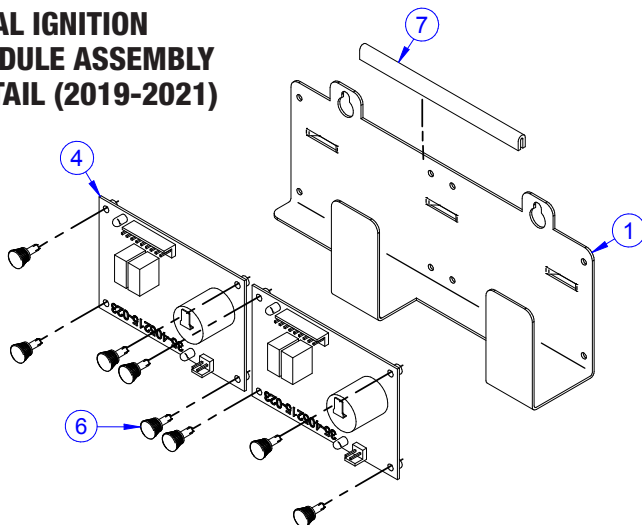




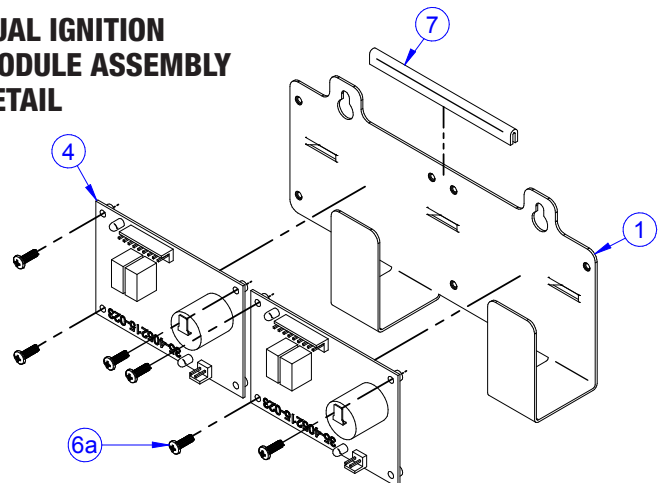
Item	Part Number	Description	Qty
1	2532312	Mount Bracket- Ignition Modules	2
2	6000-0149-4	Aluminum Gas Tube	1
	7000-0267	Compression Fittings (per gas tube)	2
3	7000-1973	Ignition Cable- Long (orange boot) (zone 3 only)	1
4	7000-1695	Ignition Module	4
5	7000-1974	Ignition Cable- Short (black boot)	3
6	7000-1833	Snap Fastener, Plastic (per ignition Module) (mfg from 2019 to 2021)	8
6a	9000-0052	Screw- 8-32 x 1/2" Pan Hd- MSZ (mfg before 2019)	6
7	7000-0854	Protective Trim Edge-Ignition Module Mount	1



DUAL IGNITION MODULE ASSEMBLY DETAIL (2019-2021)



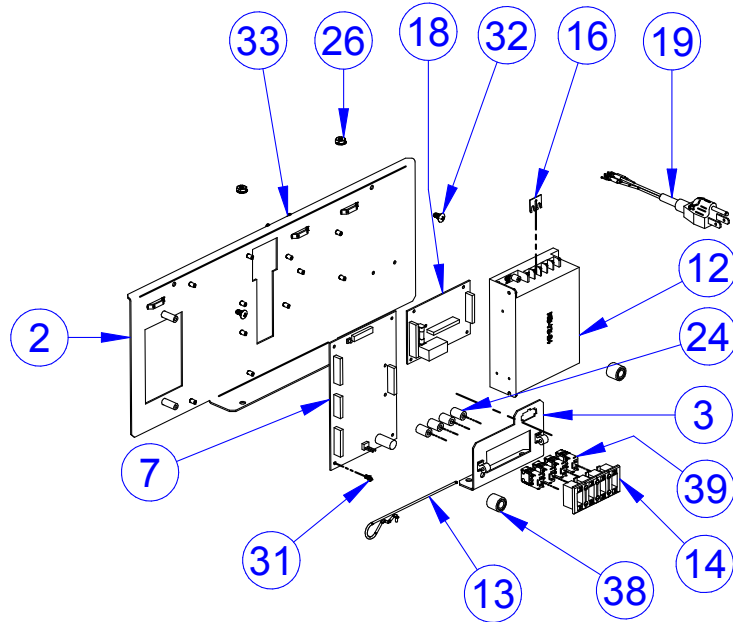
DUAL IGNITION MODULE ASSEMBLY DETAIL



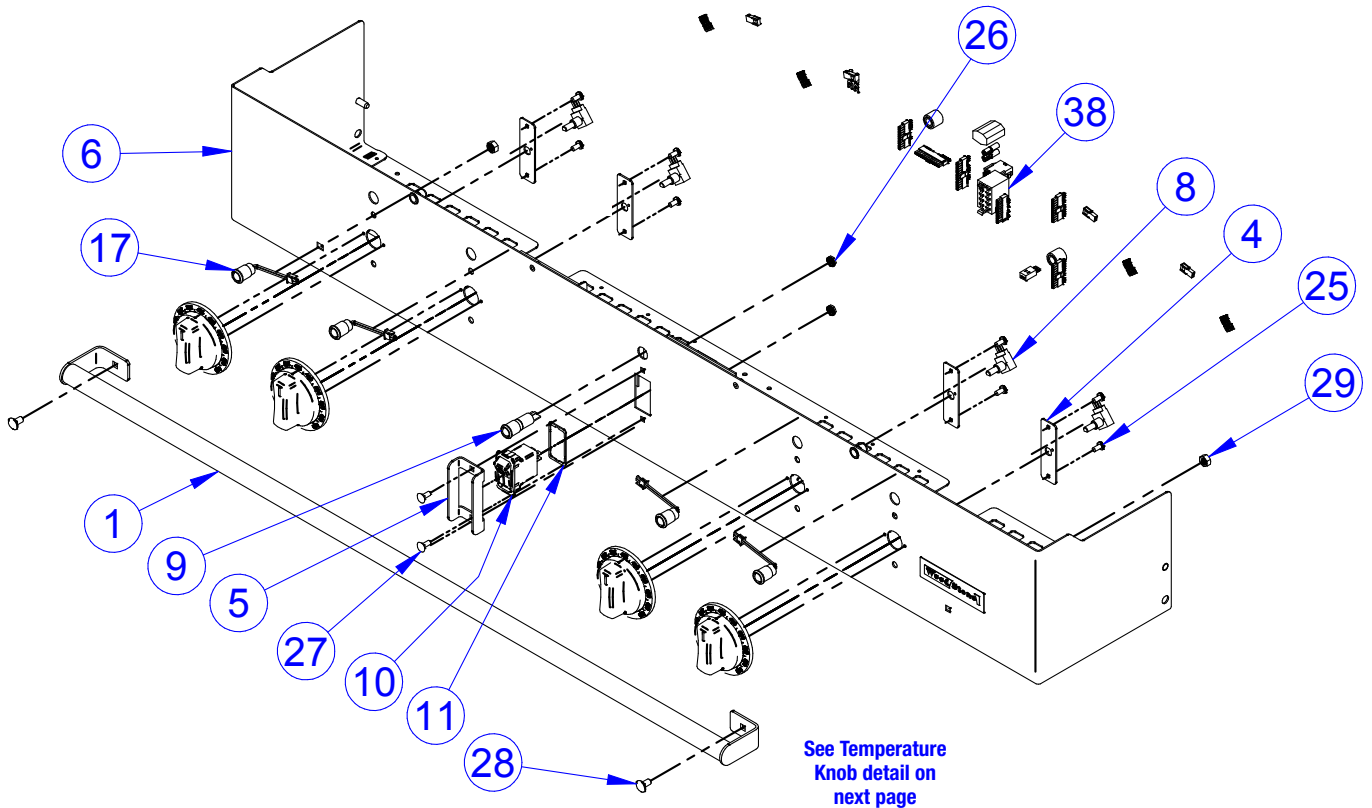


UTILITY PANEL

See Parts List next page



CONTROL PANEL





**UTILITY &
CONTROL PANEL
PART NUMBERS**

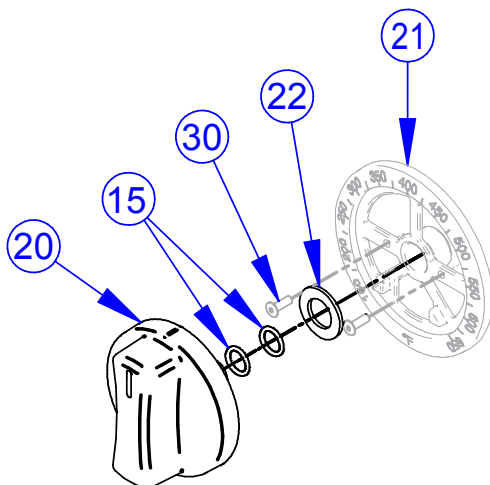
Item	Part Number	Description	Qty
1	002-PL1803-2	Bump Bar Weldment	1
2	2532295	Utility Panel	1
2	1432252	Utility Panel	1
3	1432253	Mount Bracket- Thermocouple Bulkhead Fitting	1
4	1432257	Pot Mount Bracket- 4 Knob	4
5	1552290	Switch Guard	1
6	1643251	Control Panel- 4 Knobs	1
6	1643246	Control Panel- 4 Knobs	1
7	7000-0891-61	4-Channel Main Board- 4 Knob	1
7	7000-0891-60	4-Channel Main Board- Hidden Knob	1
8	7000-0894-1	Potentiometer	4
9	7000-0897	Panel Light 24V Red	1
10	7000-0946-1	On/Off Switch Body, OTTO, Lighted	1
11	7000-0946-2	Gasket, OTTO On/OFF Switch	1
12	7000-1370	Power Supply, 75W, 24VDC	1
13	7000-1382	Retention Wire, Thermocouple	1
14	7000-1383	Thermocouple Bulkhead, 4 - Circuit	1
15	7000-1452	O-Ring, 3/8" ID, 1/2" OD, Buna-N	8
16	7000-1610	Terminal Jumper, 2-Position	1
17	7000-1687	Panel Light 24V DC Green LED	4
18	7000-1763-1	Buffer Board- PCB- GEN2, GEN1 Replacement	1
19	7000-1782-1	Jumper Cord Assembly	1
20	7000-1787-1	Control Knob with Markings	4
21	7000-1788-1	Escutcheon with GPL °F Scale	4
21	7000-1788-2	Escutcheon with GPL °C Scale	4
22	7000-1790	Washer, .515" ID x .885" OD	4
24	70CE-0006	Ferrite Bead Filter	4
25	9000-0105	Screw, 10-32 x 3/8 PH, Round Head	8
26	9000-0123	Nut, 10-32 Kep	6
27	9000-0127	Bolt, 10-32 x 1/2" Round Head Carriage	4
28	9000-0265	1/4-20 x 1/2" Carriage	2
29	9000-0268	Nut, 1/4-20 TopLok	2
30	9000-0532	Rivet, Enclosed, 1/8 dia. x 3/8, SS	8
31	9000-0658	Screw, 4-40 x 1/4" PH, Pan Head	11
32	9000-1414	Screw, 8-32 x 3/8" PH, Truss Head	2
33	9000-1436	Screw, 3mm x 5mm Long	2
38	WH0022	Wire Harness—Gas Controls—4 Knob	1
39	WH0045TC	Thermocouple Pigtail Assembly	4
40	* WH0020	Wire Harness—Gas Valves (not shown)	1
41	* WH0021	Wire Harness—Gas Controls— Hidden Knob (not shown)	1

TEMPERATURE KNOB INSTALL

1. Attach Potentiometer (8) to Mounting Bracket (4) and mount to Control Panel.
2. Slide Washer (22) onto Control Knob shaft (20).
3. Apply Silicone Lubricant (not supplied) to shaft.
4. Slide O-Rings (15) onto Control Knob shaft, making sure they are seated in the grooves.
5. Slide Control Knob (20) into Escutcheon (21).

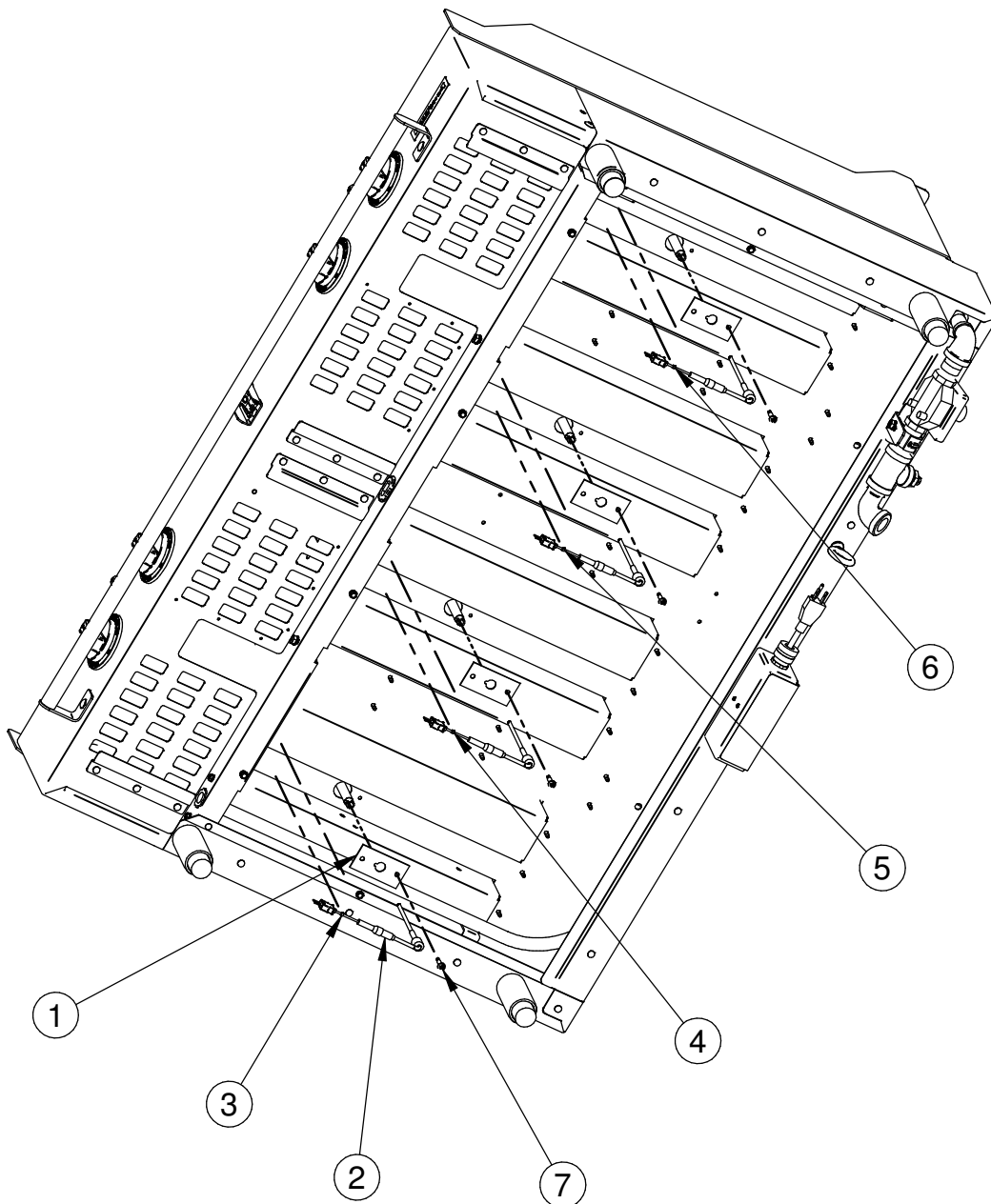
**TEMPERATURE KNOB
REPLACEMENT ASSEMBLY
RP-GPL-KNOB**

(#21 & 30 not part of assembly)



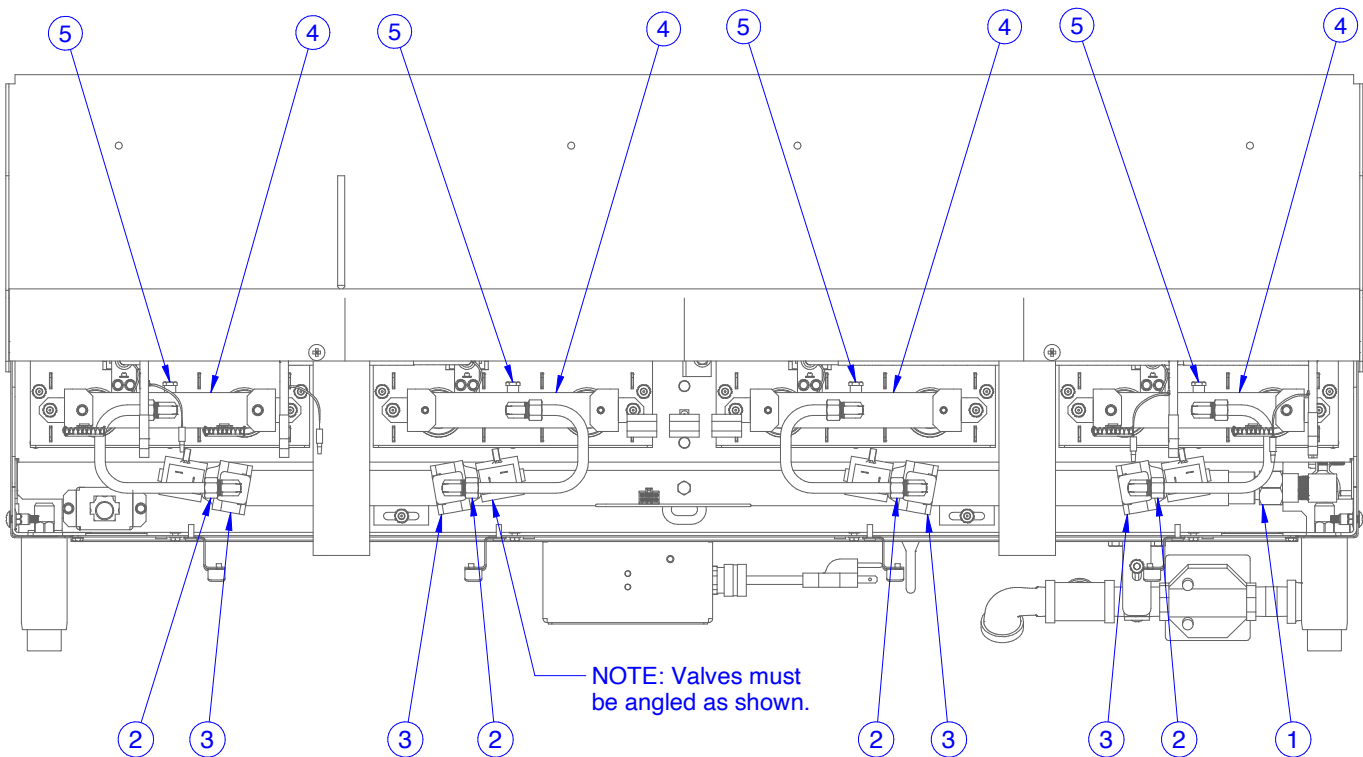


Item	Part Number	Description	Qty
2	7000-0919-4	Thermocouple	4
2	7000-0919-1	Thermocouple	4
3	7000-1745-1	Wire Label Marker - #1	1
4	7000-1745-2	Wire Label Marker - #2	1
5	7000-1745-3	Wire Label Marker - #3	1
6	7000-1745-4	Wire Label Marker - #4	1





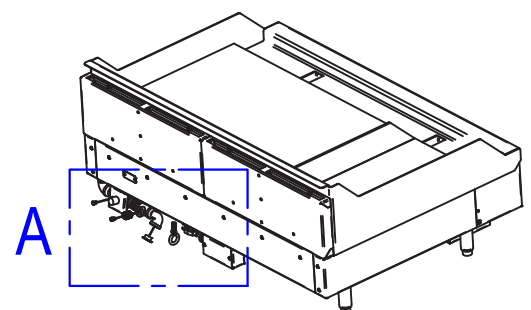
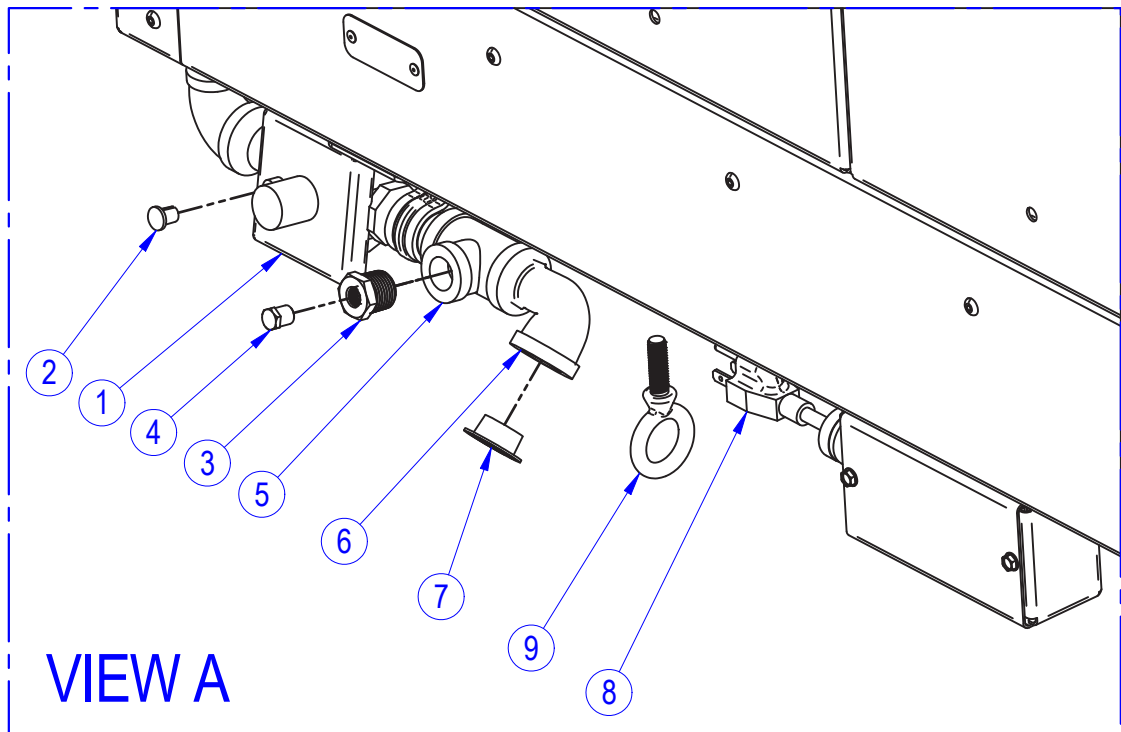
Item	Part Number	Description	Qty
1	002-928-4836-11	Gas Valve Manifold	1
2	7000-0267	Compression Fitting Adapter, 1/4 NPTM x 3/8 Tube, Brass	4
3	7000-1321	Gas Valve, 1/4" DC Gas Solenoid Valve	4
4	002-GPL4836-30	Burner Manifold	4
5	7000-0300	Pipe Plug, 1/8"	4

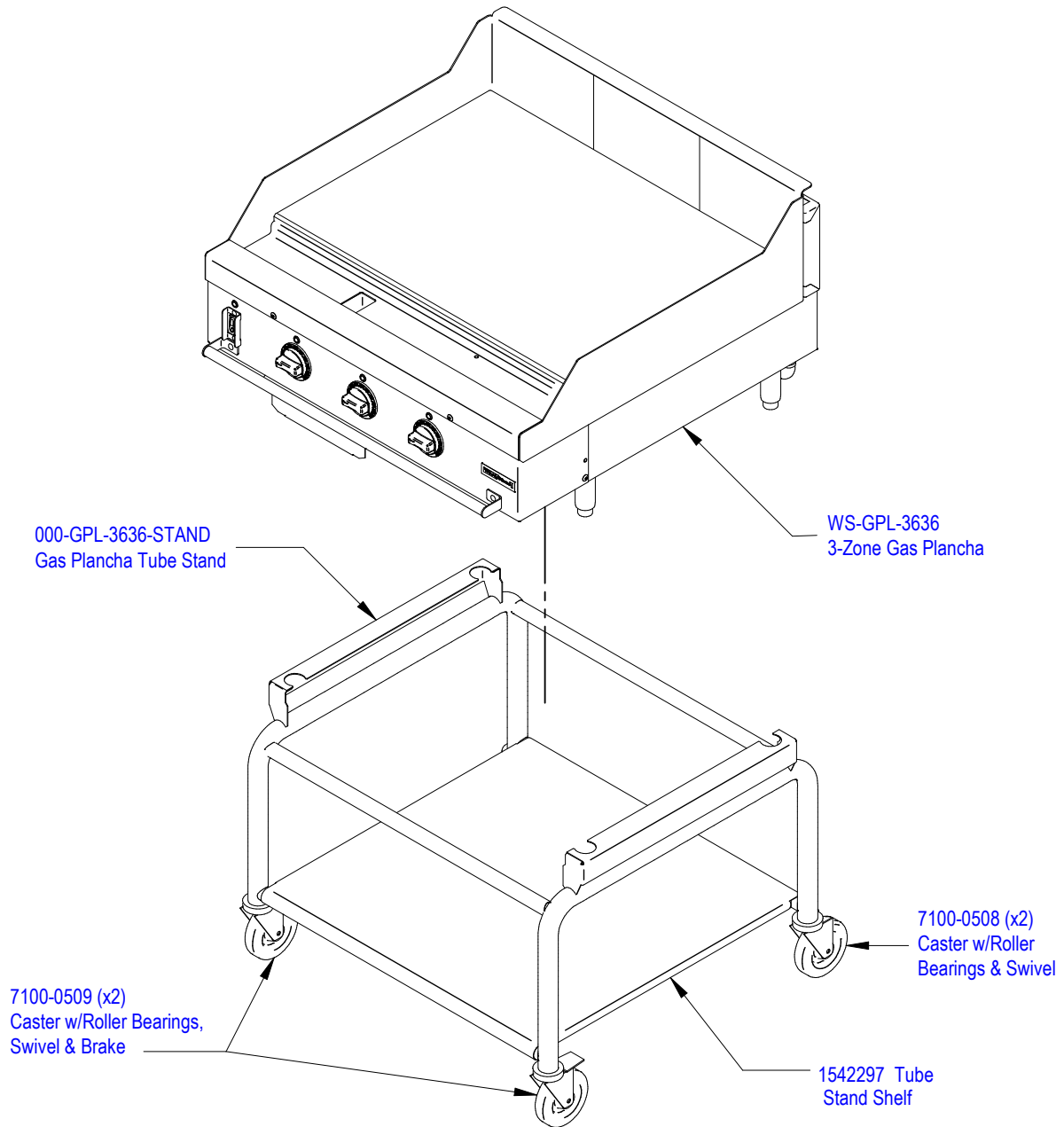




Item	Part Number	Description	Qty
1	7000-1775	Maxitrol Regulator RV48L- NG	1
1	7000-1776	Maxitrol Regulator RV48L- LP	1
2	7000-0143	Dust Cap- RV 48 Regulator	1
3	7000-0175	Reducer Bushing- 1/2" NPTM x 1/8" NPTF	1
4	7000-0300	1/8" Hex Head Pipe Plug	1
5	7000-0402	3/4" x 3/4" x 1/2" Tee	1
6	7000-0421	3/4" 90° Street Elbow	1
7	7000-0718	Plastic Plug, 3/4" NPT	1
8	7000-1836*	Power Cord, SJTOW, 18/3, 105°C, 5-15P to ROJ x 72"	1
8	7000-1375-1*	Power Cord, SJTOW, 18/3, 105°C, 5-15P to ROJ x 72"	1
9	7000-1376	Eye Bolt, 1" ID x 3/8-16 UNC x 1 Shank, Zinc Plated	1

*Call Wood Stone to determine which power cord part is correct for your unit.

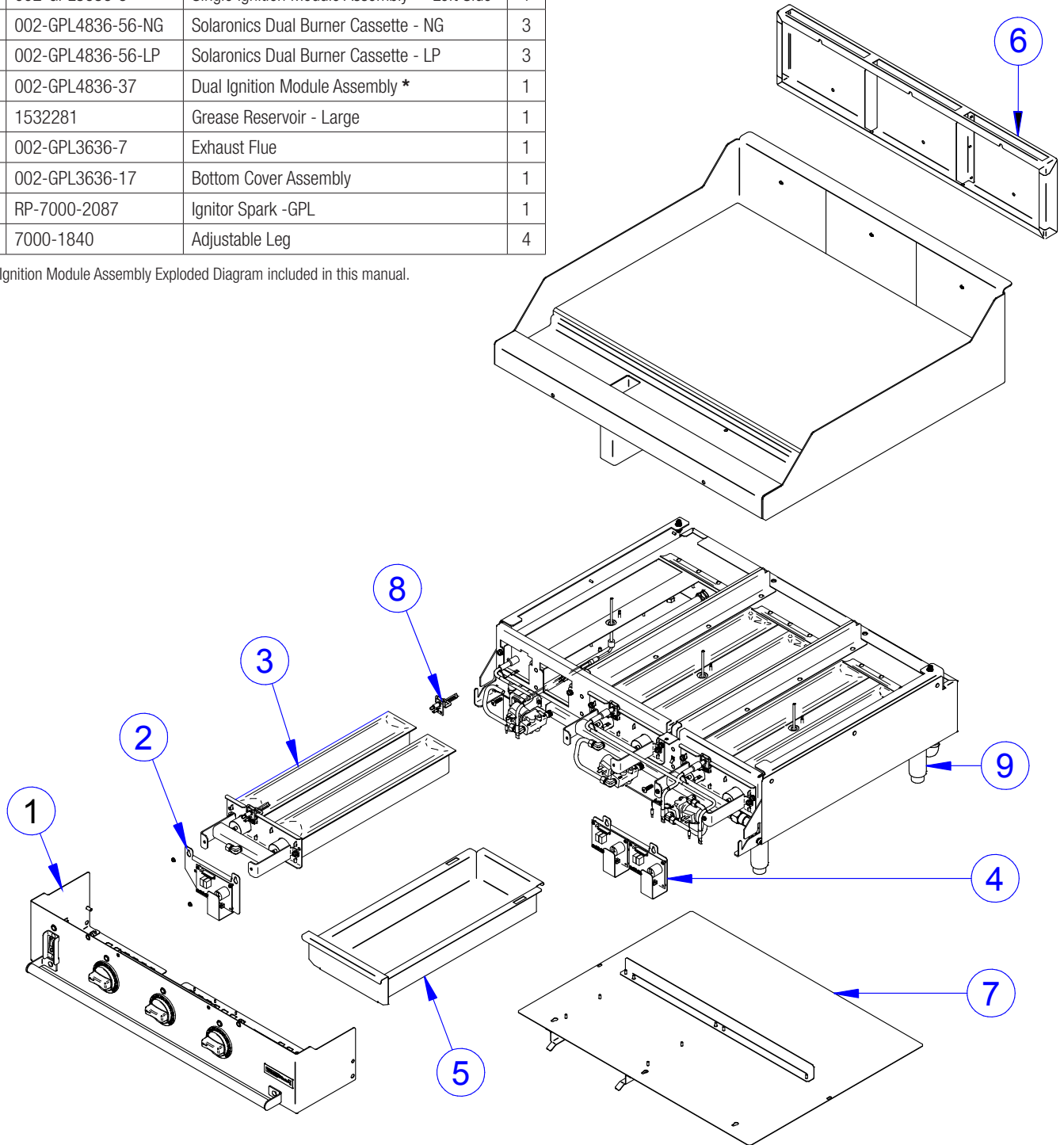






Item	Part Number	Description	Qty
1	002-GPL3636-11	Control Panel Assembly - 3 Knob	1
2	002-GPL3636-5	Single Ignition Module Assembly * -Left Side	1
3	002-GPL4836-56-NG	Solaronics Dual Burner Cassette - NG	3
3	002-GPL4836-56-LP	Solaronics Dual Burner Cassette - LP	3
4	002-GPL4836-37	Dual Ignition Module Assembly *	1
5	1532281	Grease Reservoir - Large	1
6	002-GPL3636-7	Exhaust Flue	1
7	002-GPL3636-17	Bottom Cover Assembly	1
8	RP-7000-2087	Ignitor Spark -GPL	1
9	7000-1840	Adjustable Leg	4

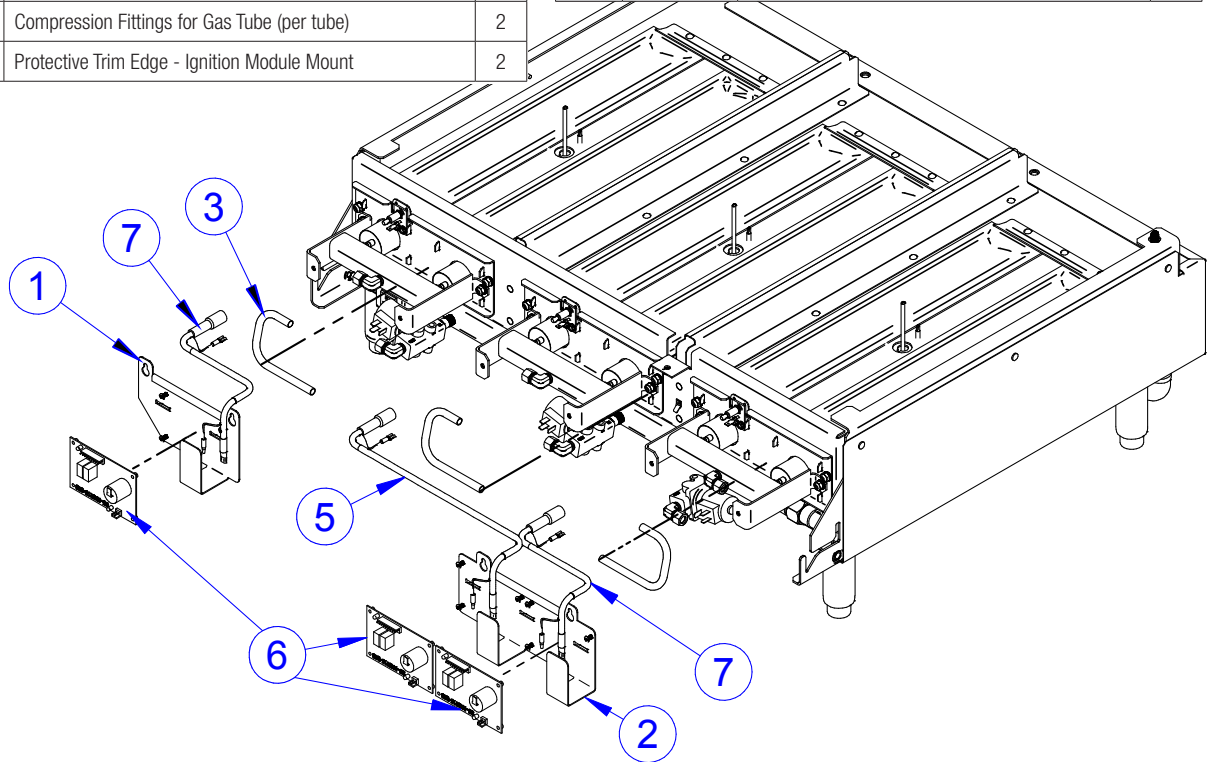
*See Ignition Module Assembly Exploded Diagram included in this manual.



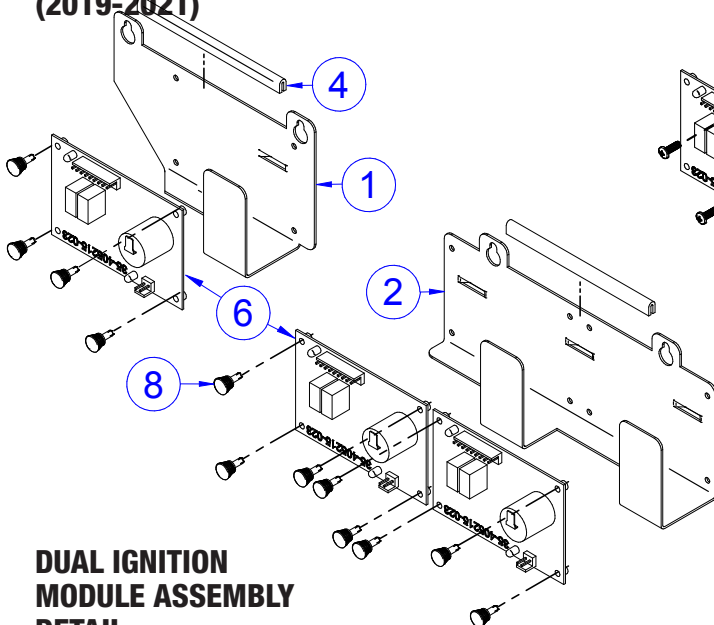


Item	Part Number	Description	Qty
1	2532313	Single Ignition Module Mounting Bracket (only)	
1	2532292	Single Ignition Module Mounting Brkt (only)	1
2	2532312	Dual Ignition Module Mounting Bracket (only)	
2	2532280	Dual Ignition Module Mounting Brkt (only)	1
3	6000-0149-4	Gas Tube - Main Burner	3
	7000-0267	Compression Fittings for Gas Tube (per tube)	2
4	7000-0854	Protective Trim Edge - Ignition Module Mount	2

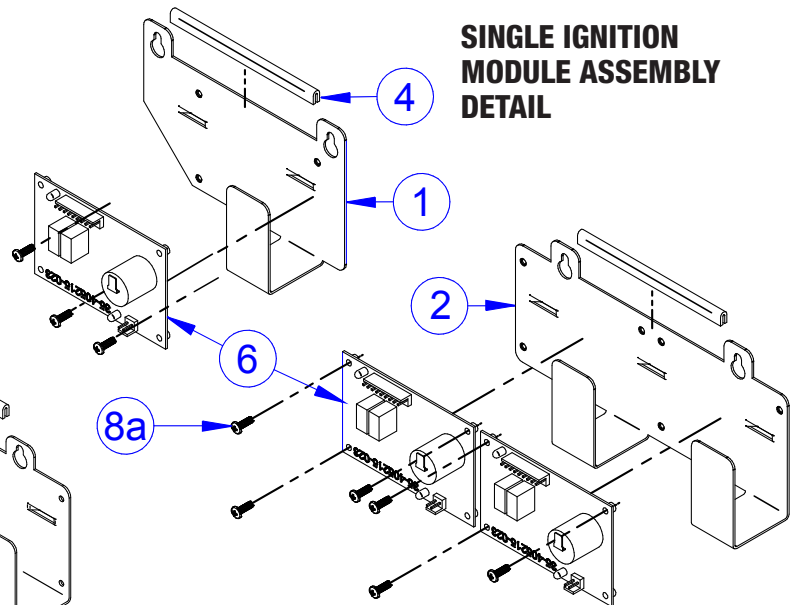
Item	Part No.	Description	Qty
5	7000-1973	Ignition Cable Assembly - Long - w/Ground Strap	1
6	7000-1695	Ignition Module	3
7	7000-1974	Ignition Cable Assembly - Short - w/Ground Strap	2
8	7000-1833	Snap Fastener, plastic (mfg from 2019 to 2021)	12
8a	9000-0052	Screw - 8-32 x1/2" Pan Hd - MSZ (before 2019)	9



**SINGLE IGNITION
MODULE ASSEMBLY
DETAIL
(2019-2021)**



**SINGLE IGNITION
MODULE ASSEMBLY
DETAIL**



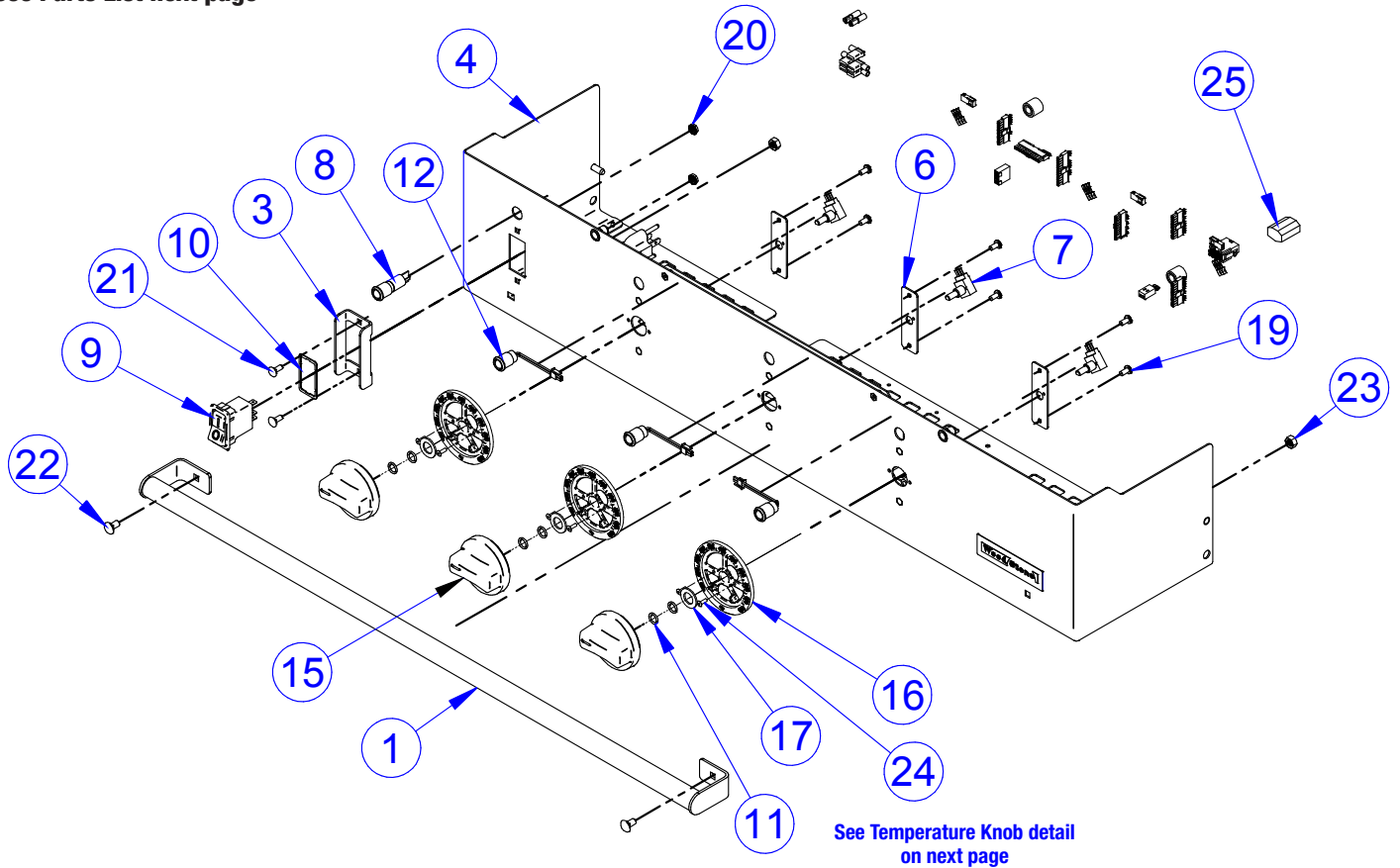
**DUAL IGNITION
MODULE ASSEMBLY
DETAIL**

**DUAL IGNITION MODULE
ASSEMBLY DETAIL
(BEFORE 2019)**



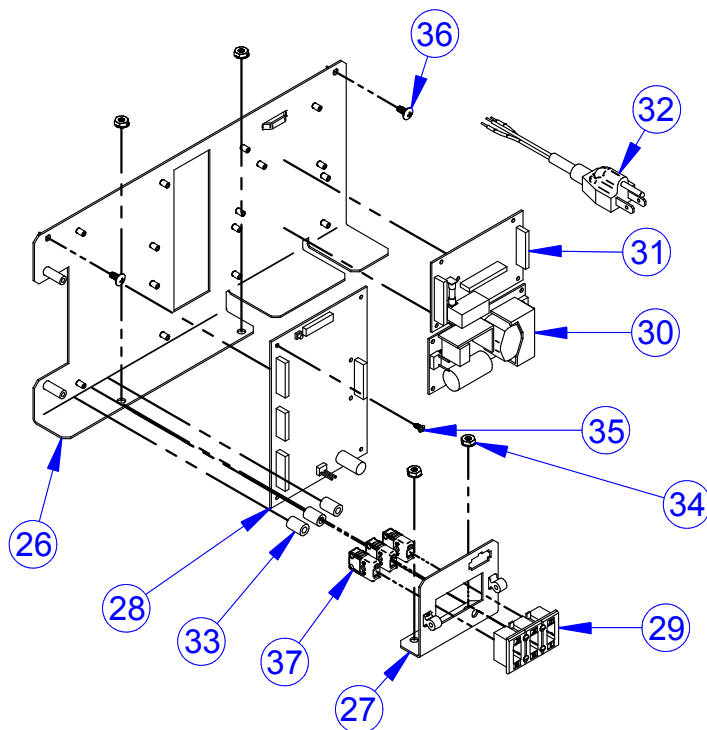
CONTROL PANEL

See Parts List next page



UTILITY PANEL

See Parts List next page





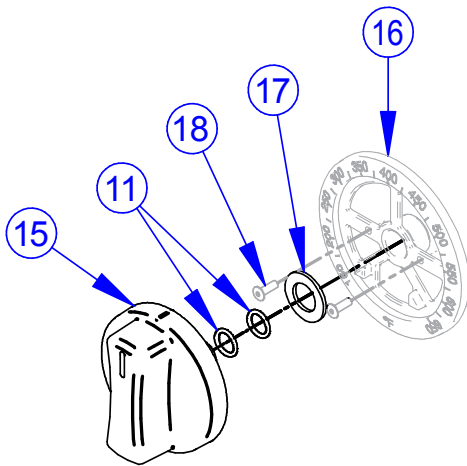
CONTROL & UTILITY PANEL PART NUMBERS

TEMPERATURE KNOB INSTALL

1. Attach Potentiometer (7) to Mounting Bracket (6) and mount to Control Panel.
2. Slide Washer (17) onto Control Knob shaft (15).
3. Apply Silicone Lubricant (not supplied) to shaft.
4. Slide O-Rings (11) onto Control Knob shaft, making sure they are seated in the grooves.
5. Slide Control Knob (15) into Escutcheon (16).

**TEMPERATURE KNOB
REPLACEMENT ASSEMBLY
RP-GPL-KNOB**

(#16 & 18 not part of assembly)

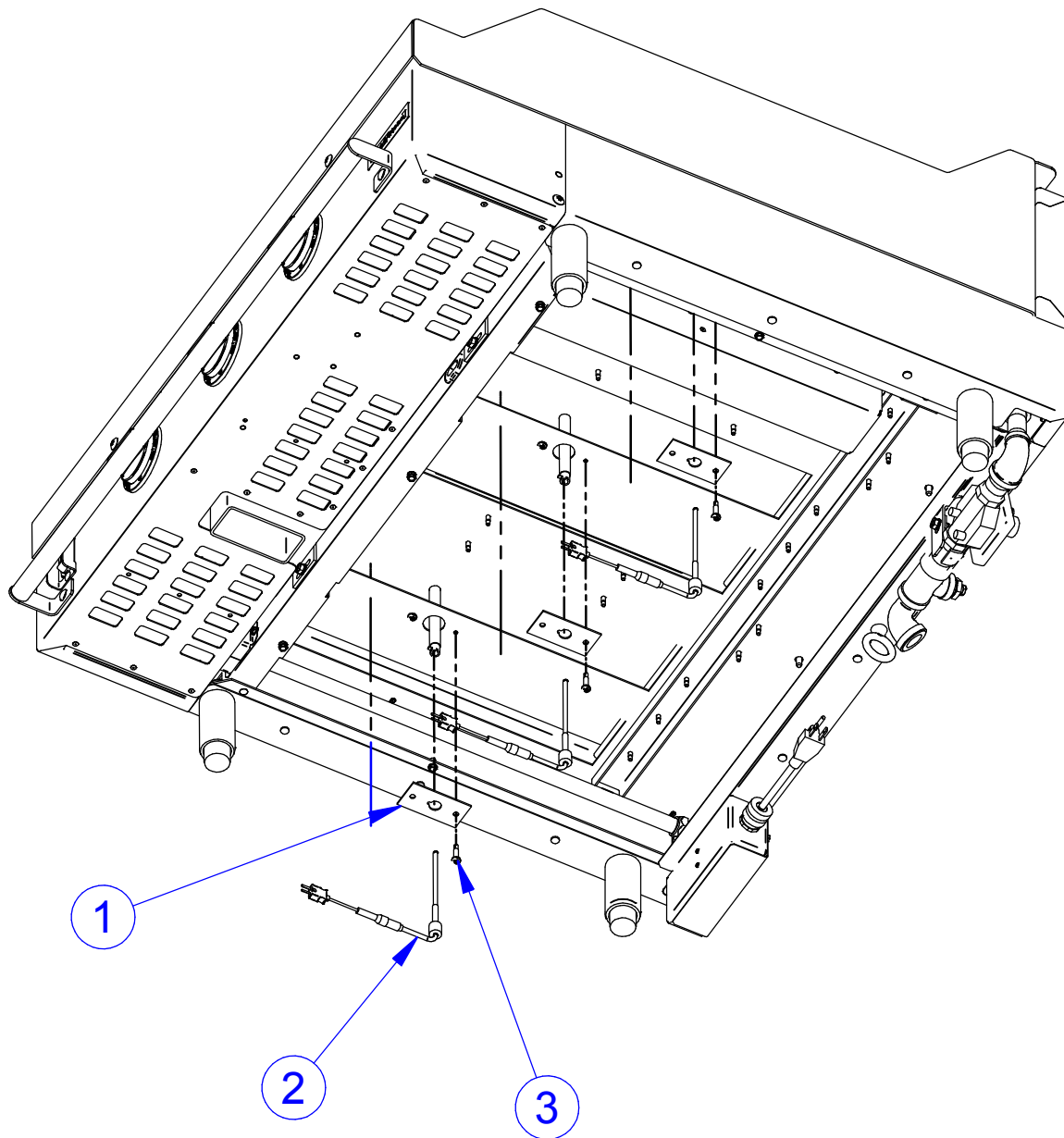


Item	Part Number	Description	Qty
CONTROL PANEL			
1	002-GPL3636-6	Bump Bar Weldment	1
3	1552290	Switch Guard	1
4	1643253	Control Panel- 3 Knobs	1
6	2532290	Pot Mount Bracket - Exposed Knob	3
7	7000-0894-1	Potentiometer	3
8	7000-0897	Panel Light 24V Red	1
9	7000-0946-1	On/OFF Switch Body, OTTO, Lighted	1
10	7000-0946-2	Gasket, OTTO On/Off Switch	1
11	7000-1452	O-Ring - 3/8" ID x 1/2" OD - Buna N	6
12	7000-1687	Panel Light 24V Green LED	3
15	7000-1787	Cast Knob Body	1
16	7000-1788-1	Cast Escutcheon with GPL °F Scale	3
17	7000-1790	Washer, .515"ID x .885"OD	3
18	9000-0532	Rivet, Enclosed, 1/8 dia. x 3/8, SS	6
19	9000-0105	Screw, 10-32 x 3/8 PH, Round Head	6
20	9000-0123	Nut, 10-32 Kep	6
21	9000-0127	Bolt, 10-32 x 1/2" Round Head Carriage	2
22	9000-0265	Bolt, 1/4-20 x 1/2" Carriage	2
23	9000-0268	Nut, 1/4-20 TopLok	2
24	9000-0532	Rivet, 1/8" Sealed BH .125"-.188"	6
25*	WH0032	Wire Harness - Gas Controls - 3 Knob	1
UTILITY PANEL			
26	2532305	Utility Panel	1
26	2532288	Utility Panel	1
27	2532289	Mount Bracket - T/C Bulkhead - 3 Pole	1
28	7000-0891-61	4-Channel Temperature Control - 3 Knob	1
29	7000-1393	Thermocouple Bulkhead, 3 - Circuit	1
30	7000-1394	Power Supply, 60 watt, 24V Output	1
31	7000-1762-1	Buffer Board - PCB - Gen 2	1
32	7000-1797-1	Jumper Cord Assembly	1
33	70CE-0006	Ferrite Bead Filter	3
34	9000-0123	Nut, 10-32 Kep	4
35	9000-0658	Screw 4-40 x 1/4" Philips Pan Head	15
36	9000-1414	Screw, 8-32 x 3/8" PH, Truss Head	2
37	WH0045TC	Thermocouple Pigtail Assembly	3



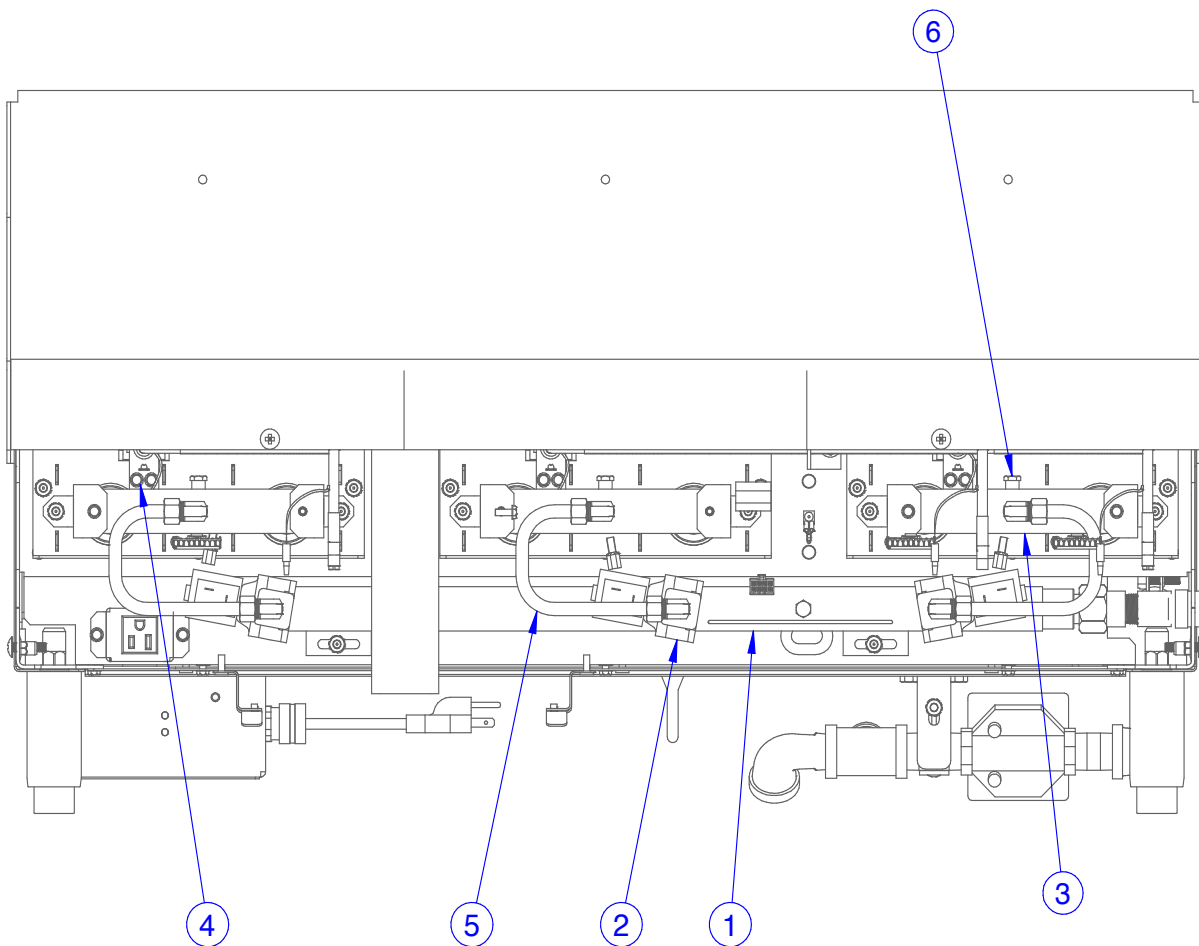
Item	Part Number	Description	Qty
2	7000-0919-4	Thermocouple*	3
2	7000-0919-1	Thermocouple*	3

*Note: Thermocouple part number depends on manufacture date. Call Wood Stone for more information.





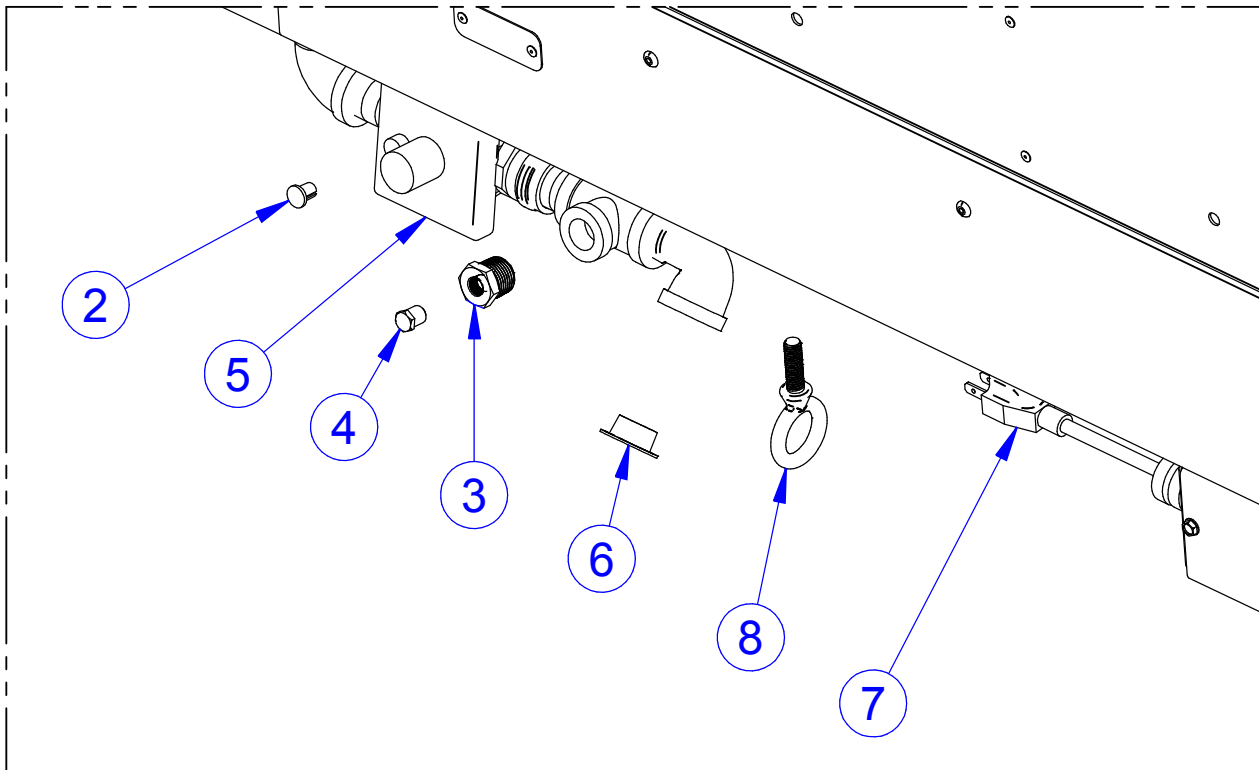
Item	Part Number	Description	Qty
1	002-928-3636-4	Gas Valve Manifold Assembly	1
2	7000-1321	Gas Valve, 1/4"NPT 25VDC Solenoid	3
3	002-GPL4836-30	Gas Manifold Assembly - Dual IR Burner	3
4	RP-7000-2087	Ignitor Spark -GPL	1
5	6000-0149-4	Gas Tube - Main Burner	3
	7000-0267	Compression Fittings for Gas Tube (per tube)	2
6	7000-0300	Test port and plug	3





Item	Part Number	Description	Qty
2	7000-0143	Dust Cap - RV 48L Regulator	1
3	7000-0175	Reducer Bushing - 1/2" NPTM x 1/8" NPTF	1
4	7000-0300	Plug 1/8" NPT Male Hex Head	1
5	7000-1775	Maxitrol Regulator RV48L - NG	1
5	7000-1776	Maxitrol Regulator RV48L - LP	1
6	7000-0718	Plastic Plug, 3/4" NPT	1
7	7000-1836*	Power Cord, SJTOW, 18/3, 105°C, 5-15P to ROJ x 72"	1
7	7000-1375*	Power Cord, SJTOW, 18/3, 105°C, 5-15P to ROJ x 72"	1
8	7000-1376	Eye Bolt, 1" ID x 3/8-16 UNC x 1 Shank, Zinc Plated	1

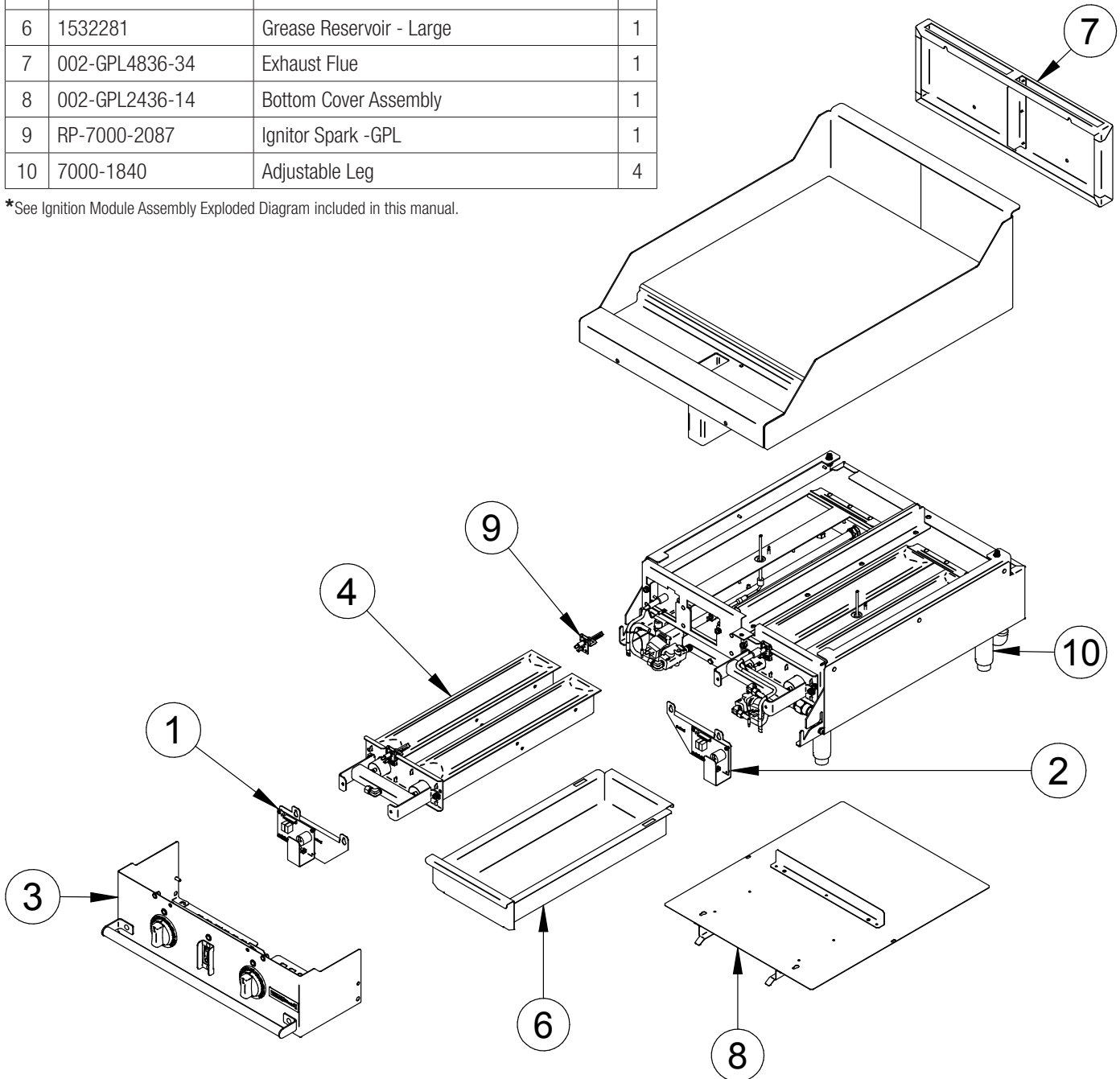
*Call Wood Stone to determine which power cord part is correct for your unit.





Item	Part Number	Description	Qty
1	002-GPL2436-5	Single Ignition Module Assembly - Left Side*	1
2	002-GPL2436-6	Single Ignition Module Assembly - Right Side*	1
3	002-GPL2436-8	Control Panel Assembly - 2 Knobs	1
4	002-GPL4836-56-LP	Solaronics Dual Burner Cassette - LP	2
4	002-GPL4836-56-NG	Solaronics Dual Burner Cassette - NG	2
6	1532281	Grease Reservoir - Large	1
7	002-GPL4836-34	Exhaust Flue	1
8	002-GPL2436-14	Bottom Cover Assembly	1
9	RP-7000-2087	Ignitor Spark -GPL	1
10	7000-1840	Adjustable Leg	4

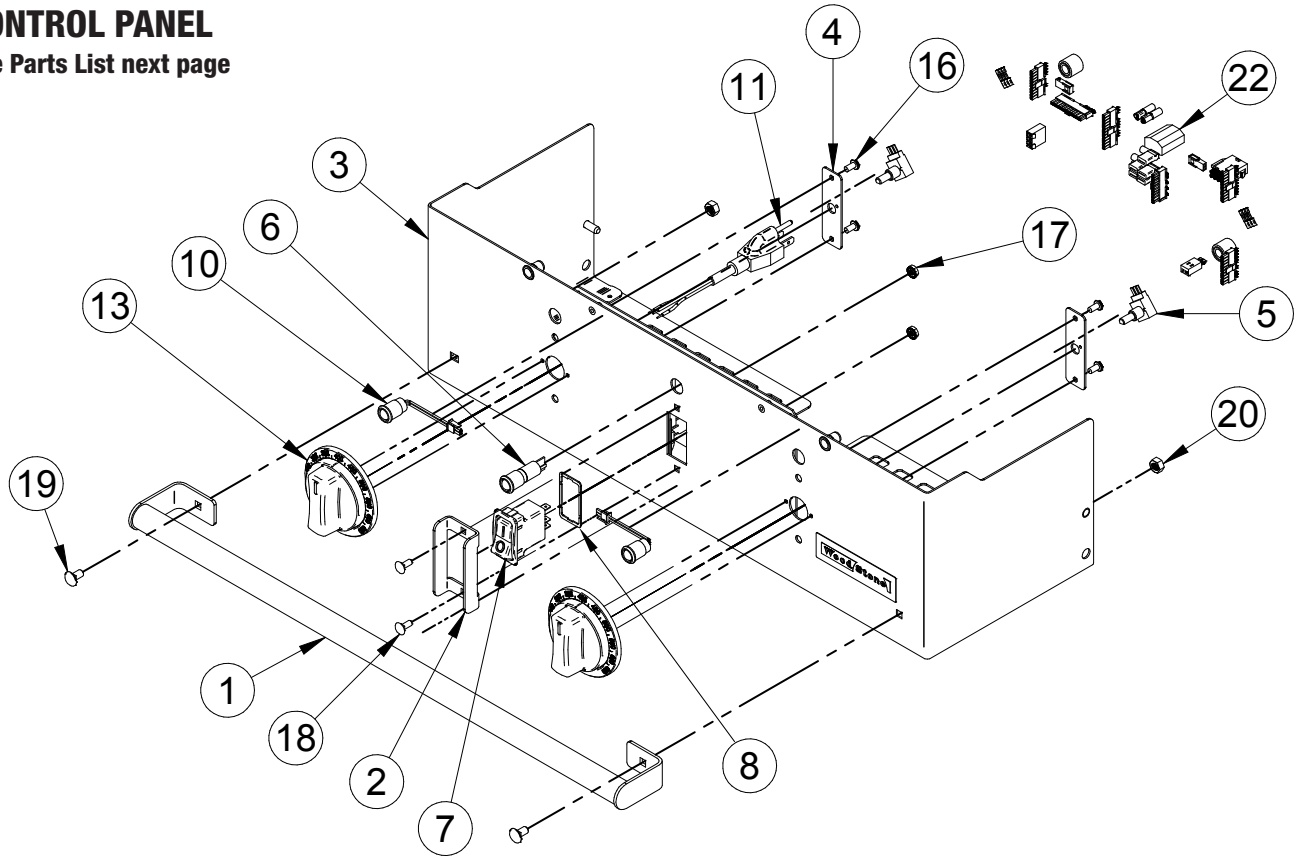
*See Ignition Module Assembly Exploded Diagram included in this manual.





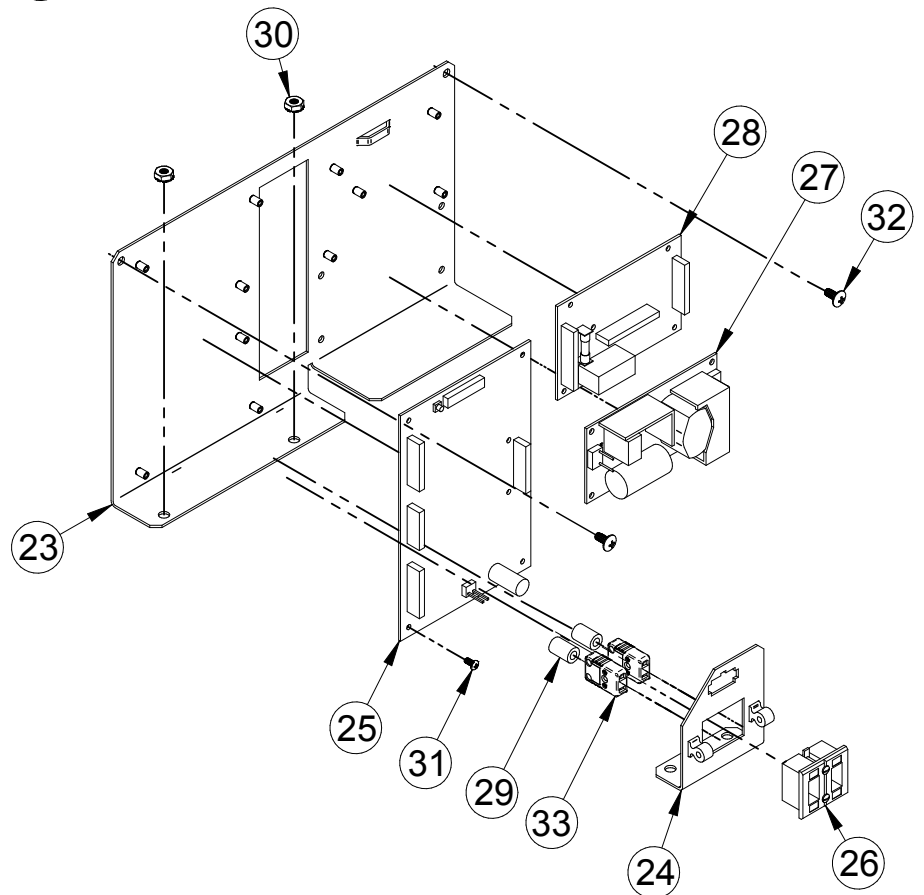
CONTROL PANEL

See Parts List next page



UTILITY PANEL

See Parts List next page





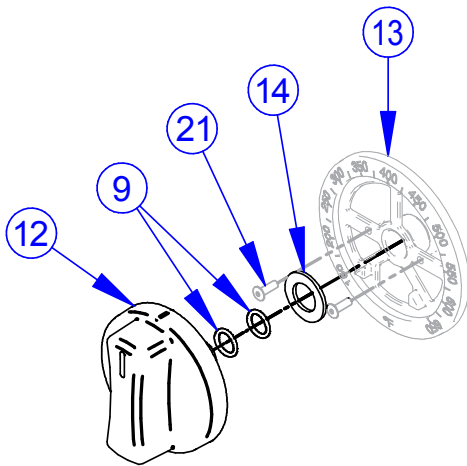
CONTROL & UTILITY PANEL PART NUMBERS

TEMPERATURE KNOB INSTALL

1. Attach Potentiometer (5) to Mounting Bracket (4) and mount to Control Panel.
2. Slide Washer (14) onto Control Knob shaft (12).
3. Apply Silicone Lubricant (not supplied) to shaft.
4. Slide O-Rings (9) onto Control Knob shaft, making sure they are seated in the grooves.
5. Slide Control Knob (12) into Escutcheon (13).

**TEMPERATURE KNOB
REPLACEMENT ASSEMBLY
RP-GPL-KNOB**

(#13 & 21 not part of assembly)

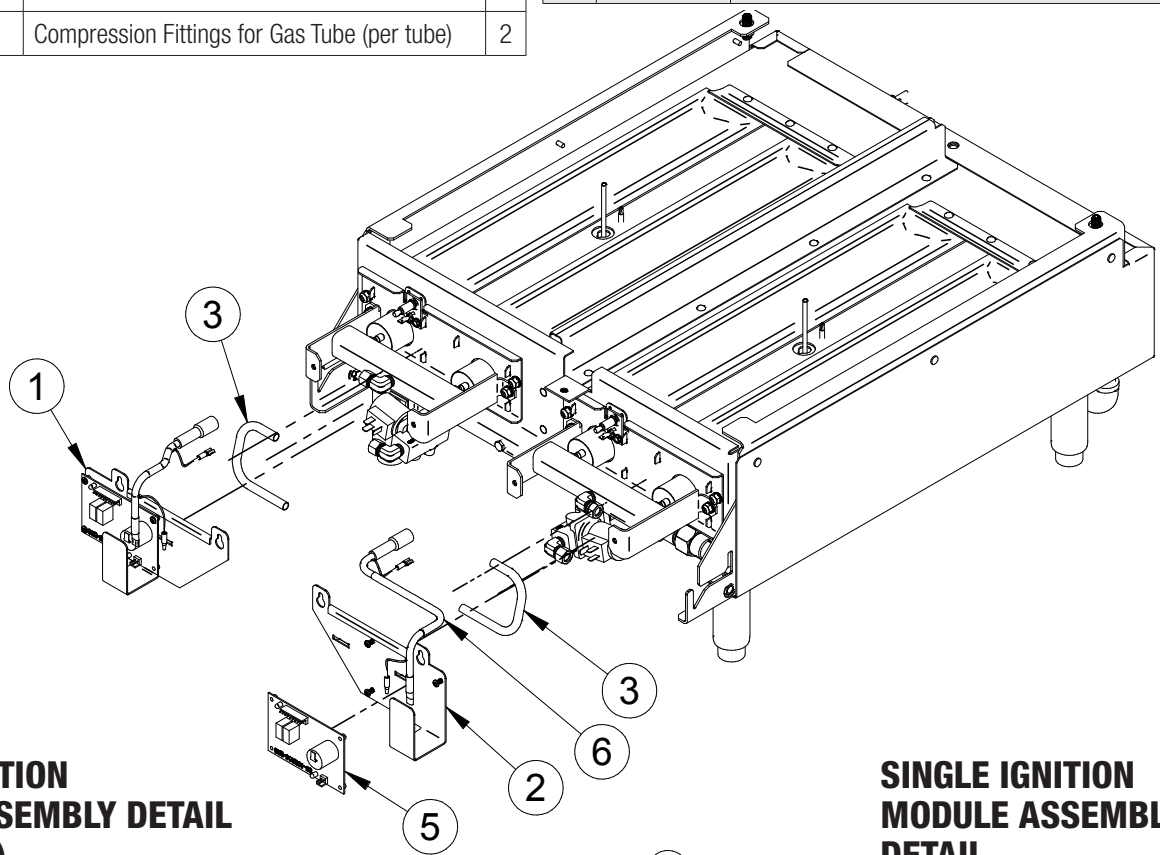


Item	Part Number	Description	Qty
CONTROL PANEL			
1	002-GPL2436-3	Bump Bar Weldment	1
2	1552290	Switch Guard	1
3	1643255	Control Panel - 2 Knobs	1
3	1643250	Control Panel - 2 Knobs	1
4	2532290	Pot Mount Bracket - Exposed Knob	2
5	7000-0894-1	Potentiometer	2
6	7000-0897	Panel Light 24V Red	1
7	7000-0946-1	On/OFF Switch Body, OTTO, Lighted	1
8	7000-0946-2	Gasket, OTTO On/OFF Switch	1
9	7000-1452	O-Ring - 3/8" ID x 1/2" OD - Buna N	4
10	7000-1687	Panel Light 24V Green LED	2
11	7000-1784-1	Jumper Cord Assembly	1
12	7000-1787-1	Cast Knob Body with Markings	2
13	7000-1788-1	Cast Escutcheon with GPL °F Scale	2
14	7000-1790	Washer, .515"ID x .885"OD	2
16	9000-0105	Screw, 10-32 x 3/8 PH, Round Head	4
17	9000-0123	Nut, 10-32 Kep	4
18	9000-0127	Bolt, 10-32 x 1/2" Round Head Carriage	2
19	9000-0265	Bolt, 1/4-20 x 1/2" Carriage	2
20	9000-0268	Nut, 1/4-20 TopLok	2
21	9000-0532	Rivet, 1/8" Sealed BH .125"-.188"	4
22	WH0042	Wire Harness - Gas Controls - 2 Knob	1
UTILITY PANEL			
23	2532304	Utility Panel	1
23	2532293	Utility Panel	1
24	2532300	Mount Bracket - T/C Bulkhead - 2 Pole	1
24	2532294	Mount Bracket - T/C Bulkhead - 2 Pole	1
25	7000-0891-61	4-Channel Temperature Control - 2 Knob	1
26	7000-0977	Thermocouple Bulkhead	1
27	7000-1394	Power Supply, 60 watt, 24V Output	1
28	7000-1762-1	Buffer Board - PCB - Gen 2	1
29	70CE-0006	Ferrite Bead Filter	2
30	9000-0123	Nut, 10-32 Kep	2
31	9000-0658	Screw 4-40 x 1/4" Phillips Pan Head	11
32	9000-1414	Screw, 8-32 x 3/8" PH, Truss Head	2
33	WH0045TC	Thermocouple Pigtail Assembly	2

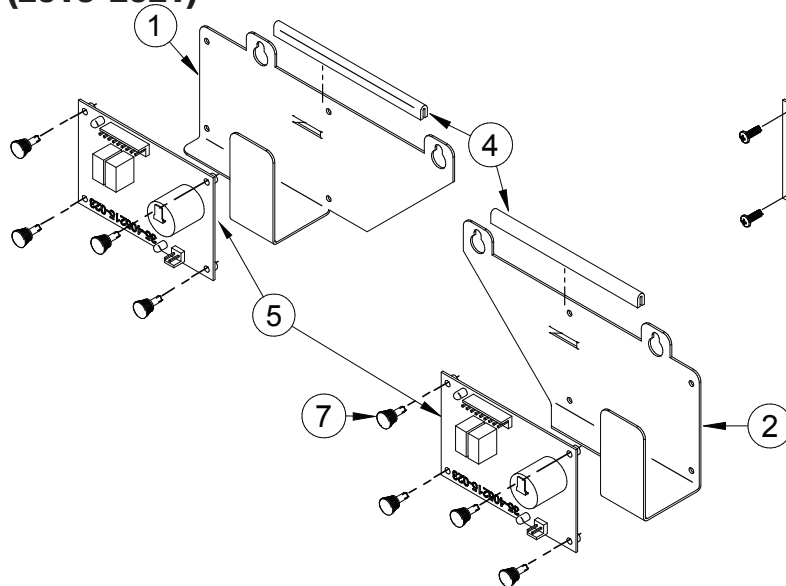


Item	Part Number	Description	Qty
1	2532311	Single Ignition Module Mounting Bracket (only)	1
1	2532284	Single Ignition Module Mounting Bracket (only)	1
2	2532310	Single Ignition Module Mounting Bracket (only)	1
2	2532283	Single Ignition Module Mounting Bracket (only)	1
3	6000-0149-5	Gas Tube - Main Burner	2
	7000-0267	Compression Fittings for Gas Tube (per tube)	2

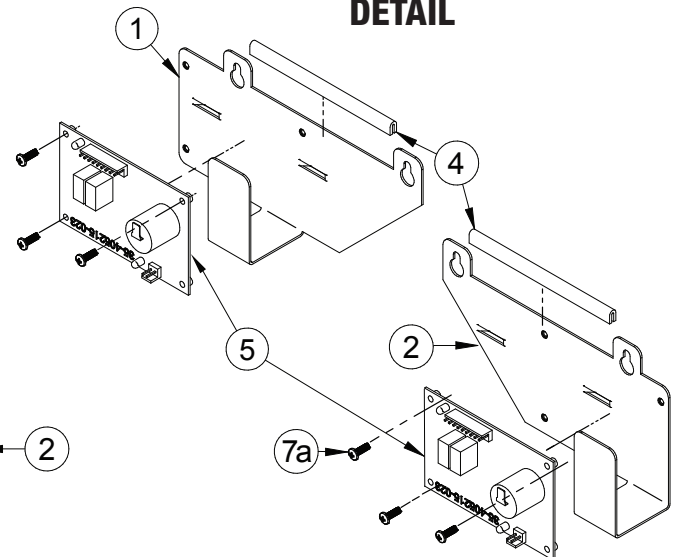
Item	Part Number	Description	Qty
4	7000-0854	Protective Trim Edge	2
5	7000-1695	Ignition Module	2
6	7000-1974	Ignition Cable Assembly -w/Ground Strap	2
7	7000-1833	Snap Fastener, Plastic (mfg from 2019 to 2021)	8
7a	9000-0052	Screw - 8-32 x 1/2" Pan Hd - MSZ	6



**SINGLE IGNITION
MODULE ASSEMBLY
DETAIL
(2019-2021)**

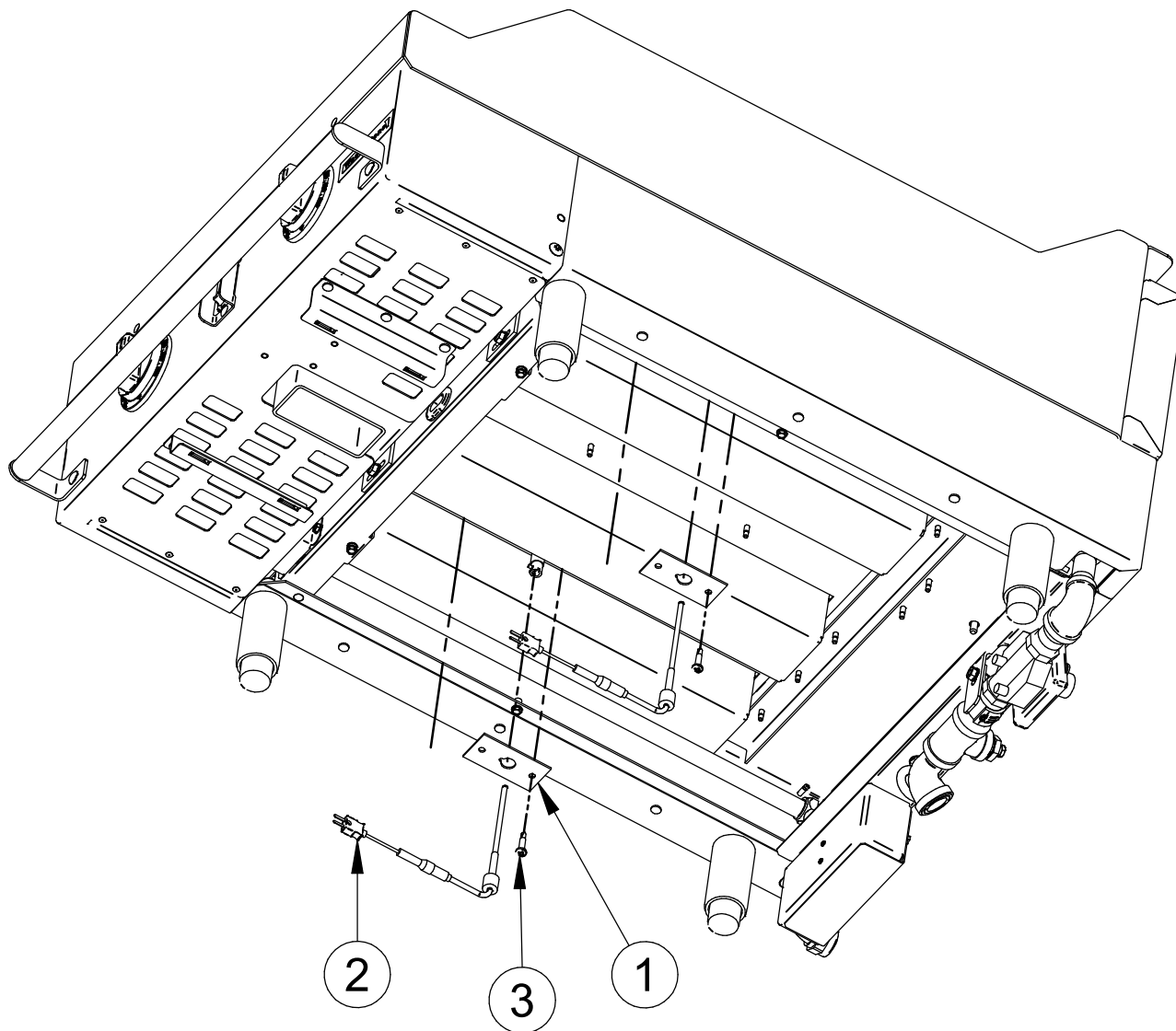


**SINGLE IGNITION
MODULE ASSEMBLY
DETAIL**



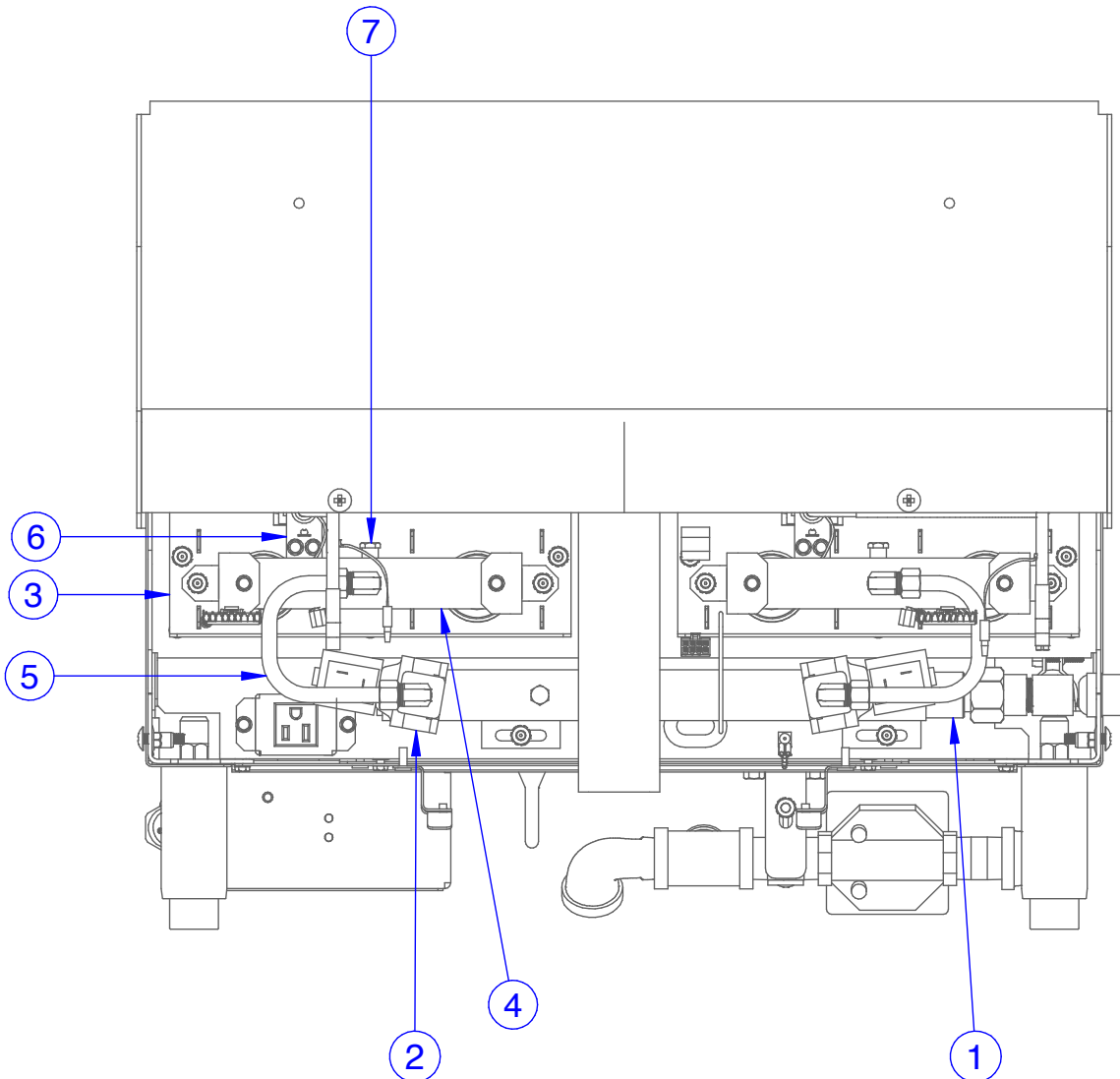


Item	Part Number	Description	Qty
2	7000-0919-4	Thermocouple	2
2	7000-0919-1	Thermocouple	2



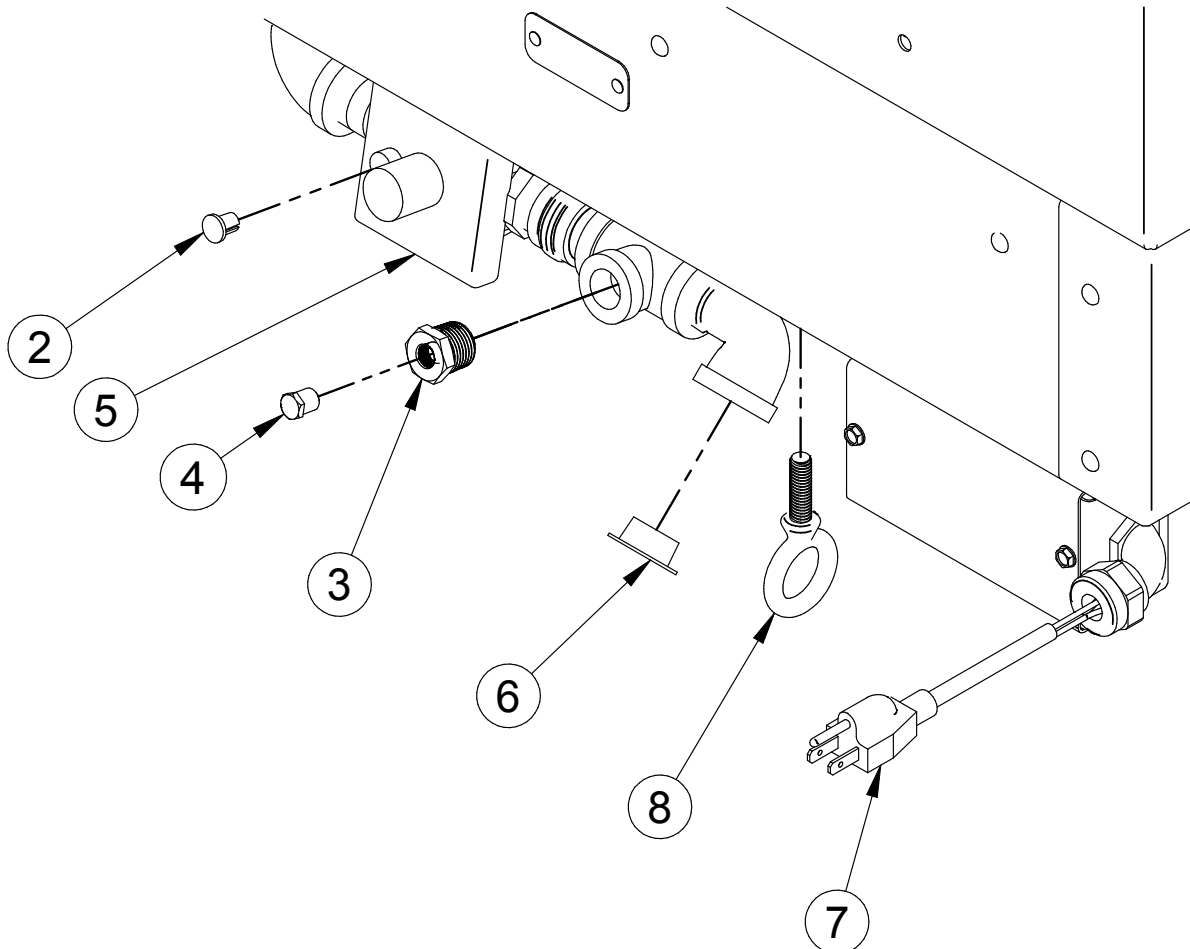


Item	Part Number	Description	Qty
1	002-928-2436-1	Gas Valve Manifold Assembly	1
2	7000-1321	Gas Valve, 1/4" NPT 25VDC Solenoid	2
3	002-GPL4836-56	Solaronics Dual Burner Cassette	2
4	002-GPL4836-30	Gas Manifold Assembly - Dual IR Burner	2
5	6000-0149-5	Gas Tube - Main Burner	2
6	RP-7000-2087	Ignitor Spark -GPL	1
	7000-0267	Compression Fittings for Gas Tube (per tube)	2
7	7000-0300	Pipe Plug, 1/8"	2





Item	Part Number	Description	Qty
1	002-928-4836-8	Gas Inlet Manifold - NG	1
2	7000-0143	Dust Cap - RV 48L Regulator	1
3	7000-0175	Reducer Bushing - 1/2" NPTM x 1/8" NPTF	1
4	7000-0300	Plug 1/8" NPT Male Hex Head	1
5	7000-1775	Maxitrol Regulator RV48L - NG	1
5	7000-1776	Maxitrol Regulator RV48L - LP	1
6	7000-0718	Plastic Plug, 3/4" NPT	1
7	7000-1836	Power Cord, SJTOW, 18/3, 105°C, 5-15P to ROJ x 72"	1
7	7000-1375	Power Cord, SJTOW, 18/3, 105°C, 5-15P to ROJ x 72"	1
8	7000-1376	Eye Bolt, 1" ID x 3/8-16 UNC x 1 Shank, Zinc Plated	1



**ALL WARRANTY SERVICE MUST BE PRE-APPROVED BY WOOD STONE****PLEASE CONTACT THE FACTORY FIRST**

Wood Stone warrants its equipment to the original purchaser against defects in material or manufacture for a period of one year from the original date of purchase, subject to the following exclusions and limitations.

Please contact the factory first at 1.800.988.8103 or 1.360.650.1111, seven days a week. Our normal business hours are 8am to 5pm Pacific time Monday–Friday. If calling during non-business hours, follow the recorded instructions for emergency service and a Wood Stone technician will get back to you promptly.

EXCLUSIONS:

The warranties provided by Wood Stone do not apply in the following instances:

1. In the event that the equipment is improperly installed. Proper installation is the responsibility of the installer; proper installation procedures are prescribed by the Wood Stone installation manual.
2. In the event the equipment is improperly maintained. Proper maintenance is the responsibility of the user; proper maintenance procedures are prescribed in the Wood Stone installation manual.
3. In the event that the failure or malfunction of the appliance or any part thereof is caused by abnormal use or is otherwise not attributable to defect in material or manufacture.
4. In the event that the appliance, by whatever cause, has been materially altered from the condition in which it left the factory.
5. In the event that the rating plate has been removed, altered or obliterated.
6. On parts that would be normally worn or replaced under normal conditions.
7. Scratches or damage to the grill surface due to improper cleaning or normal wear and tear.

If any oral statements have been made regarding this appliance, such statements do not constitute warranties and are not part of the contract of sale. This Limited Warranty constitutes the complete, final and exclusive statement with regard to warranties.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OR WARRANTY AGAINST LATENT DEFECTS

LIMITATIONS OF LIABILITY: In the event of warranty claim or otherwise, the sole obligation of Wood Stone shall be the repair and/or replacement, at the option of Wood Stone, of the appliance or component or part thereof. Such repair or replacement shall be at the expense of Wood Stone with the exception of travel over 100 miles or two hours, overtime, and holiday charges which shall be at the expense of the purchaser. Any repair or replacement under this warranty does not constitute an extension of the original warranty for any period of the appliance or for any component or part thereof. Parts to be replaced under this warranty will be repaired or replaced at the option of Wood Stone with new or functionally operative parts. The liability of Wood Stone on any claim of any kind, including claims based on warranty, expressed or implied, contract, negligence, strict liability or any other theories shall be solely and exclusively the repair or replacement of the product as stated herein, and such liability shall not include, and purchaser specifically renounces any rights to recover, special, incidental, consequential or other damages of any kind whatsoever, including, but not limited to, injuries to persons or damage to property, loss of profits or anticipated profits, or loss of use of the product.

TO SECURE WARRANTY SERVICE

If you claim a defect covered by this Limited Warranty, contact:

Wood Stone Corporation, Attn: Service Department, 1801 W. Bakerview Rd., Bellingham, WA 98226 USA
Phone 1.800.988.8103 or 1.360.650.1111



WOOD STONE CORPORATION

1801 W. Bakerview Rd.

Bellingham, WA 98226 USA

Toll Free 800.988.8103

Tel 360.650.1111

Fax 360.650.1166

www.woodstone-corp.com

An ongoing program of product improvement may
require us to change specifications without notice.