



THE TASTE YOU CAN COUNT ON

**Nieco MPB94 Gas
Preventative Maintenance
Guide**

May 16, 2017
Final

Procedures

Preventative Maintenance should be performed every 12 months

PM should be scheduled either after closing or prior to opening

1. Inspect power supply cord and cap. Check cap for signs of overheating. Check cord for cracks and breaks.
2. Inspect gas hose and connections for cracks and leaks
3. Inspect all four wheels/casters. Replace any that are bent or not turning properly. Tighten any that are loose.
4. Remove all the daily, weekly and monthly parts from the broiler and inspect. Make note of any broken or abused parts. Straighten any bent sheet metal parts.
5. Inspect all the PTFE bearings and replace if needed
6. Inspect flame arrestors for breaks and warping from heat.
7. Inspect lower and upper burners for cracks and plugged burner ports.
8. If equipped, Inspect the Incendalyst for damage and cleaning. Clean with water only.
9. Inspect high temperature wires for cracking and breaking at element connections
10. Inspect high temperature wires for burning at relay and contactor connections
11. Fill out PM inspection form.

Required Maintenance

1. Lubricate drive and feeder chains
2. Replace both feeder clutch plastic bushings
3. Replace hot surface igniter
4. Replace flame sensor and wire
5. Remove all mounting clips from upper heating elements if present
6. Replace all main burner orifices
7. Replace all pilot orifices, including zip tube orifice
8. Adjust all gas pressures
9. Calibrate broiler

OPEN

Inspection Sheet

Restaurant Number _____

Date: _____

Serial Number _____

Inspected and good condition

Needs follow up service

Needs Immediate service or replacement

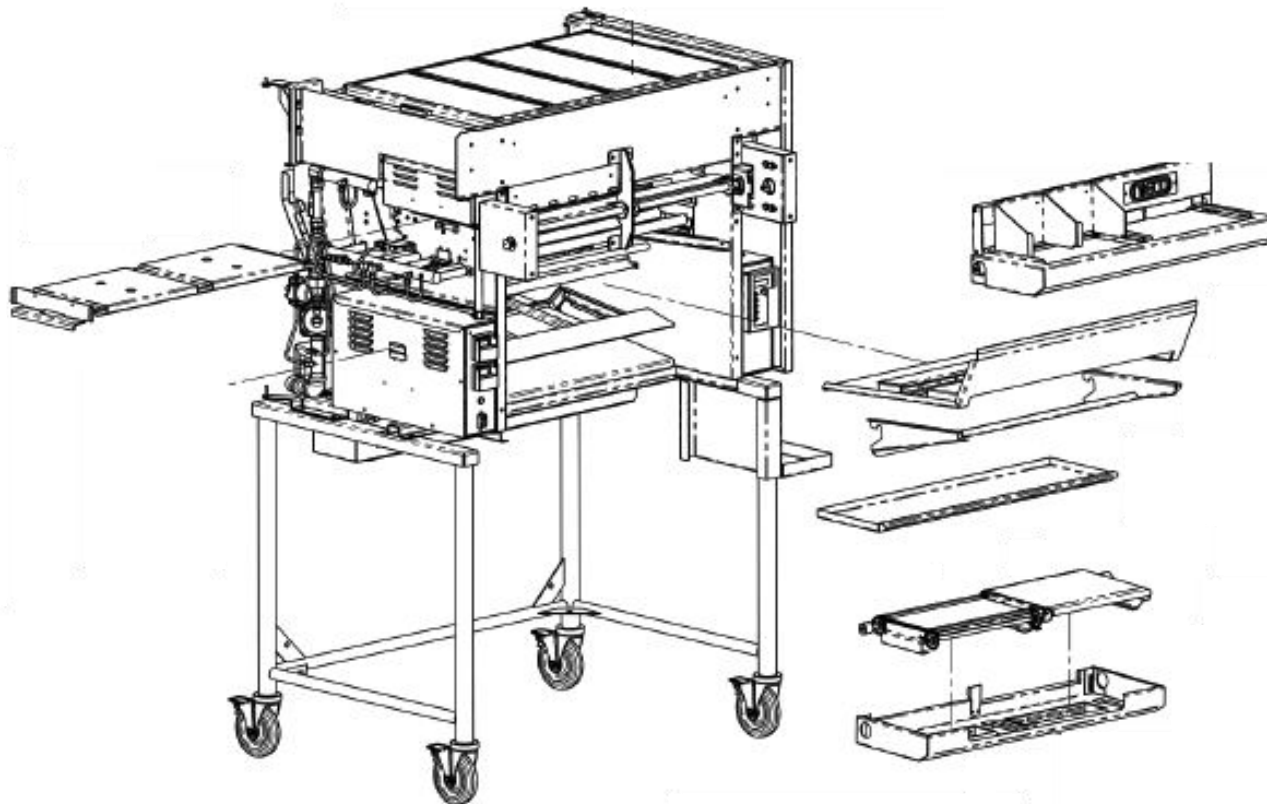
Service or replacement completed

COMPONENT CHECK

	1	Inspect Power cord and plug
	2	Inspect Casters, make sure they are tight to frame, no flat spots and roll properly
	3	Inspect Panels and all other removable parts
	4	Inspect Gas hose and supply. Check hose for gas leaks with bubbles
	5	Inspect restraining cable and fastenings
	6	Inspect broiler frame (cross rods & supports)
	7	Remove and Inspect lower burners
	8	Inspect flame arrestors
	9	Inspect Incendalyst (Catalyst)
	10	Remove and inspect upper burners
	11	Inspect all wiring connections in control box, tighten all high voltage connections
	12	Inspect control box for grease or water (clean if needed)
	13	Inspect and adjust both feeders
	14	Inspect all high temperature wires and connections at elements
	15	Remove all heating element retaining clips if present
	16	Flex side heating elements total amps _____
	17	Main side heating elements total amps _____

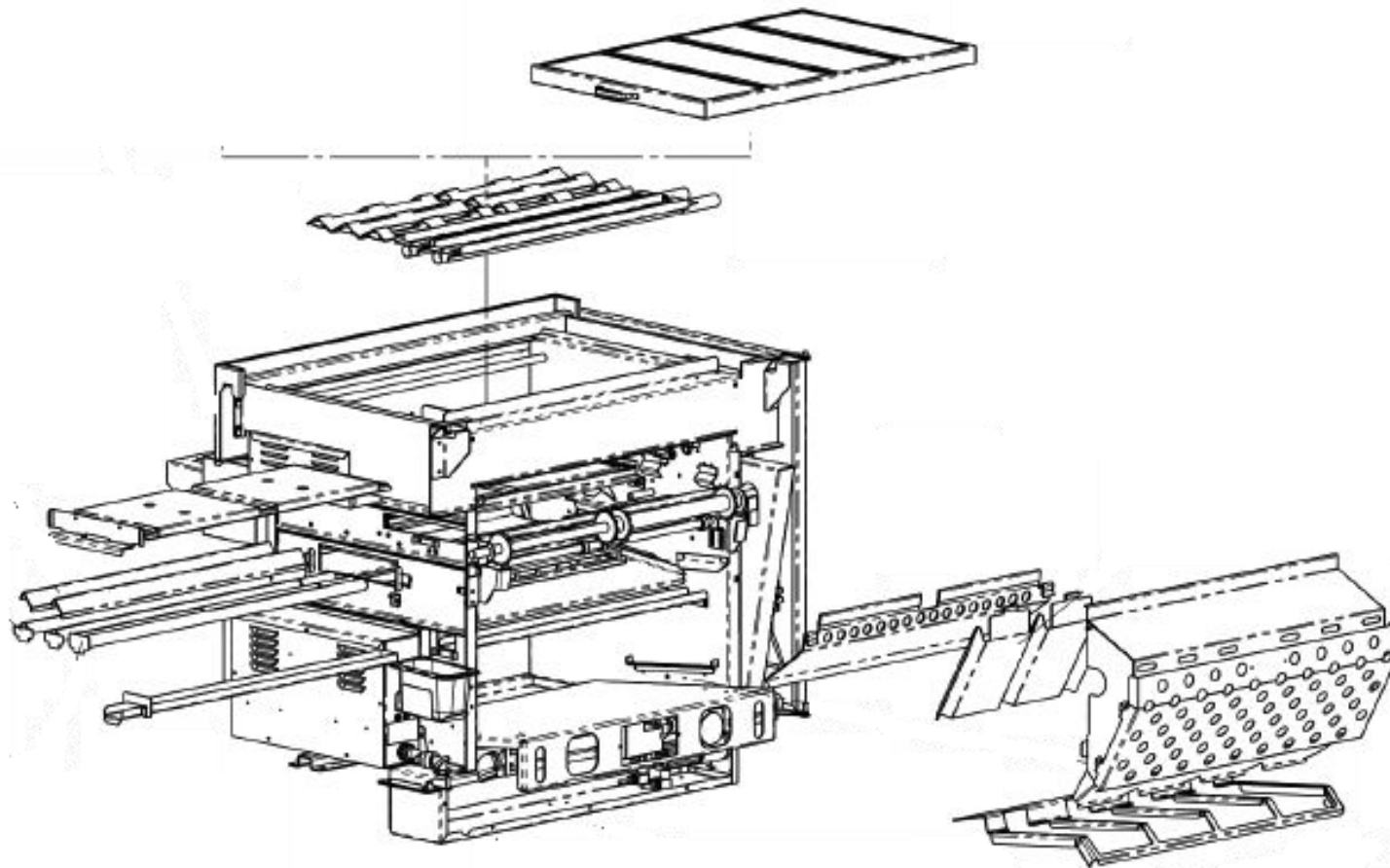
COIN

Assembly



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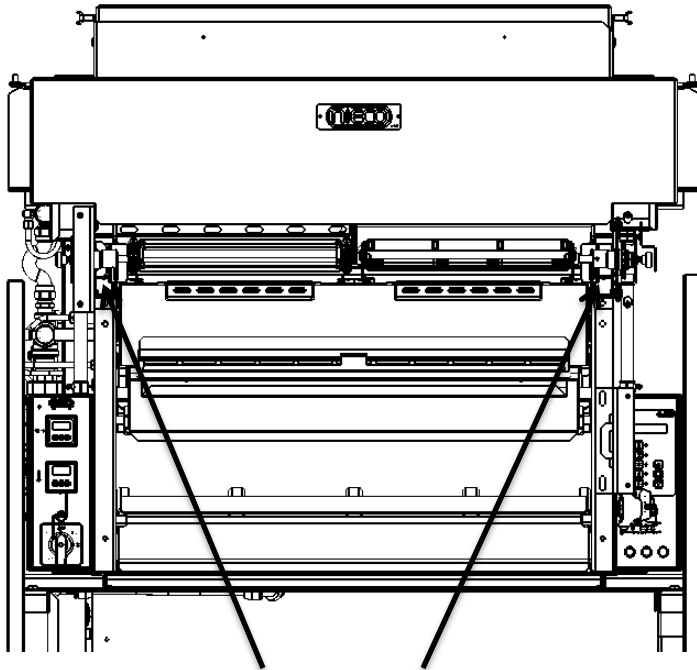
Assembly



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White PTFE Bearings

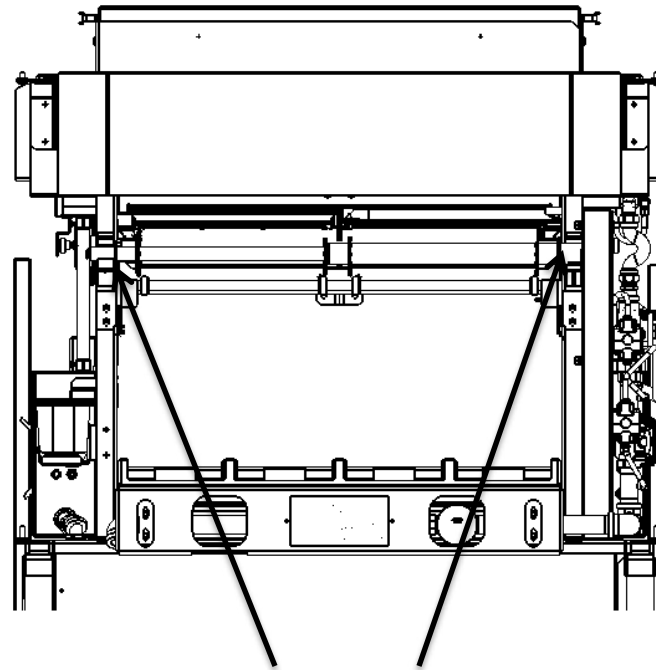
FEED END



P/N 6049

P/N 6049

DISCHARGE END



P/N 6047

P/N 6046



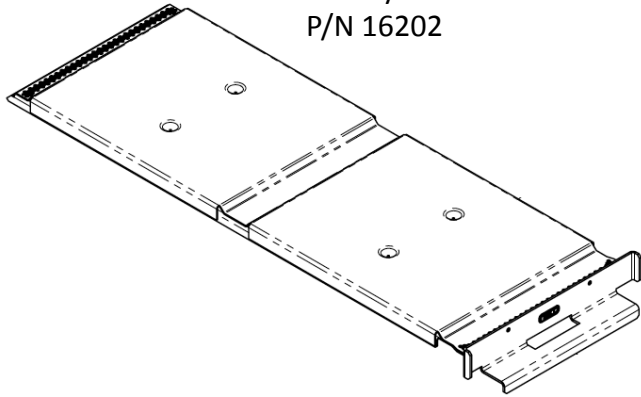
Example

1. Inspect all 4 PTFE Bearings and replace if worn

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Flame Arrestors

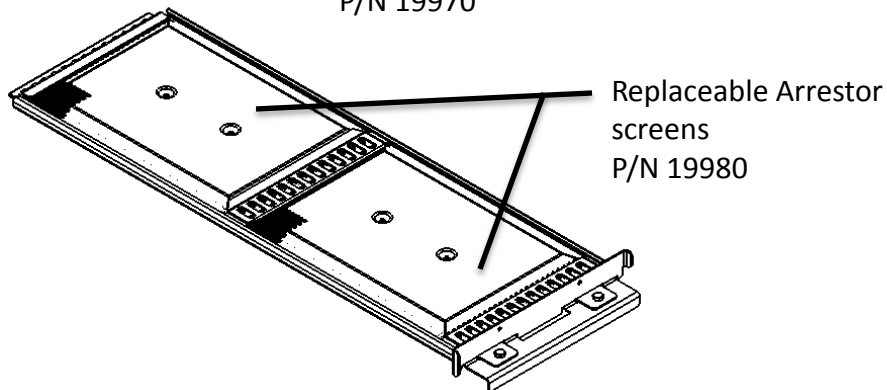
Old style Flame Arrestor
P/N 16202



Old Style

This is a one piece design and the entire arrestor must be replaced if there are any holes or excessive warping. Replace with the new style flame arrestor

New style Flame Arrestor
P/N 19970

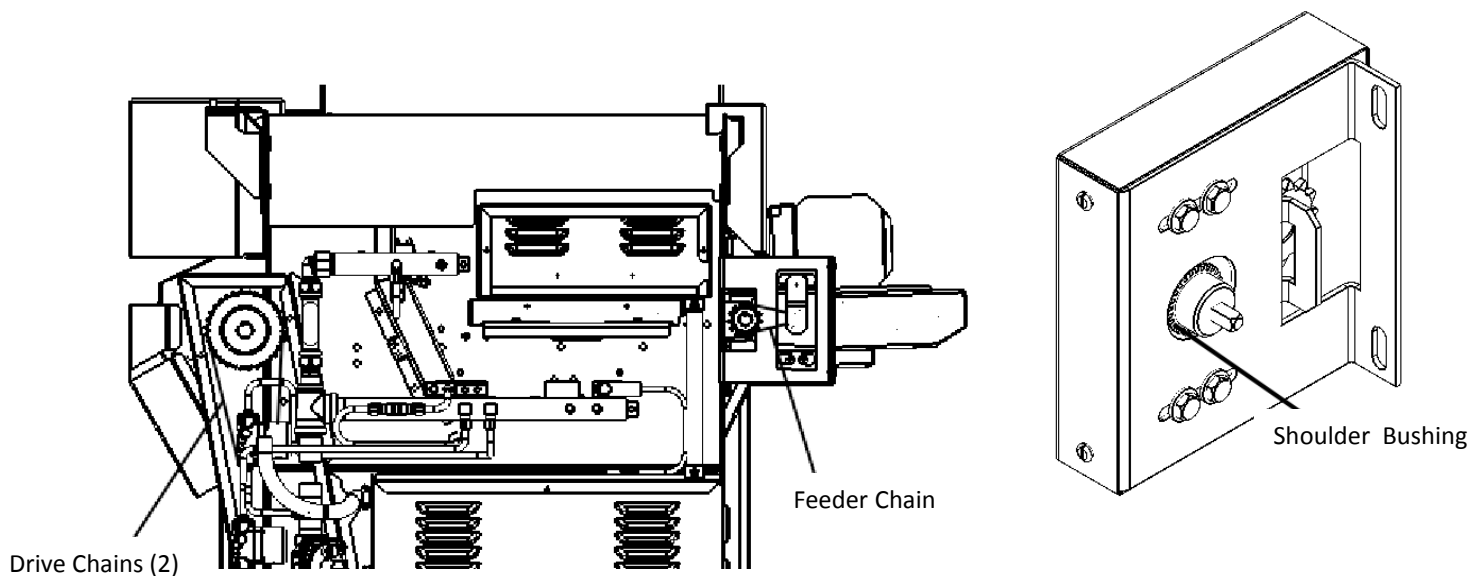


New Style

This Flame Arrestor is a frame assembly and two replaceable arrestor screens. With this design you replace only the defective screen.

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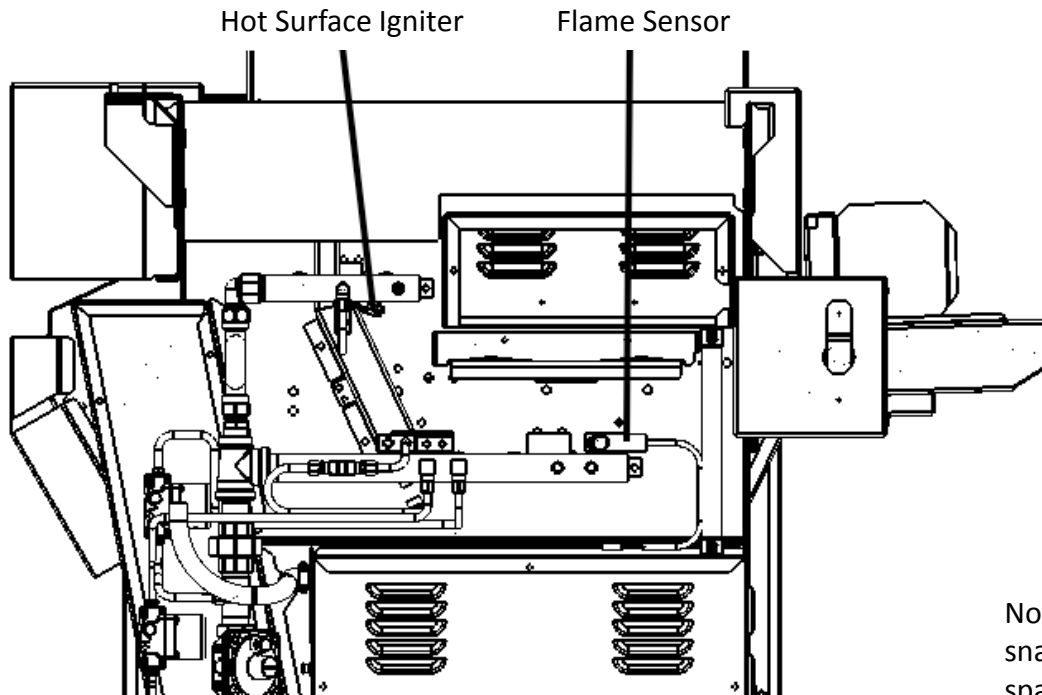
Lubricate all Drive Chains



1. Remove cover and lubricate Drive Chains. (2 chains)(We suggest using high temperature grease)
2. Remove cover and lubricate Feeder Chains. (Main and Flex sides) (We suggest using high temperature grease)
3. Remove feeder drive and replace white shoulder bushing
4. Install feeder assembly and align pin with feeder

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Replace Ignition Parts



Hot Surface Igniter



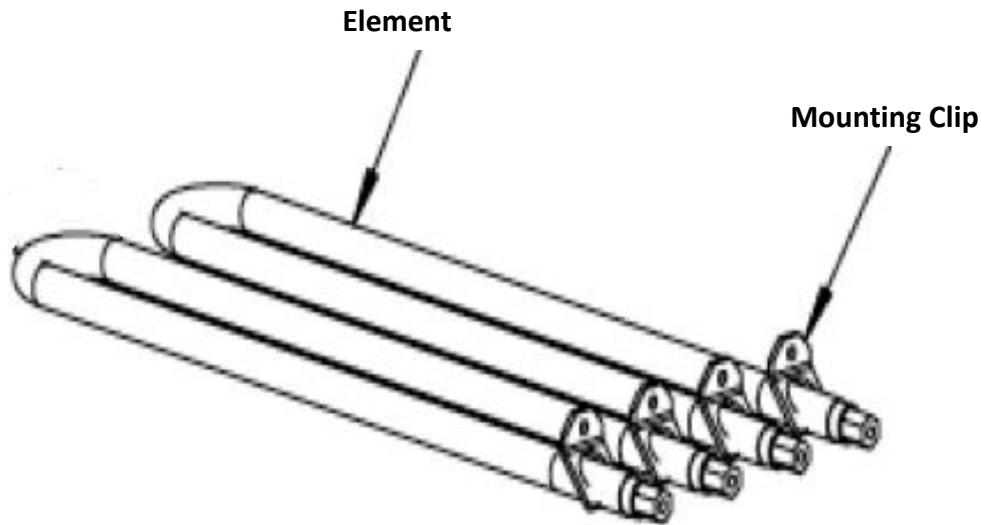
Flame Sensor

1. Replace the Hot Surface Igniter
2. Replace the Flame Sensor

Note: Broilers built in 2006 require snap in flame sensor and separate spark wire.

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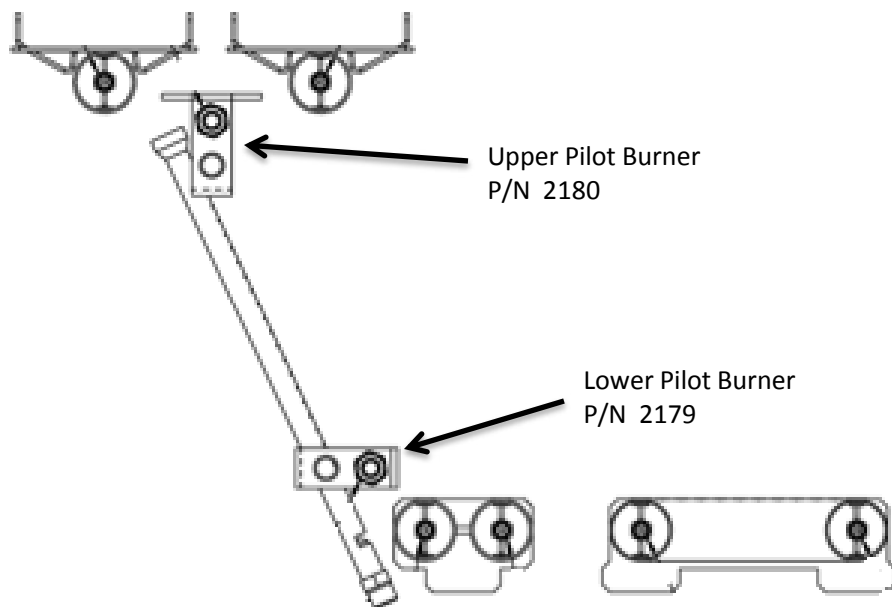
Elements



1. If present, remove all the mounting clips for the upper heating elements on both the main and flex side of the broiler and **discard**.
2. Inspect all elements for cracks, bowing and excessive corrosion.

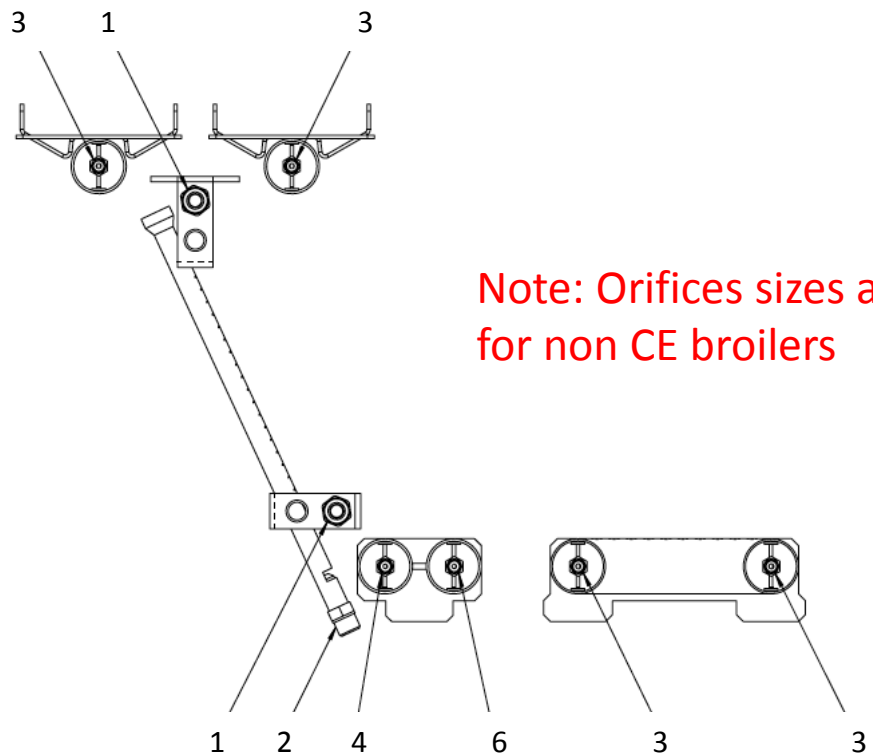
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Replace Pilot Burners



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Orifice Replacement



Note: Orifices sizes are
for non CE broilers

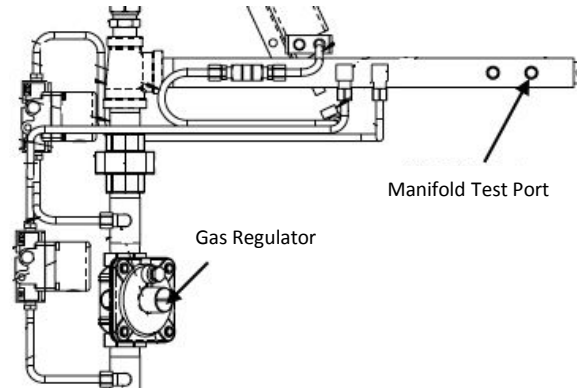
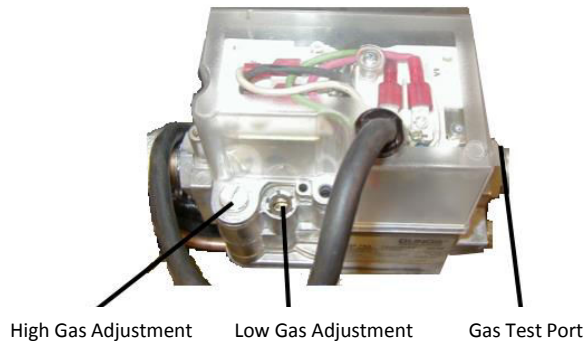
Orifices Natural Gas			
#	Description	Part #	Qty
1	Orifice, Pilot #3225	2182	2
2	Orifice, Zip Tube #75	2185	1
3	Orifice, Main Burner, #42	16590	4
4	Orifice, Main Burner, #46	2051	1
5	Orifice, Main Burner, #45	14045	1

Orifices LP Gas			
#	Description	Part #	Qty
1	Orifice, Pilot #4214	17276	2
2	Orifice, Zip Tube #80	2186	1
3	Orifice, Main Burner, #54	2065	4
4	Orifice, Main Burner, #56	2064	1
5	Orifice, Main Burner, #56	2064	1

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Set Gas Pressures

Dungs Valve Adjustment



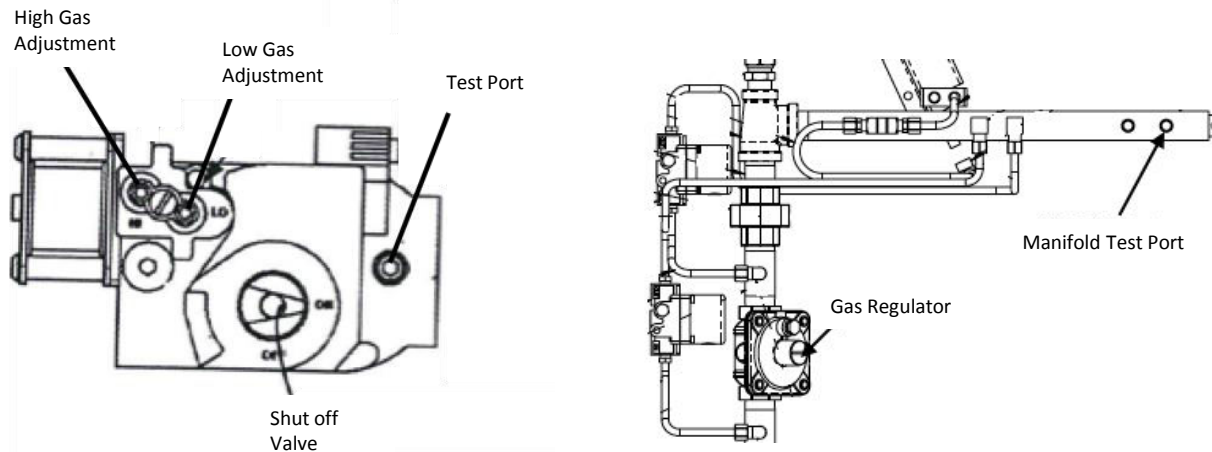
Setting the pressures and calibration

1. Assemble the broiler and connect power and gas
2. Attach Manometer to the Gas Test Port on the main gas valve
3. Turn on the broiler and set the load sensor control to 800F
4. Remove the high gas adjustment screw cover and set the high gas pressure to 4.5" WCI (10.5" WCI for LPG)
5. Change the load sensor control to 250F
6. Using the Low Gas Adjustment, set the low gas pressure to 3" WCI (8" WCI for LPG)
7. Move the manometer to the test port located on the main gas manifold
8. Change the load sensor control to 800F
9. Remove the gas regulator screw cover and adjust the pressure to 3" WCI (8" WCI for LPG)
10. Calibrate the broiler

OCEIN

Set Gas Pressures

Honeywell Gas Valve adjustment



Setting the pressures and calibration

1. Assemble the broiler and connect power and gas
2. Attach Manometer to the output test port on the main gas valve
3. Turn on the broiler and set the load sensor control to 800F
4. Using the High Gas Adjustment, set the high gas pressure to 4.5" WCI (10.5" WCI for LPG)
5. Change the load sensor control to 250F
6. Using the Low Gas Adjustment, set the low gas pressure to 3" WCI (8" WCI for LPG)
7. Move the manometer to the test port located on the main gas manifold
8. Change the load sensor control to 800F
9. Using the gas regulator, adjust the pressure to 3" WCI (8" WCI for LPG)
10. Calibrate the broiler

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Calibrate Broiler

Automatic Calibration

- A. Before turning the broiler on, press and hold the load sensing control knob/button in
- B. Turn the main power switch to position 2 and continue to hold the load sensing control knob/button in for 5 seconds.
- C. After 5 seconds, release the knob/button. The control will display a countdown of 60 minutes. After the countdown the control will display “rdy” and the broiler will be calibrated.

DO NOT COOK DURING CALIBRATION

Automatic
calibration



Display will show
60 minute
countdown

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Parts Required

Description	Part #	Qty
Shoulder Bushing	14896	2
Igniter, Hot Surface	10291	1
Sensor, Flame (snap in)	16857	1
Sensor, Flame W/wire	25957	1
Burner, Pilot	2180	1
Burner, Pilot	2179	1
PTFE Bushing	6049	2
PTFE Bushing	6046	1
PTFE Bushing	6047	1
Orifices Natural Gas		
Description	Part #	Qty
Orifice, Pilot #3225	2182	2
Orifice, Zip Tube #75	2185	1
Orifice, Main Burner, #42	16590	4
Orifice, Main Burner, #46	2051	1
Orifice, Main Burner, #45	14045	1
Orifices LP Gas		
Description	Part #	Qty
Orifice, Pilot #4214	17276	2
Orifice, Zip Tube #80	2186	1
Orifice, Main Burner, #54	2065	4
Orifice, Main Burner, #56	2064	2

Machines built in 2006
Machines built after 2006

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