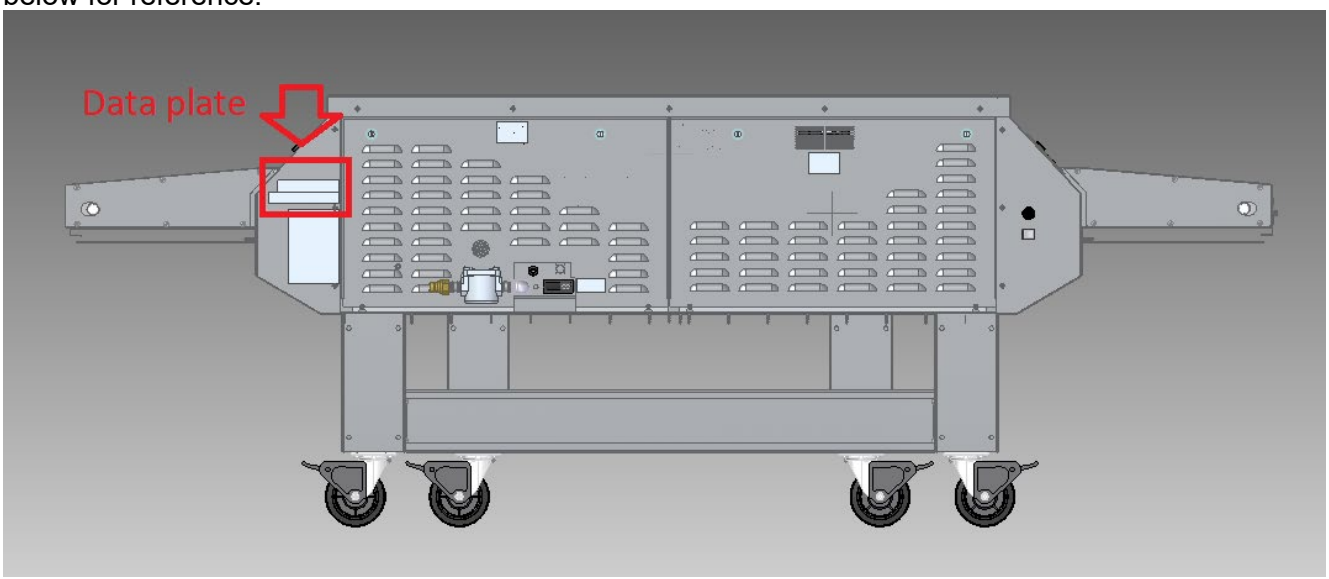
Hot Rocks Oven – How to fix ignition errors (≈1 Hour)

1 – Gathering information (≈5minutes)

A. Make sure to note the Model and Serial number and add it to your invoice/report.
This information can be found on the serial plate located on the back of the oven, see the picture below for reference:



B. Confirm with the customer when and which (6 month or a yearly) maintenance was last performed. Note the information in your invoice/report.

C. Confirm with the customer the frequency at which the error is happening, whether it's only in the mornings, during rush hour etc…make sure to add this information in your invoice/report. If the ignition issue is presented as the oven being on most times but sometimes giving an igniter fault in the middle of the day or dropping heavily in temperature before catching back up to set point this is often due to the flame sensor not picking up on the flame, you may skip to step 3 then 4E immediately.

2 – Basic verifications (≈5minutes)

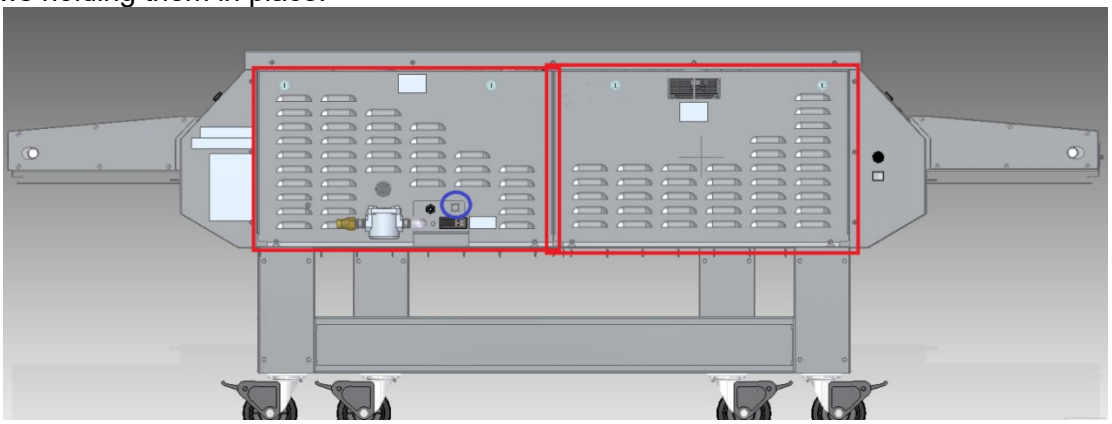
A. Make sure the valve on the wall is opened (Industry standard says it should be parallel to the pipe when opened), in some setups there may be more than one.

B. If possible, turn off all the gas operated equipment other than the oven and attempt to turn on the oven using the main screen's power button (Make sure the hood is activated as well, in some setup this is mandatory in order for the oven to light up)

3 – Setting up the work space (≈10-20 minutes)

A. Move the oven away from the wall, often, there will be an Ansul extinguisher system in place. Remove this system and pull the ovens off the wall in order to clear space for you to fit behind it.

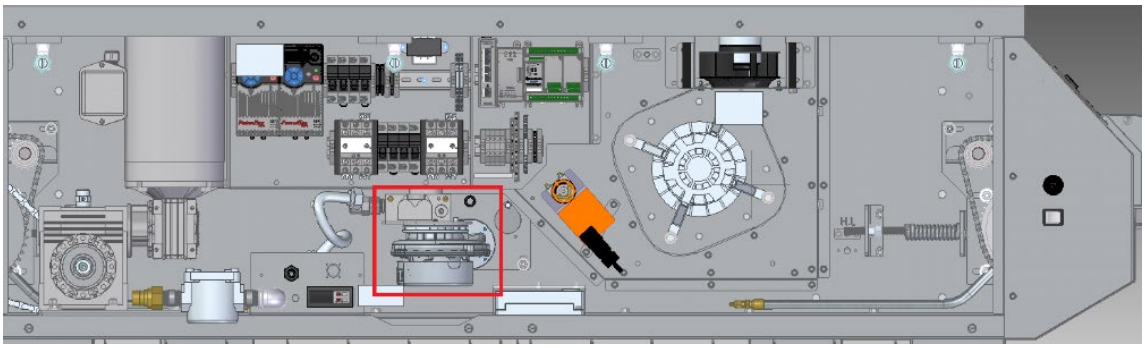
B. Remove the 2 (or 3 depending on model) back panels. There will be a few phillips head screws holding them in place.



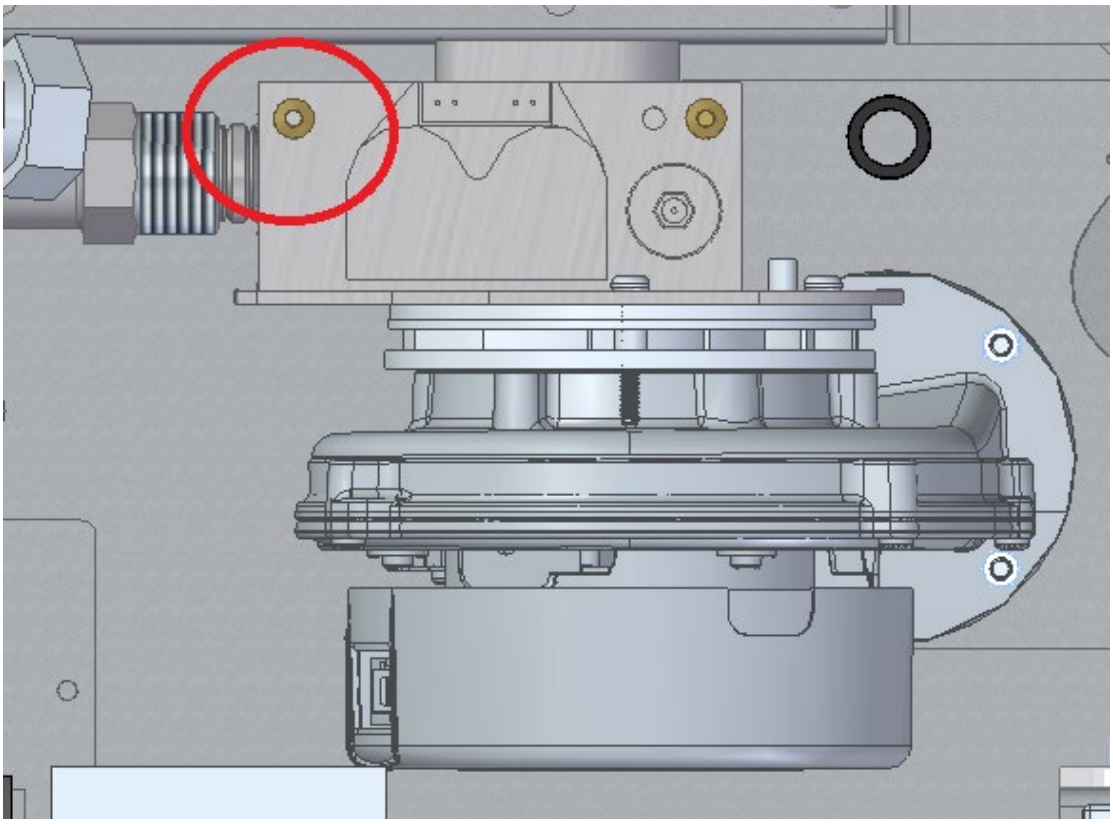
The oven may have a wire connecting to the hood system (indicated by the circle in the picture above), most often this won't be the case especially with type 1 hoods, if the wire is present make sure it stays connected during the checkups otherwise the oven won't light up. It is also important to ensure this wire is tightly connected.

4 – Measurements & verifications (see common solutions at the end of this document, ≈30-40Minutes)

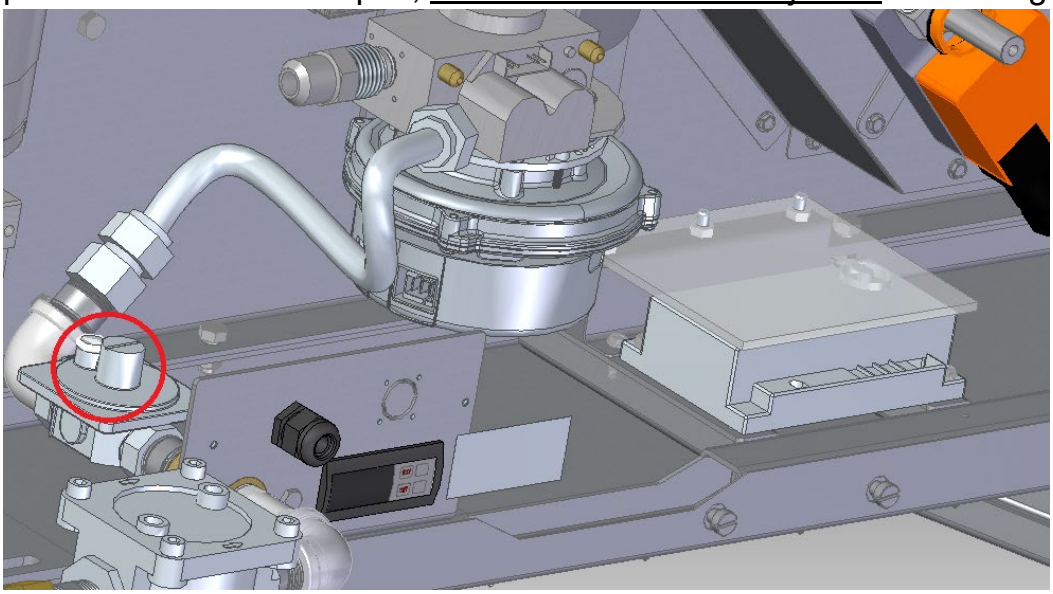
A. Find the blower & valve assembly inside the panels.



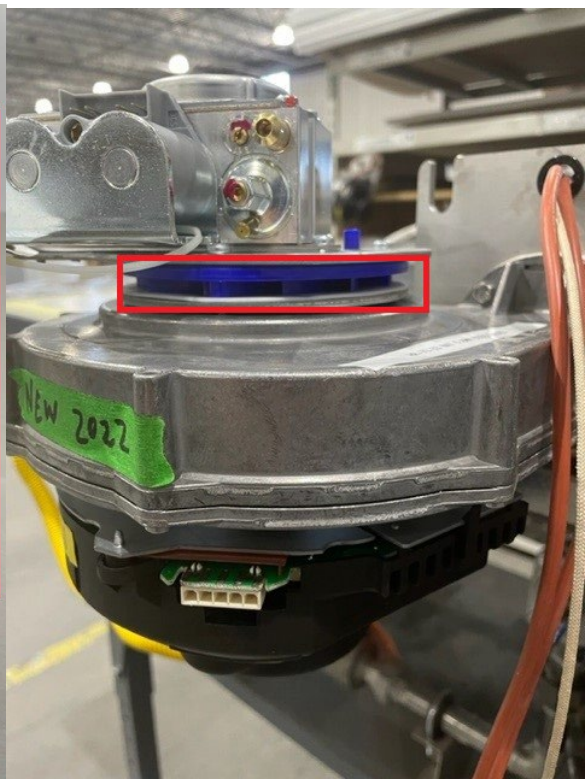
B. Install your meter on the incoming (left side) brass fitting. You will need to loosen up the small screw inside of it prior to hooking up the meter, although this screw won't completely come out it will let the gas flow in your meter's tube. When trying to turn on the oven the pressure should drop slightly, after 30 seconds of purge, which in turn confirms the valve is opening. Make sure to note the reading on your invoice/report. (This reading is known as the "Dynamic Pressure"



C. The recommended measurement is between 6-8” W.C while the oven is in high fire, make sure to note the pressure read on your invoice/report. If the pressure is not within spec, it can and should be adjusted on the regulator,



D. Clean up the air intake, on old models this will be a flexible black tube and on the newer model a blue swirl plate. Compressed air is the best tool for this.



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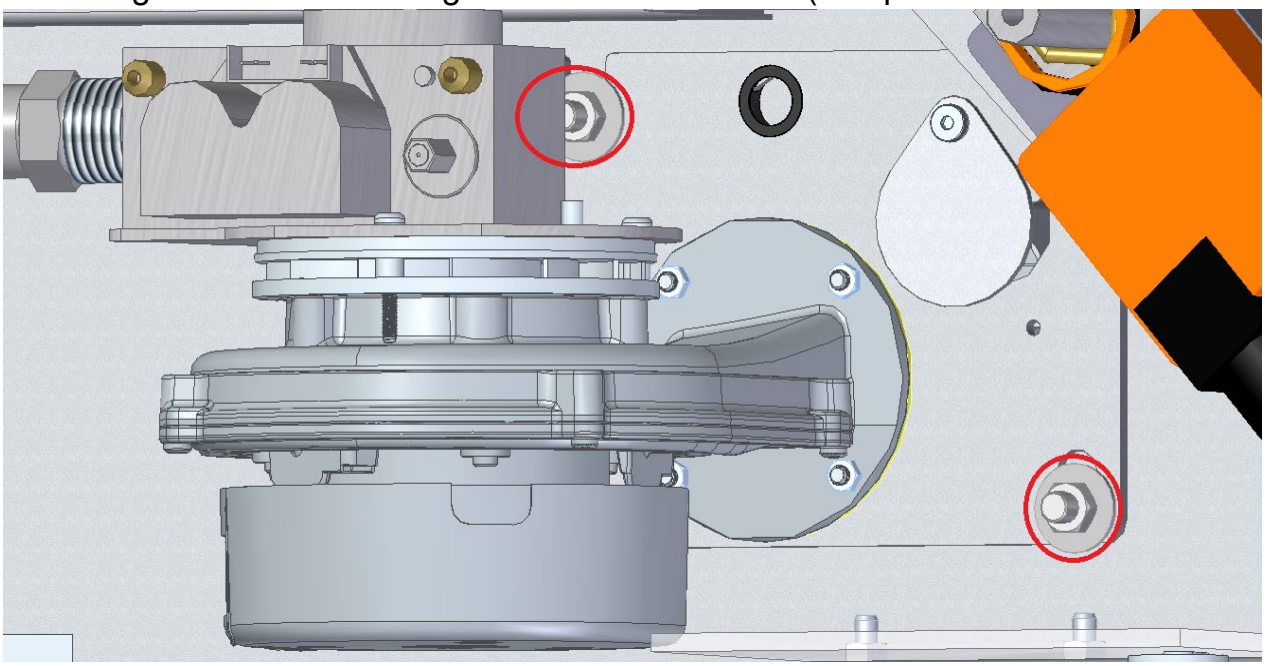
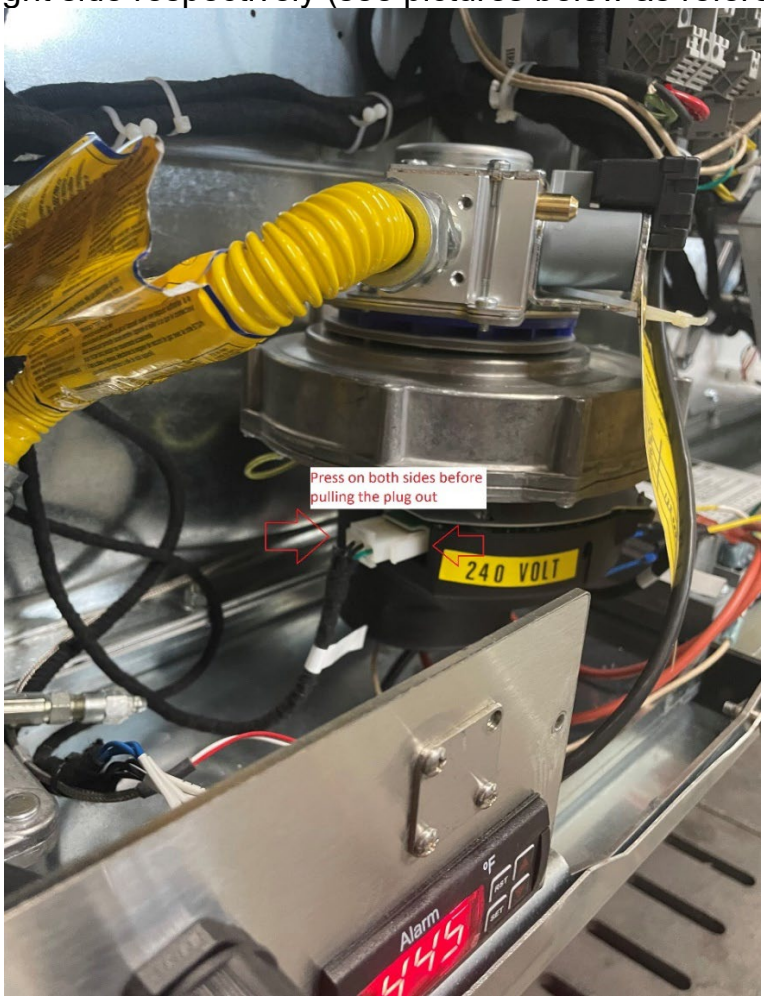
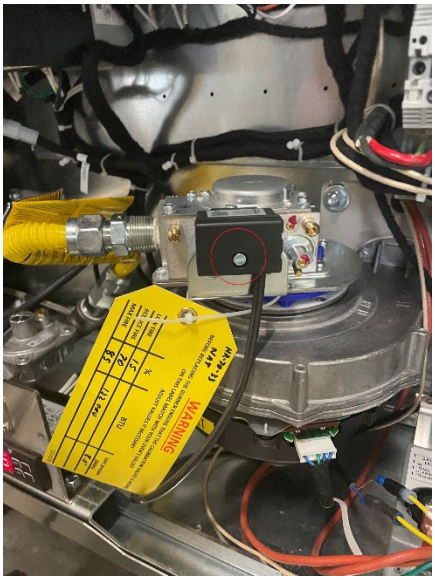
E. Pull out the burner assembly, to do so you will need to remove the 2 Hexagonal Screws holding the blower to the wall (see picture below as



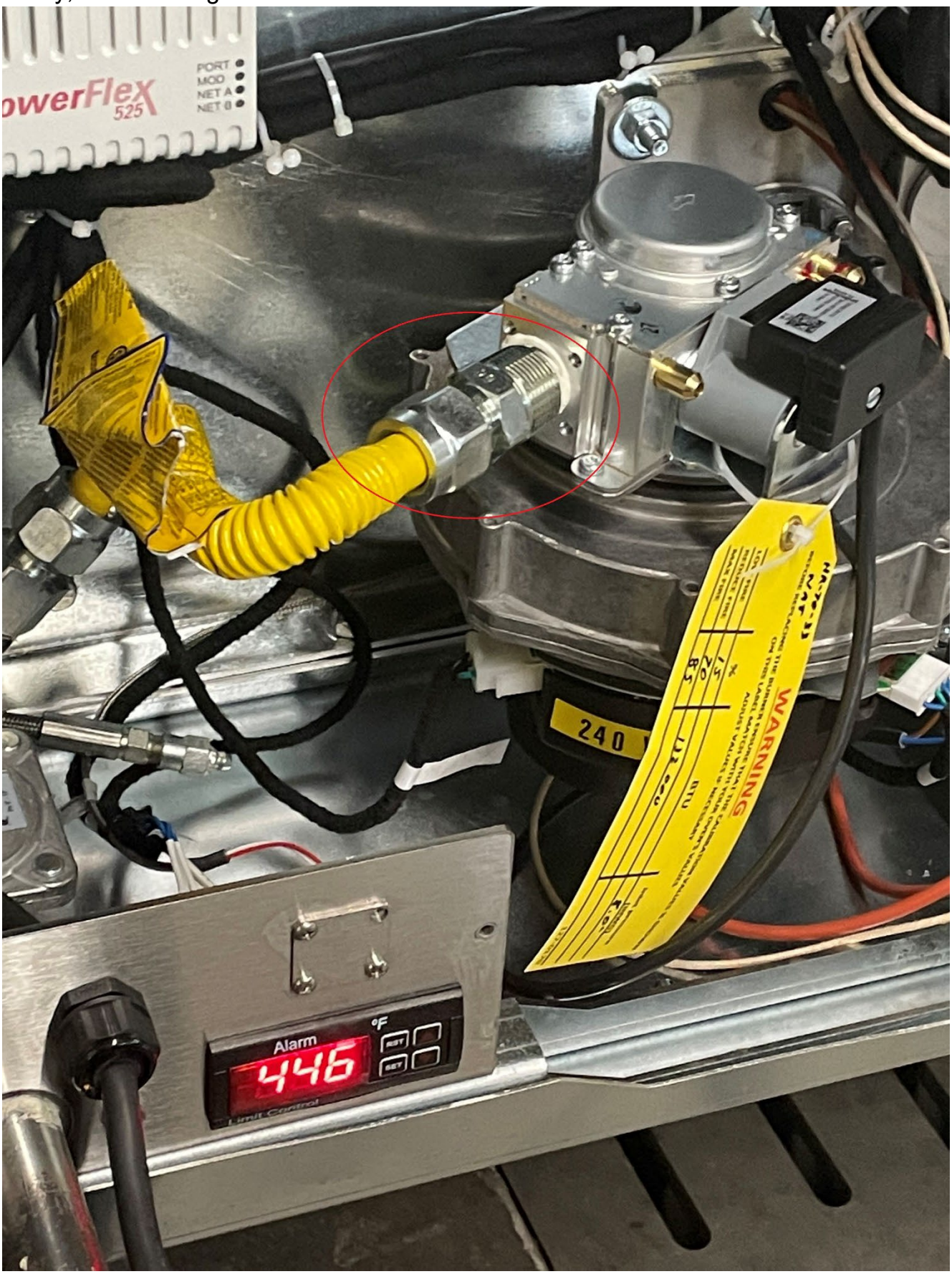
Then you will need to unplug both the 3 pin and 5 pin connectors on the left and right side respectively (see pictures below as reference),



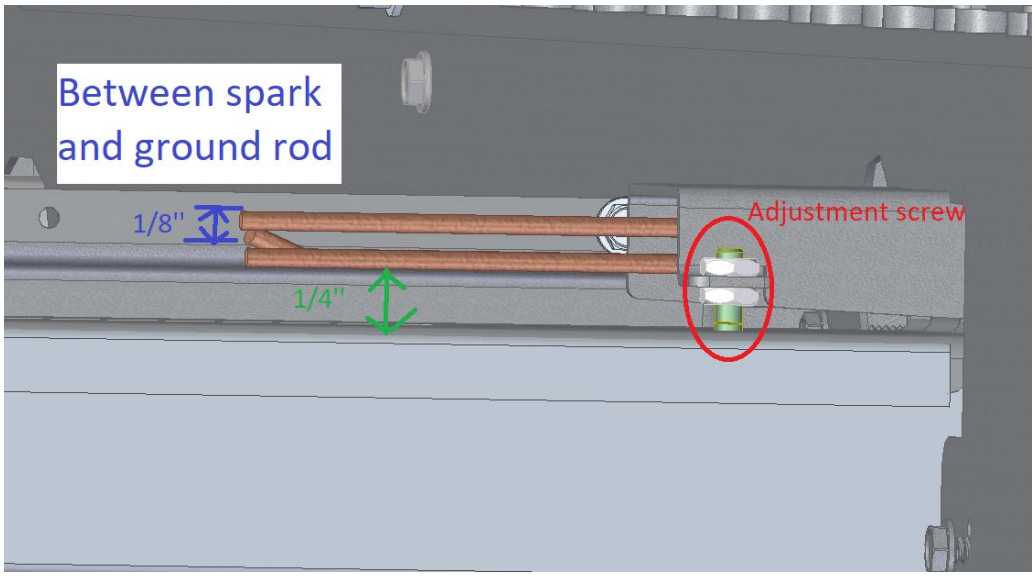
Then disconnect the valve connector by loosening the screw indicated in the picture below,



Lastly, turn off the gas valve and disconnect the flexible tube from the blower

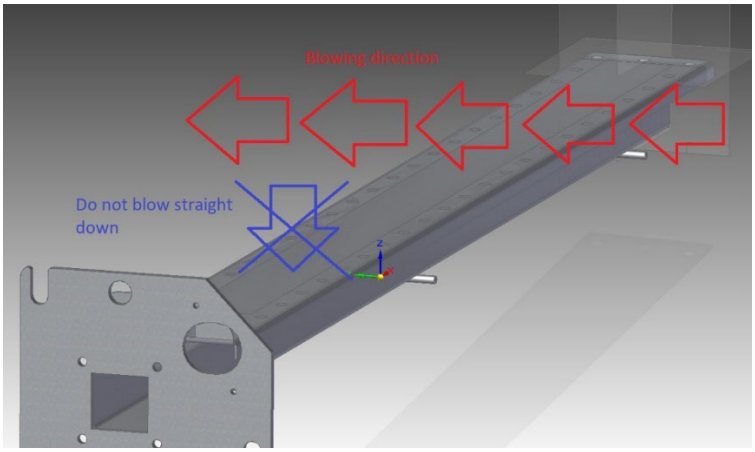


F. Once the assembly is pulled out, clean the rod by gently rubbing a dry cloth against them. Adjust them to their proper position which is ¼'' above the burner's membrane and 1/8'' between the ground and spark rod



G. Verify that all the wires are in good condition, look for exposed or teared up harness or any wires in a brittle state. Make sure the connections on both ends are tight and that the electrical continuity has no resistance. Try to turn on the oven, watch for the spark, it should happen after the 30 second purge at the same time the valve is opening normally and this spark should last 15 seconds and the arc should occur **only** from the spark to the ground rod.

H. Clean the burner with compressed air, make sure to aim across the surface and not directly from the top of the membrane. Use a vacuum as well to get any other residue off the membrane. It is important to inspect the burner's condition as well in order to confirm it is not pierced.



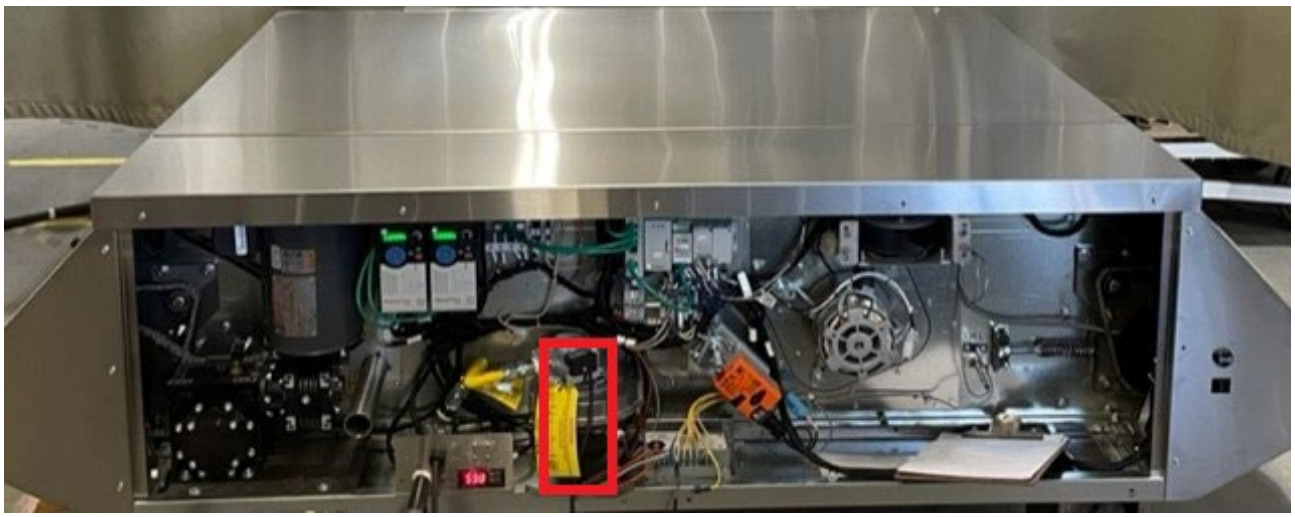
Common Solutions (following the verifications above):

2A = If the incoming valve was closed, open it up and bill the customer as this sort of service is not covered by our warranty.

2B = If the equipment turns on when all the other gas equipments are off but not when multiple are active, the pressure in their main line is likely lacking, recommend a gas specialist and bill the customer as this sort of service is not covered by our warranty.

3B = If the ventilation wire was loose or disconnected, tighten the connection and bill the customer as this sort of service is not covered by our warranty. If the ventilation wire was not present/bypassed this solution does not apply.

4B = If the pressure is not dropping when attempting to turn on the oven, double check the black connector on the valve (continuity), if the valve still won't open this is likely a defective valve. (Assuming all other check-ups are good). Please note the blower & valve assembly, depending on the model and gas type of the unit, will have a different part number. Make sure to provide the model and serial number when requesting the replacement to service@hotrocksoven.com.



4C = If the measurement of pressure during high fire is out of spec and once that is adjusted as described the oven lights up, then please bill the customer this sort of service is not covered by our warranty.

4E&F = If the oven lights up after cleaning and adjusting the rods and making sure that this is consistent with 5 consecutive tests then please bill the customer this sort of service is not covered by our warranty. Should the oven not light up but the rods are damaged, the customer should have spare ones in his Yearly maintenance kits on site. If he doesn't have one of those, please request a HR11-0028-A replacement at service@hotrocksoven.com and provide a picture of the damaged rods.

4G = If the spark is happening somewhere else than the ground rod, this is either a bad adjustment or bad connection on the ground rod, double check both. If there is no spark at all double check the power going to the module and the electrical circuit for the ventilation bypass. In very rare case the module will need to be changed, simply

request a HR11-0067-A replacement to service@hotrocksoven.com. Please note the customer may have a spare part kit on site containing said module.

4H = If the burner is pierced, it will need to be changed. Make sure to provide the model and serial number and a picture of the burner when requesting it the replacement to service@hotrocksoven.com