

## Gas Pressure and Gas Part Replacement Checklist

The following checklist MUST be filled out for FlexFusion series combi ovens when the following gas related conditions or gas component replacements apply:

- The location has suspected gas pressure issues or unit has **NO GAS** errors.
- Ignitor and/or flame sensor are replaced.
  - **NOTE:** Section 4: CO2 Readings **are not** required when replacing these parts.
- The gas valve or gas heat exchanger are replaced under warranty.
  - **NOTE:** Section 4: CO2 Readings **are** required when replacing these parts.

**ATTENTION: CO2 Analysis requires the CO2 analyzer tool to be properly performed.**

**NOTE:** Failure to submit this form for warranty claims including these conditions will result in a denied claim.

### Required Tools

- CO2 Analyzer Tool
- Multimeter
- Manometer

### Section 1: Information

Date: \_\_\_\_\_ Technician: \_\_\_\_\_

Store/Club Number: \_\_\_\_\_

Unit Type: \_\_\_\_\_

Gas Type: ☐ Natural Gas ☐ LPG

### Section 2: Gas Pressure Readings

SERIAL NUMBER	Static	Dynamic
	in.WC	in.WC
	in.WC	in.WC
	in.WC	in.WC
	in.WC	in.WC

**Section 3: Ignitor and Flame Sensor Readings – Restriction Flange Verification****NOTE:** Only fill out this section when changing an **Ignitor, Flame Sensor, or Both**.

SERIAL NUMBER	Ignition electrode		Flame sensor		Replaced
	Before	After (if replaced)	Before	After (if replaced)	
	$\Omega$	$\Omega$	$\mu A$	$\mu A$	
	$\Omega$	$\Omega$	$\mu A$	$\mu A$	
	$\Omega$	$\Omega$	$\mu A$	$\mu A$	
	$\Omega$	$\Omega$	$\mu A$	$\mu A$	

View current type of restriction flange (between combustion blower and gas burner) and verify it is correct by comparing to the *Gas Orifice and Fan Speed* document, located at the end of this checklist.

**Section 4: CO<sub>2</sub> Readings****NOTE:** Only fill out this section when changing a **gas valve** or **heat exchanger**.

CO <sub>2</sub> readings <i>before</i> calibration		CO <sub>2</sub> readings <i>after</i> calibration	
Max. power:	%	Max. power:	%
Min. power:	%	Min. power:	%

**Additional Notes:**

gas orifice and fan speeds		01.10.2016		 Engineered to Last	
orifice de gaz et vitesse ventilateur à gaz		SN ≥ 16212356			
<b>CSA</b>					
valid for Combisteamer FPG/FGG, valable pour de fours mixtes FPG/FGG					
gas orifice/orifice de gaz in/en mm/100 and/et air baffle/défecteur d'air in/en mm/10					
unit size taille de l'appareil	orifice natural gas gaz naturel	orifice LP Gas B/P, Propane gaz propane liquéfié		orifice air baffle défecteur d'air	
test gas, gaz d'essai	Gas A	Gas E		orifice size	part no.
615	680	470		160	10016863
115	590	420		200	855224
215	590	420		200	855224
621	590	430		170	10016864
121	580	400		210	10016866
221	580	400		210	10016866
speed gas fan/ vitesse ventilateur à gaz in/en rpm				orifice size	part no.
	Max	Start	Min	680	201195
615	5050	5000	4800	590	201229
115	5050	4000	2800	580	201230
215	5050	4000	2800	470	201189
621	6700	5000	4800	430	10016868
121	6700	4000	2800	420	201185
221	6700	4000	2800	400	10016867

CO2 [Vol%]	bei max. Leistung, at max. gas fan speed, à la vitesse maximum	Bei min. Leistung, at min. gas fan speed, à la vitesse minimum
natural gas, gaz naturel	8,6 – 9,6 Vol%	0,5 – 1,2 Vol% niedriger als bei max. /lower as maximum setting 0,5 – 1,2 Vol% moins qu'au maximum
LP Gas B/P, Propane propane liquéfié	10,0 – 11,0 Vol%	0,5 – 1,2 Vol% niedriger als bei max. /lower as maximum setting 0,5 – 1,2 Vol% moins qu'au maximum
LP Gas Butane butane liquéfié	11,5 – 12,5 Vol%	0,5 – 1,2 Vol% niedriger als bei max. /lower as maximum setting 0,5 – 1,2 Vol% moins qu'au maximum

After a gas type conversion, the new gas type has to be marked permanently visible on the unit.
Après conversion en un autre type de gaz, il faut marquer visiblement le nouveau type de gaz sur l'appareil.
Caution, the gas supply shall be shut off prior to disconnecting the electrical power, before proceeding with the conversion.
Attention. Avant d'effectuer la conversion, couper d'abord l'alimentation en gaz, ensuite couper l'alimentation électrique.

WARNING	AVERTISSEMENT
<p>This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, an explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life.</p> <p>The qualified service agency is responsible for the proper installation of this kit.</p> <p>The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.</p>	<p>Cette trousse de conversion doit être installée par un service d'entretien qualifié, selon les instructions du fabricant et selon toutes les exigences et tous les codes pertinents de l'autorité compétente.</p> <p>Assurez-vous de bien suivre les instructions dans cette notice pour réduire au minimum le risque d'incendie, d'explosion ou la production de monoxyde de carbone pouvant causer des dommages matériels, des blessures ou la mort.</p> <p>Le service d'entretien qualifié est responsable de l'installation de cette trousse.</p> <p>L'installation n'est pas adéquate ni complète tant que bon fonctionnement de l'appareil converti n'a pas été vérifié selon les instructions du fabricant fournies avec la trousse.</p>

## No Gas - Quick Reference

### Explanation of the Error

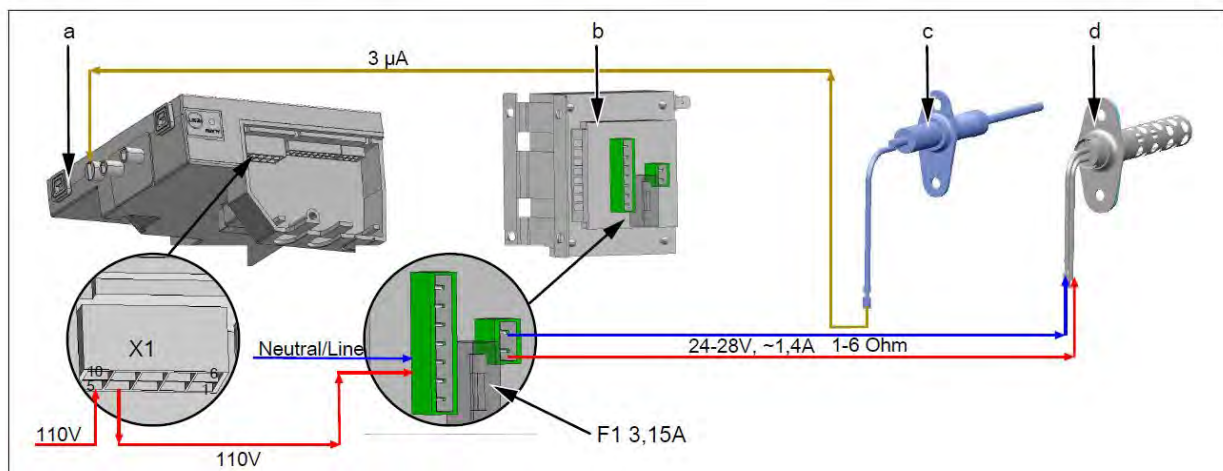
No flame was sensed upon the first request or loss of flame sensed during the operation. Multiple things could happen when the error occurs.

### Quick Check

Verify the Gas Shut Off is fully open and the Quick Disconnect is fully connected. If you find one of these to be the fault, perform the troubleshooting steps, described below.

**NOTE:** It is best practice to go into the CO2 menu, cycle the unit a few times, and stay until the unit is at temp.

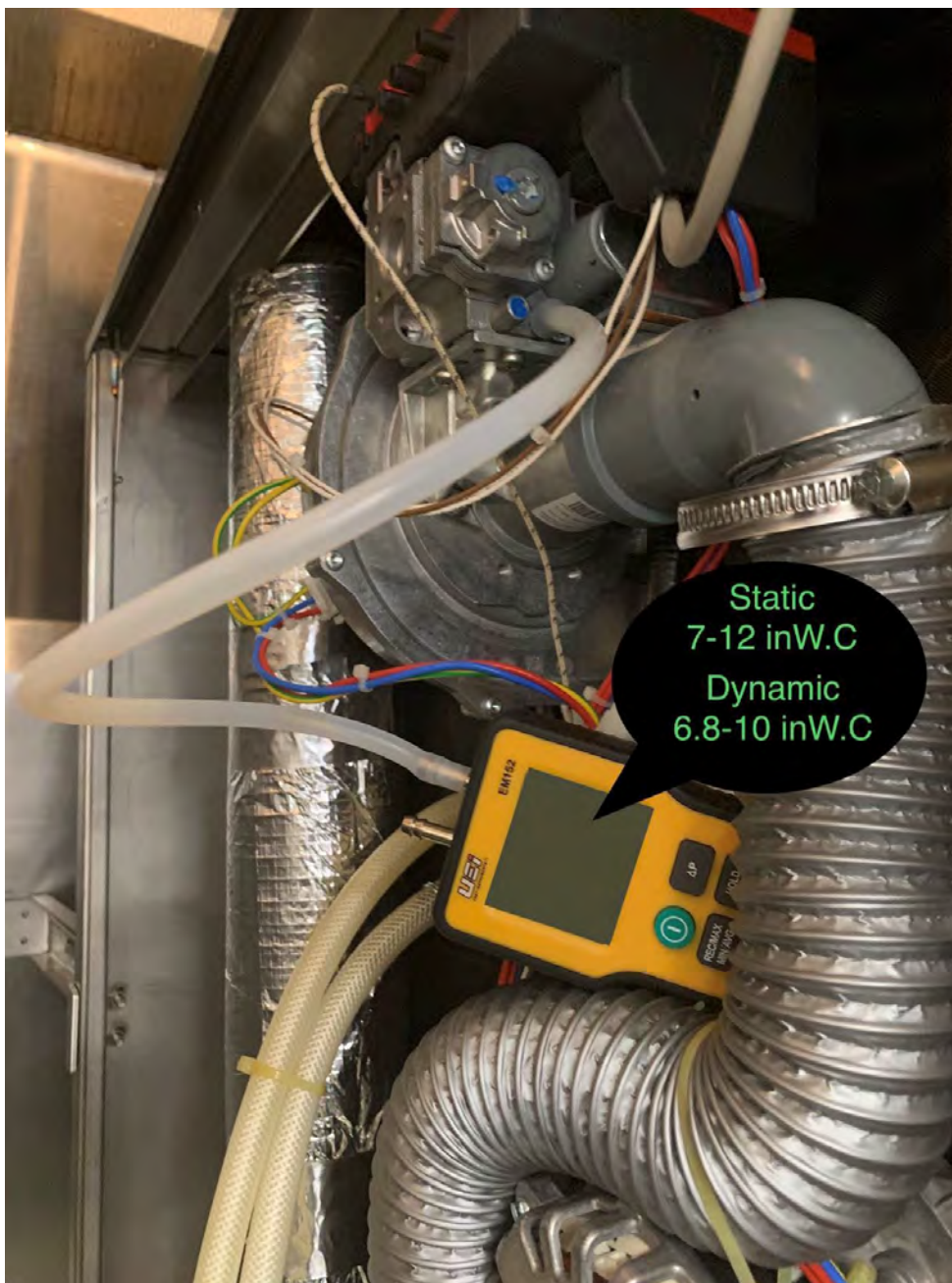
### Troubleshooting Gas Combi Issues





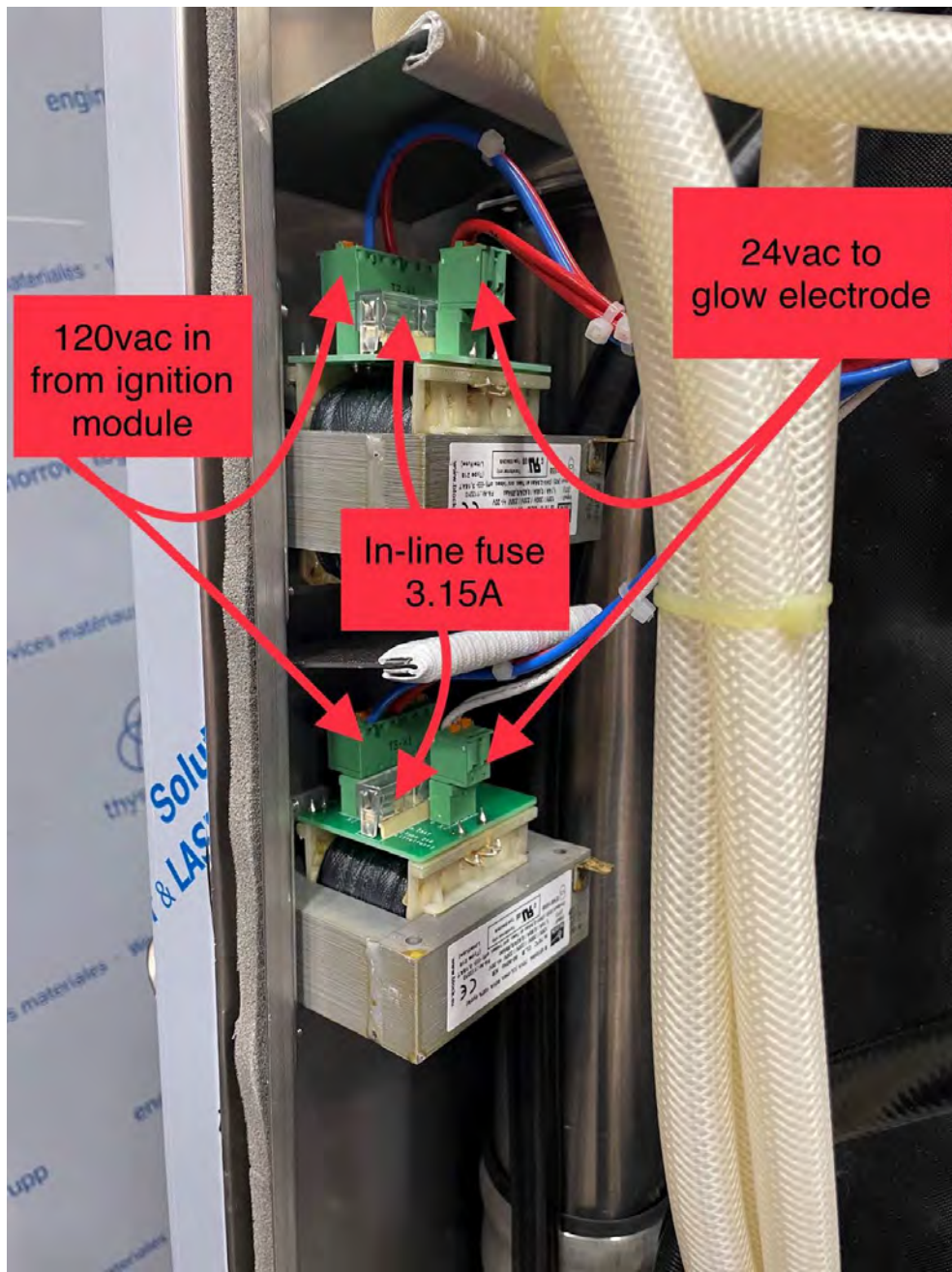
To troubleshoot this issue, do the following:

1. **Check the incoming gas pressure.**  
Record the minimum and maximum.



**2. Check the glow electrode.**

Voltage is sent from the ignition module (120vac) to the ignition transformer where 120v is stepped down to 24vac, and then sent to the glow electrode to ignite the gas.





**2.1 Check the glow electrode.**

If the voltage is good and no fuses are blown, then check the cold resistance ( $1\Omega$ - $6\Omega$ ) or amp draw of the glow electrode.



**3. Check the flame sense.**

After the glow electrode has ignited the flame, there should be a reading of at least  $3\mu$  (DC microamps). The ignition module is looking for this permissive to allow the unit to go into full burn. If the flame sense is good, swap the ignition module and CAN Cable for testing to diagnose a failed module.

