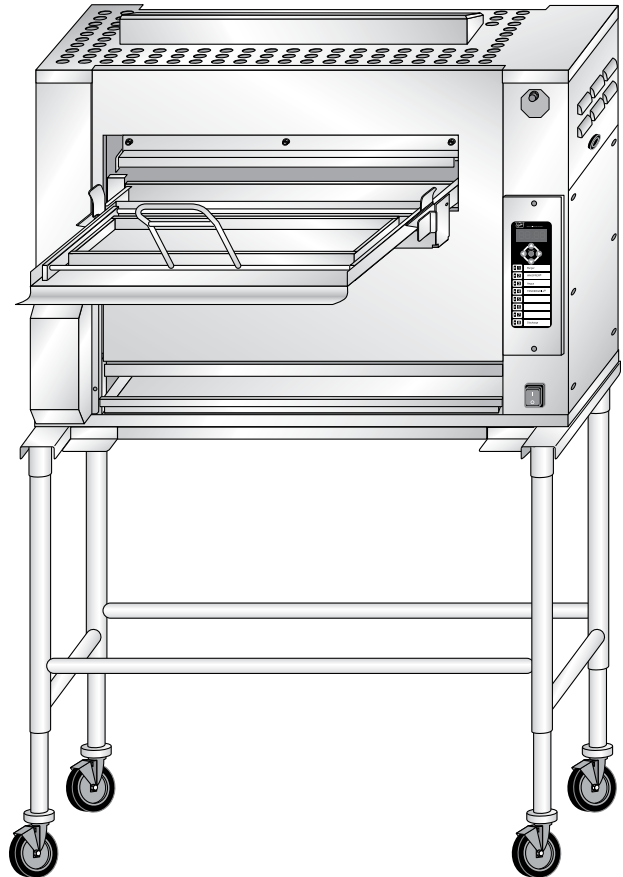




Your Solutions Partner

## Illustrated Parts List

### **Flexible Batch Broiler Gas Domestic Version**



#### **MODELS:**

<b>FBB-NO-120</b>	<b>FBB-NO-120-H</b>
<b>FBB-NC-120</b>	<b>FBB-NC-120-H</b>
<b>FBB-PO-120</b>	<b>FBB-PO-120-H</b>
<b>FBB-PC-120</b>	<b>FBB-PC-120-H</b>

<b>FBB-NO-1202</b>	<b>FBB-NO-1202-H</b>
<b>FBB-NC-1202</b>	<b>FBB-NC-1202-H</b>
<b>FBB-PO-1202</b>	<b>FBB-PO-1202-H</b>
<b>FBB-PC-1202</b>	<b>FBB-PC-1202-H</b>

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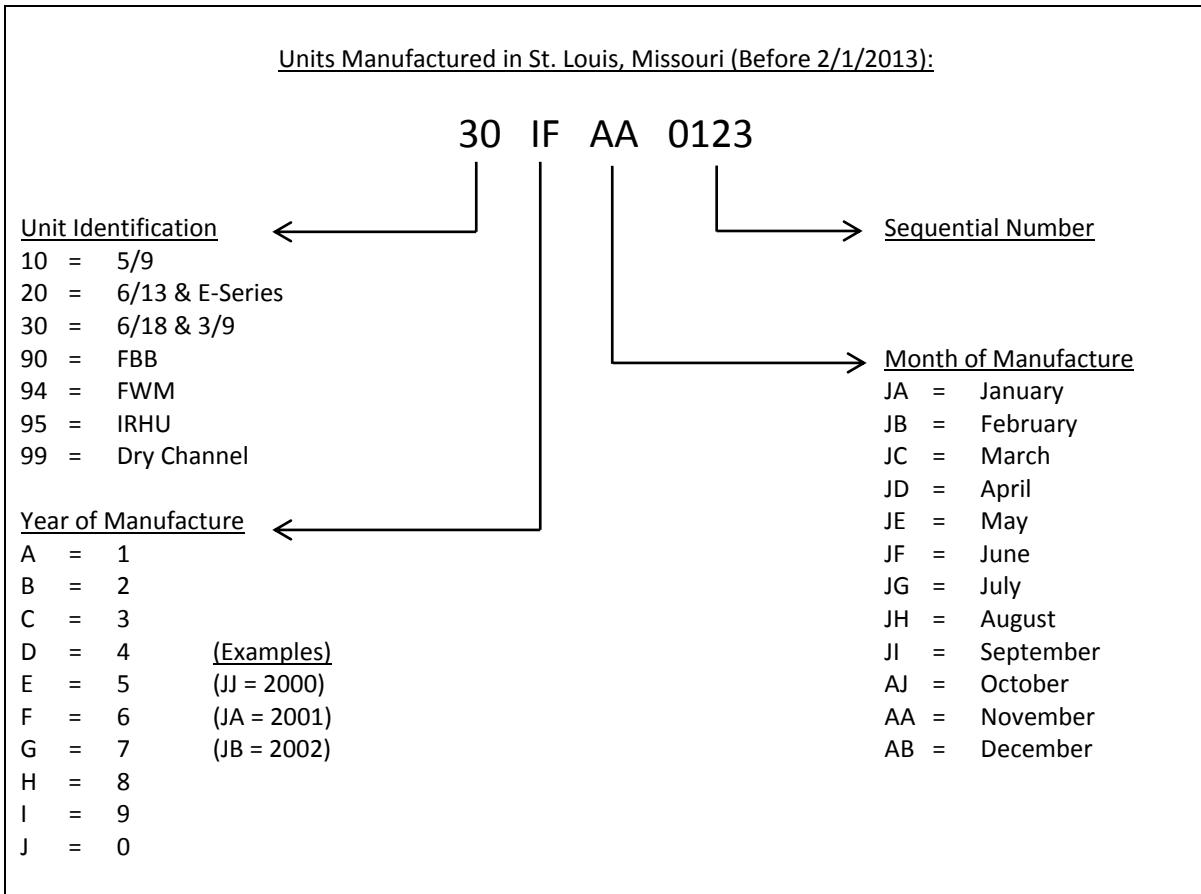
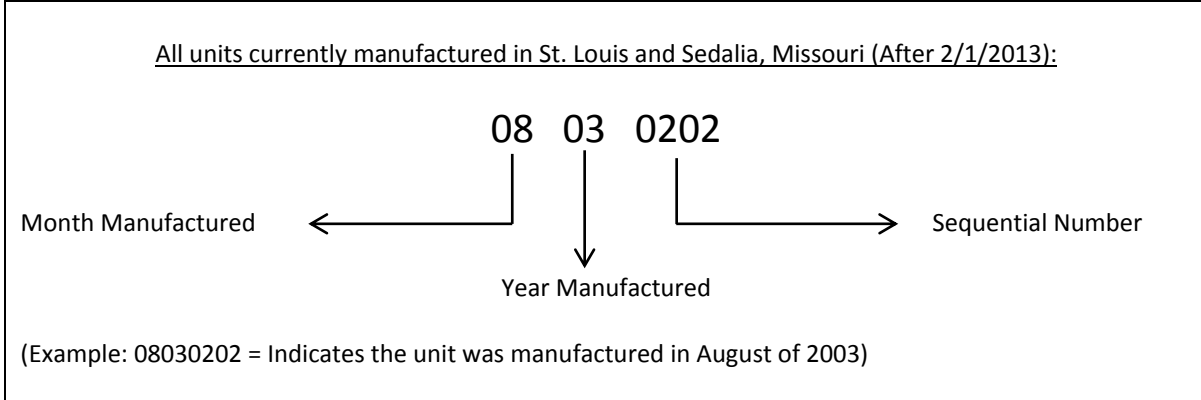
## **Duke Manufacturing Company**

**2305 N. Broadway  
St. Louis, MO 63102  
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Toll Free: 1-800-735-3853  
Fax: 314-231-5074  
[www.dukemfg.com](http://www.dukemfg.com)**

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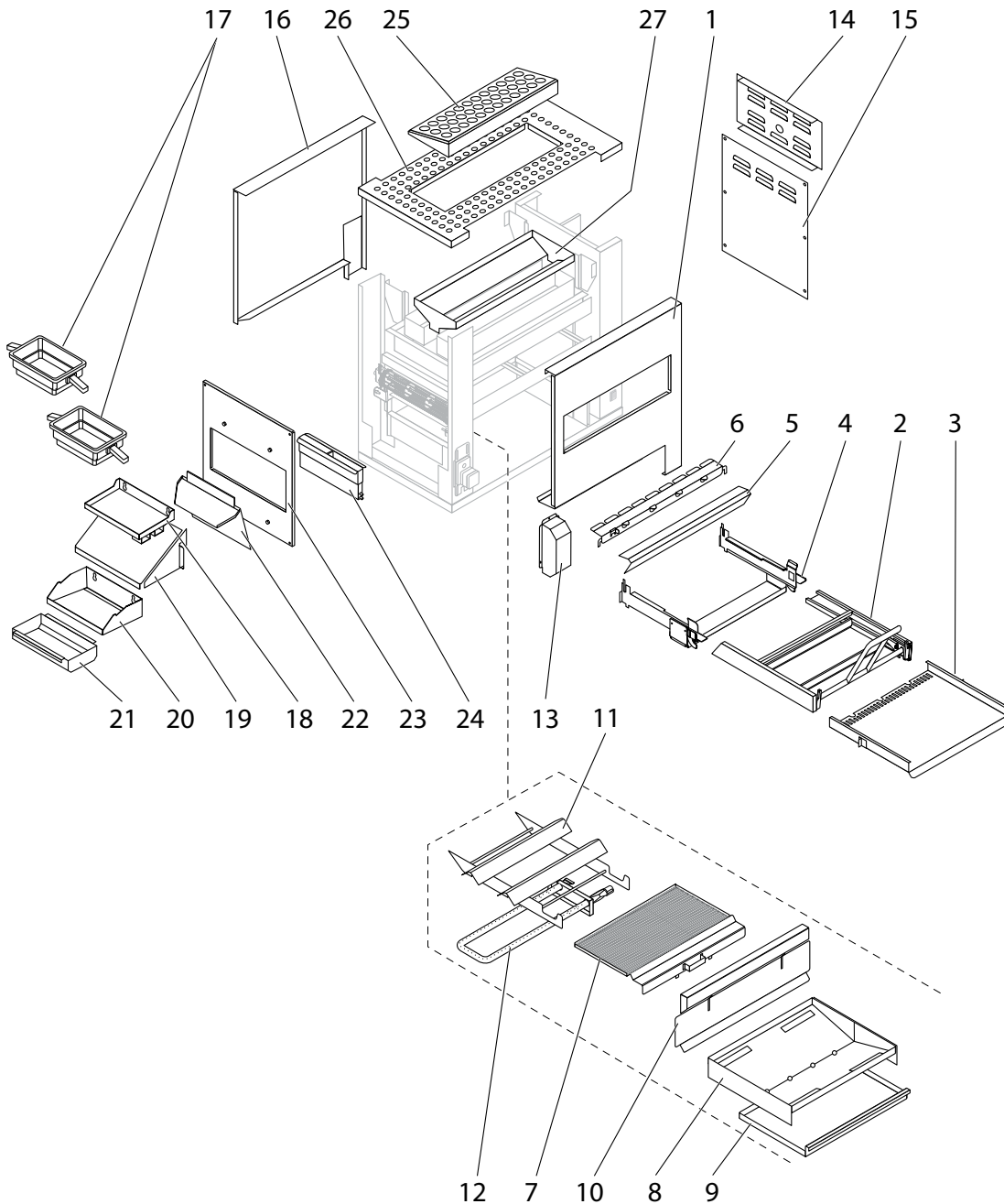
## How to Determine Manufacture Date from Duke Equipment Serial Numbers



<b>FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION COVERS, ACCESS PANELS AND PANS</b>			
<b>Item</b>	<b>Part Number</b>	<b>Description</b>	<b>Qty</b>
1	175300K	Front Panel	1
Not Shown	175048	Kit, Splash Shields (Ref-175992, 175993 & 175996)	1
2	175444K	Loader	1
3	175430K	Loader Tray	1
Not Shown	176818	Kit, Hot Dog Loader (Ref-176815)	1
4	175878K	Weldment, Loader Mounting Bracket	1
5	175429K	Hinged Door	1
6	175741K	Loader Ramp	1
7	600222	Kit, Flame Arrestor (Ref-175293)	1
8	175325K	"V" Grease Pan, 120V Domestic/Internation, High Altitude	1
	176397K	"V" Grease Pan, Center Air Flow, 120V Domestic/Canada, High Altitude	1
9	175329	Main Grease Pan, 120V Domestic/Canada, High Altitude	1
	176398K	Main Grease Pan, Center Air Flow, 120V Domestic/Canada, High Altitude)	1
10	175351	Panel, Lower "J" Burner	1
11	175200K	Weldment, Burner Shield	1
Not Shown	600311	Kit, Shield, Burner (.375 Shutter), Loader & Arrestor	1
	600332	Kit, Shield, Burner (Adjustable Shutter), Loader and Flame Arrestor	1
12	176370	Lower Burner (.375 Shutter), Center Air Flow, 120V Domestic/Canada	1
	600313	Kit, Lower Burner (Adjustable Shutter), 120V Dom, High Altitude (Ref-176421)	1
	175934	Lower Burner (.375 Shutter), 120V International	1
	175950	Kit, Lower Burner (Adjustable Shutter), 120V International (Ref-175865)	1
Not Shown	600312	Kit, Lower Burner (.375 Shutter), and Flame Arrestor (Ref-176370 & 175293)	1
	600333	Kit, Lower Burner (Adjustable Shutter), & Flame Arrestor (Ref-176421 & 175293)	1
Not Shown	600311	Kit, Lower Burner (.375 Shutter), Shield, Flame Arrestor and Spatula	1
	600332	Kit, Lower Burner, (Adjustable Shutter), Shield, Flame Arrstor and Spatula	1
	600345	Kit, Lower Burner (Adjustable Shutter), Natural Gas, High Altitude	1
13	175177	Motor Cover, Conveyor Drive	1
14	175392K	Cover, Electrical Access Panel, Upper	1
15	175383	Cover, Electrical Access Panel, Lower	1
16	175305	Cover, Rear Access Panel	1
17	156634	Pan, Custom with Handle	1
18	175353K	Shelf, Product Holding Pan	1
19	175778K	Discharge Hood	1
20	175358K	Discharge Pan	1
21	175357K	Side Grease Pan	1
22	175340	Burger Stripper	1
Not Shown	600330	Kit, Discharge Bracket (Ref-176519)	1
23	175250K	Cover, Access Panel, Discharge	1
Not Shown	600224	Kit, Discharge Chute Arm Pins (Ref-176153 & 279500)	1
24	175150K	Pivot, Ash Scrapper	1
Not Shown	175019	Pivot Scraper Mounting Bracket	1
25	175226	Impedance Pan (No Catalyst)	1
Not Shown	600406	Air Brake, Single Pack (Natural Gas, No Catalyst)	1
Not Shown	600407	Air Brake, Double Pack (Natural Gas, No Catalyst)	1
Not Shown	175480	Catalyst (Optional)	1

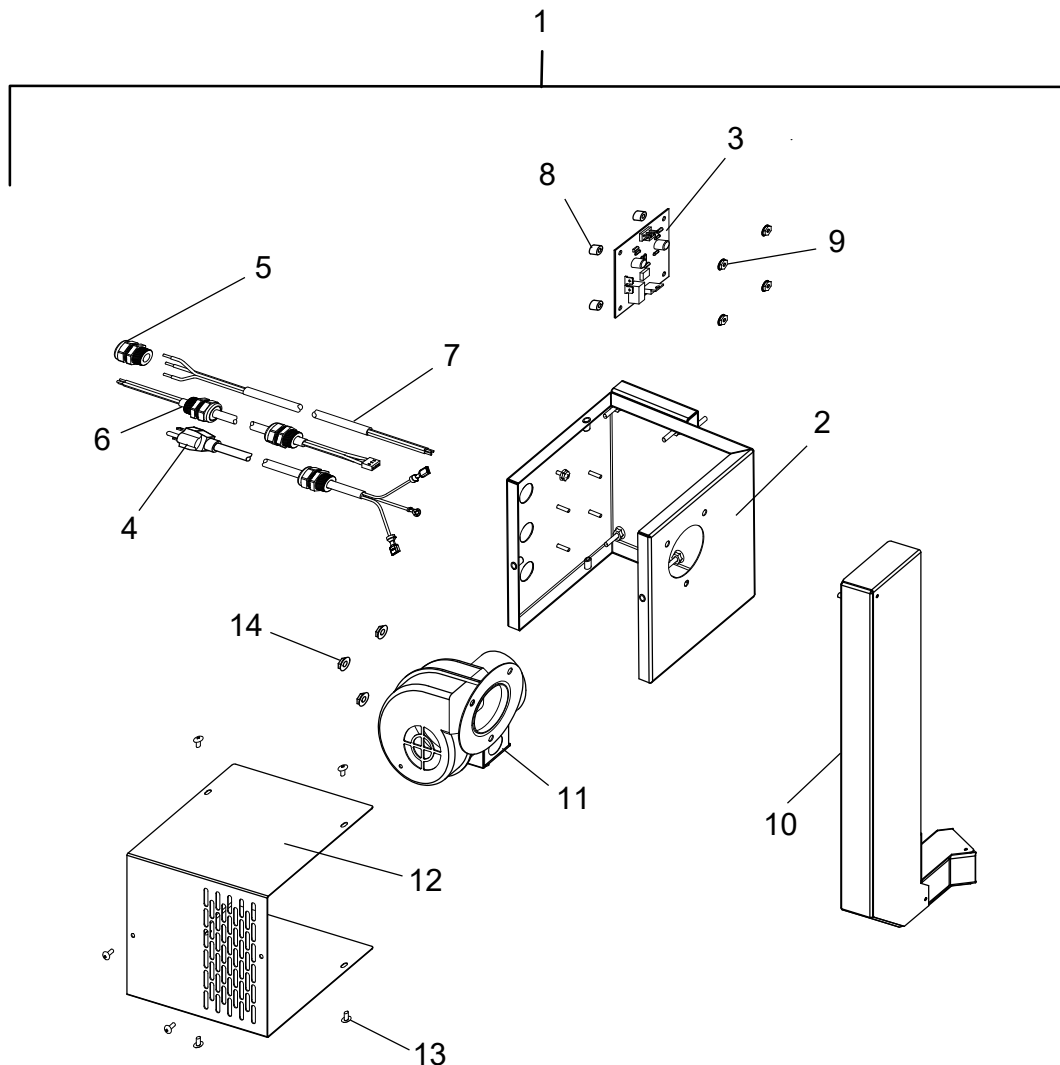
## FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION COVERS, ACCESS PANELS AND PANS

Item	Part Number	Description	Qty
Not Shown	175482	Catalyst Guard (Required with Catalyst)	1
Not Shown	600277	Kit, Catalyst Riser Assembly	1
Not Shown	600278	Kit, Catalyst and Riser Assembly	1
26	175221	Body Top	1
27	175225K	Upper Flue	1
Not Shown	175838K	Lower Flue	1
Not Shown	176583	Removable Panel Kit ( <i>Ref-175300-175250-175305</i> )	1
Not Shown	176854	Lower Flue Kit ( <i>Ref-175838-213042</i> )	1

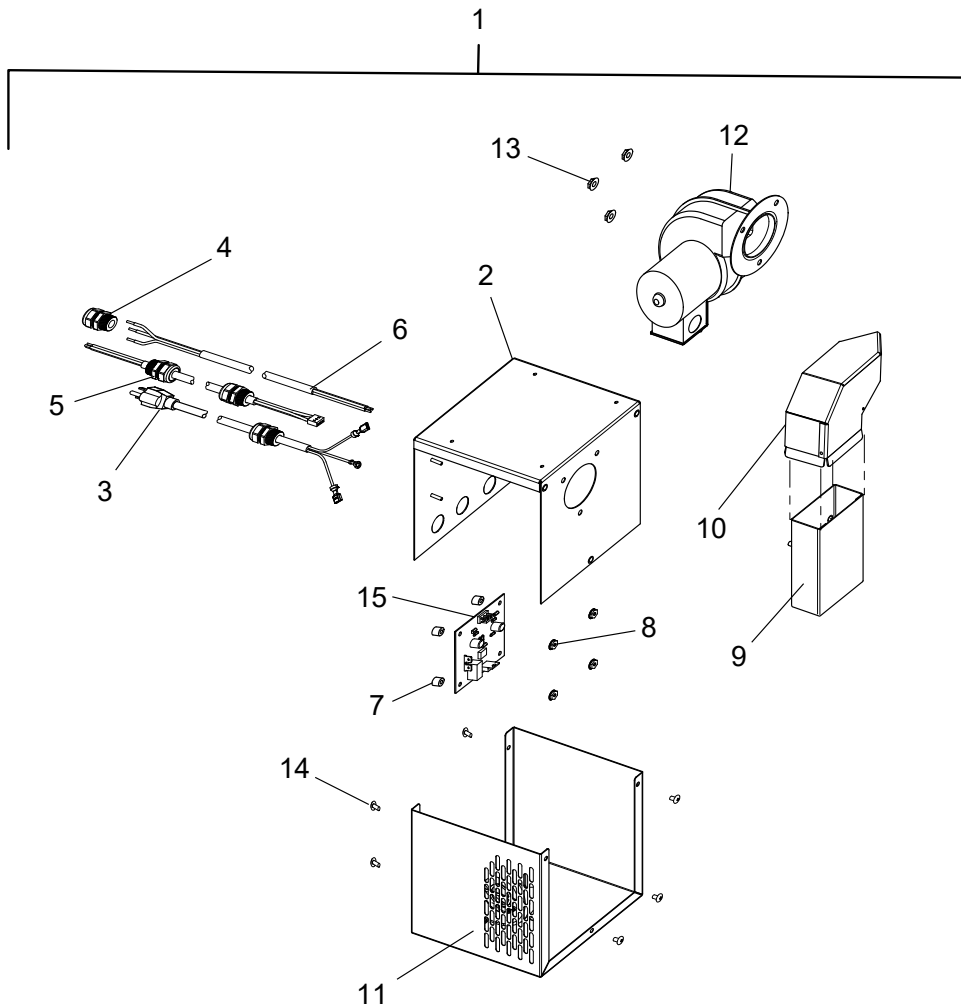


## FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION BLOWER BOX AND DUCK, BACK MOUNT, LP GAS

Item	Part Number	Description	Qty
1	176432	Assembly, Blower Box and Duct, Back Mount	1
2	176436	Box, Blower, Back Mount	1
3	176426	PCB, Purge	1
4	176428	Power Cord Assembly, 15A 125V, 9' Long (Includes Strain Relief & Connectors)	1
5	175515	Strain Relief, Power Cord	1
6	176425	Harness Assembly, Purge PCB to Ignition Module	1
7	176424	Harness, Purge Cord Blower and Outlet	1
8	156951	Spacer, 5/16" OD x 3/8" Long	4
9	154219	Nut, Keps 6-32 Hex ZP	6
10	176434	Assembly, Duct Back	1
11	176431	Blower Assembly, Terminated	1
12	176437	Cover, Blower Box, Back	1
13	213028	Screw, 10-24 x 3/8" PTHMS S/S	6
14	653637	Nut, 1/4-20 Flanged Zinc Plated Hex	3



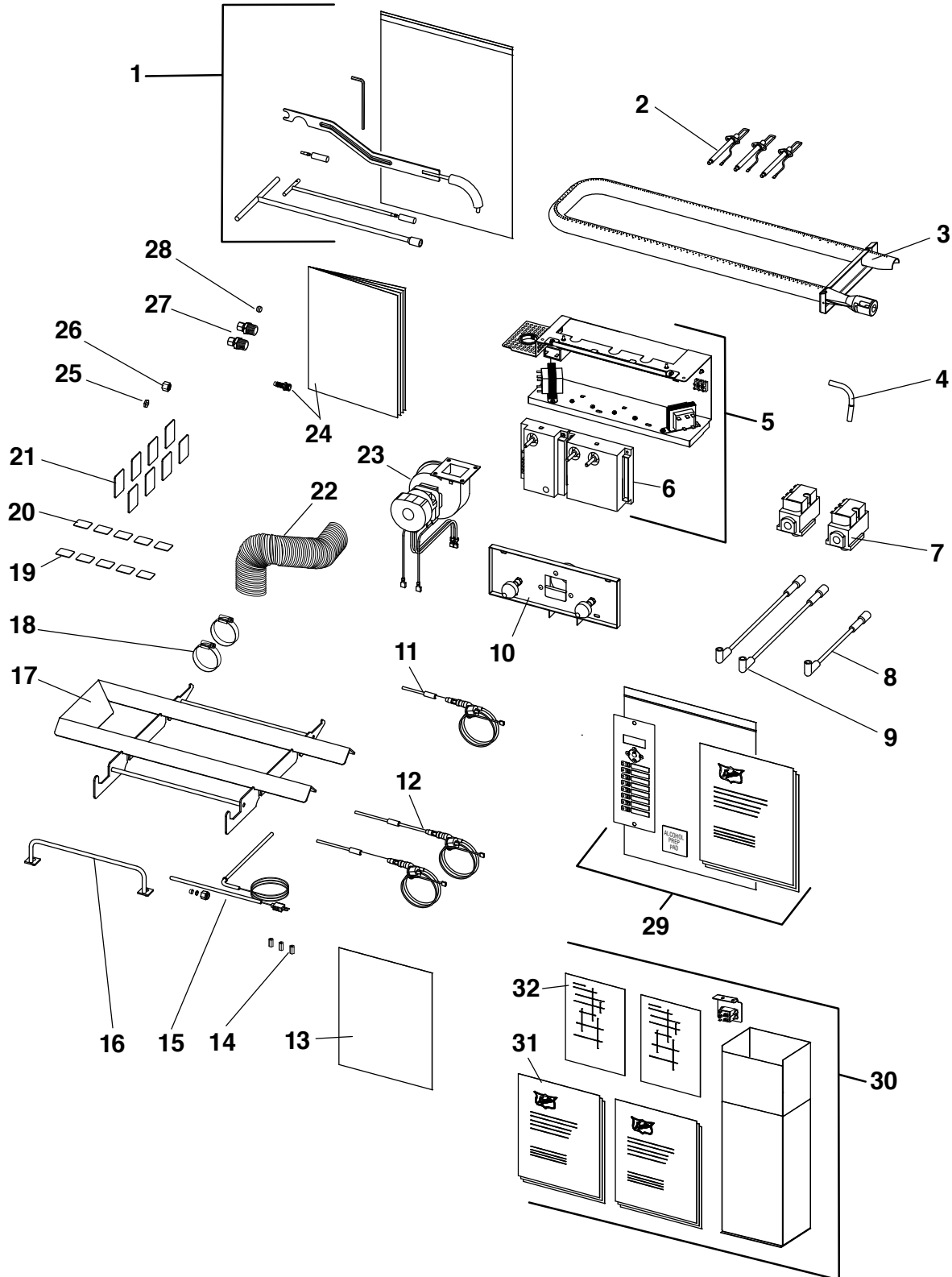
FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION BLOWER BOX AND DUCK, BASE MOUNT, LP GAS			
Item	Part Number	Description	Qty
1	176447	Assembly, Blower Box and Duct, Bas Mount	1
2	176451	Box, Blower, Base Mount	1
3	176428	Power Cord Assembly, 15A 125V, 9' Long (Includes Strain Relief & Connectors)	1
4	175515	Strain Relief, Power Cord	1
5	176425	Harness Assembly, Purge PCB to Ignition Module	1
6	176424	Harness, Purge Cord Blower and Outlet	1
7	156951	Spacer, 5/16" OD x 3/8" Long	4
8	154219	Nut, Keps 6-32 Hex ZP	6
9	176449	Assembly, Lower Duct Base	1
10	176450	Assembly, Upper Duct Base	1
11	176452	Cover, Blower Box, Base	1
12	176431	Blower Assembly, Terminated	1
13	653637	Nut, 1/4-20 Flanged Zinc Plated Hex	3
14	213028	Screw, 10-24 x 3/8" PTHMS S/S	6
15	176426	PCB, Purge	1



## FLEXIBLE BATCH BROILER REFURBISHMENT KIT: 176838 NATURAL GAS AND 176841 LP GAS MODELS

Item	Part Number	Description	Quantity	
			176838	176841
1	175700	Kit, Cleaning and Install Tools	1	1
2	175536	Spark Ignitor	3	3
3	176370	Lower Burner (.375 Shutter), Center Air Flow, 120V Domestic/Canada	1	1
4	175478	Tube, Lower Burner to Valve	1	1
5	175391-AK	Kit, Electric Component Shelf Assembly, LP Gas		1
	175391-BK	Kit, Electric Component Shelf Assembly, Natural Gas	1	
6	175868	Assembly, Ignition Module & Water Detection label, Nat. Gas	1	
	175872	Assembly, Ignition Module & Water Detection label, LP Gas		1
7	175531	Valve, Natural Gas Combo, 24 VAC .6A 50/60 Hz	2	
	175766	Valve, LP Gas Combo		2
8	175538	Ignition Suppression Cable, Lower Ignition Module	1	1
9	175537	Ignition Suppression Cable, Upper Ignition Module	2	2
10	175108	Assembly, Cover, Blower Box with Plunger	1	1
11	175534	Sensor, Lower Burner	1	1
12	175535	Sensor, IR Burner	2	2
13	529091	Instructions, Refurbishment Kits-176838 & 176841	1	1
14	175682	Nut, Coupling 8-32 x 5/8" x 5/16"	3	3
15	175977K	Kit, Temperature Probe (Ref-175518 & 175138)	1	1
16	175095K	Weldment, Ignitor Guard	1	1
17	175200K	Weldment, Burner Shield	1	1
18	175549	Hose Clamp	2	2
19	175361	Conveyor Shim-18 Gauge	5	5
20	175360	Conveyor Shim-20 Gauge	5	5
21	175727	Conveyor Shim-16 Gauge	8	8
22	175189	Hose, Blower	1	1
23	600249K	Kit, Domestic Blower & Gasket (Ref-176185 & 175511)	1	1
24	600290	Kit, Lower Orifice Holder Replacement (Ref-176368)	1	1
25	175546	Jam Nut, Orifice Holder, Lower Burner	1	1
26	175548	Nut Compression Fitting	1	1
27	175540	Brass Fitting, Gas Valve to Burner Supply Tube	2	2
28	175547	Sleeve, 3/8 Compression Fitting	1	1
29	176039	Kit, Mylar Replacement (Ref-176007)	1	1
30	600286	Kit, Blower Upgrade Components (Ref-176188)	1	1
31	176189	Instructions, 120V Blower Motor & Switch Replacement	1	1
32	175611	Wire Schematic, Domestic 120V FBB	1	
	176430	Wire Schematic, Domestic 120V FBB with Purge		1
Not Shown	281310	Screw, 10-24 x 1-1/4" TR SL SS Machine	2	2
Not Shown	175587	Screw, 10-24 x 3/8" IHXW SL SS Machine	4	4
Not Shown	213041	Nut, 10-24 Serrated Zinc	4	4
Not Shown	213042	Nut, 1/4-20 Serrated Zinc	2	2
Not Shown	297000	Sealant, Silicone Aluminum NSF	1	1

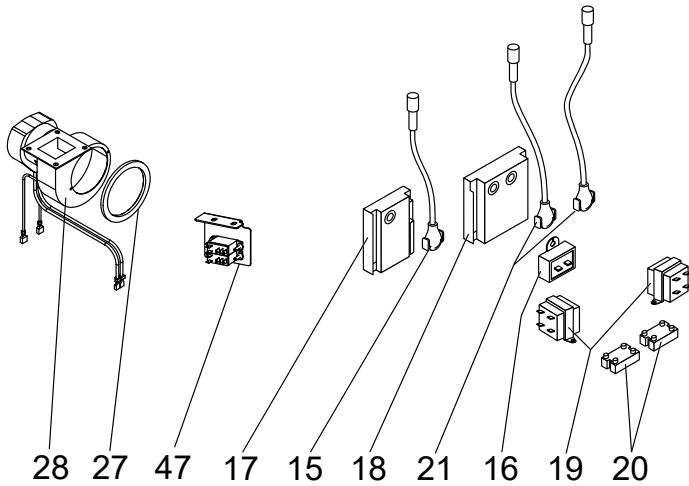
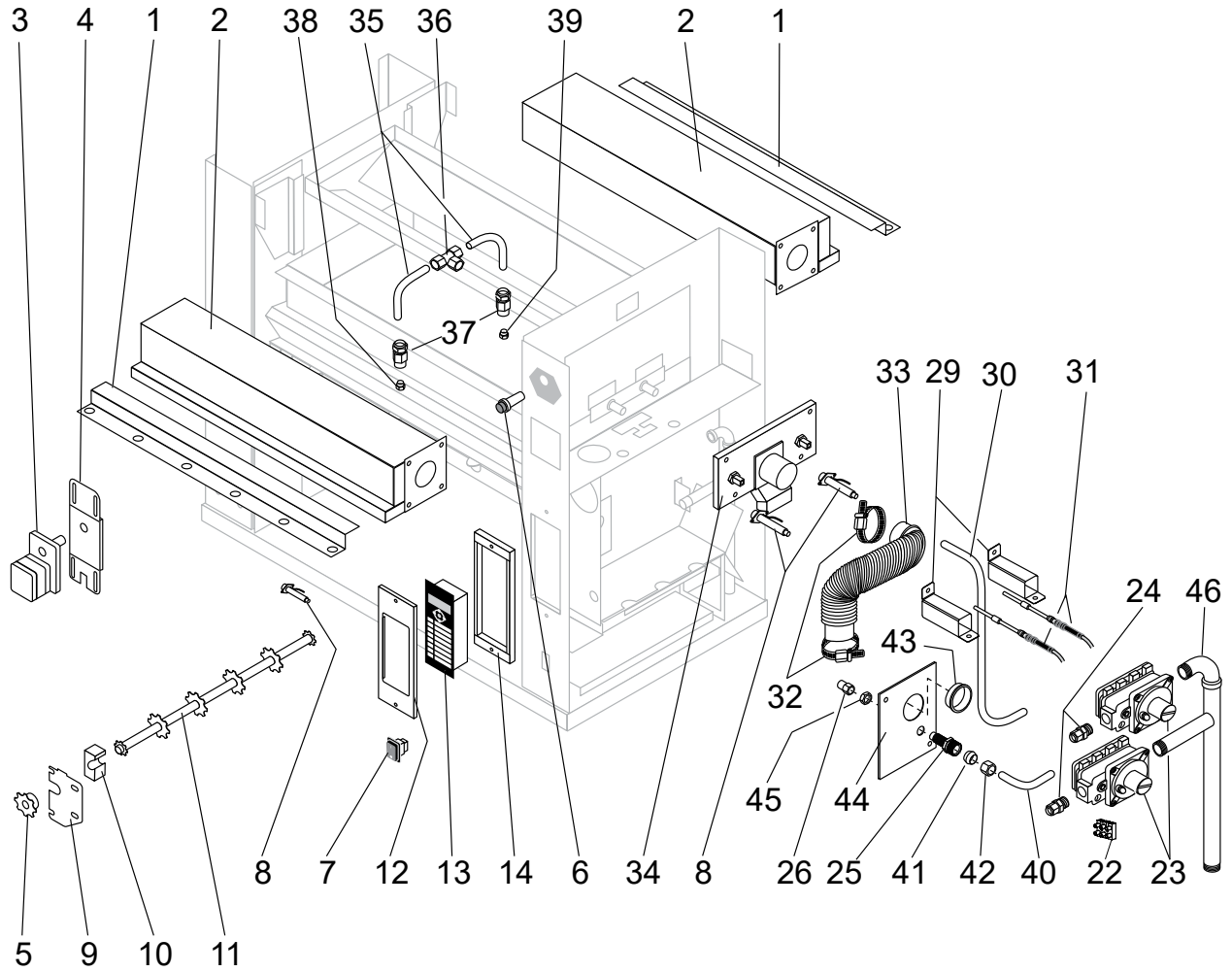
**FLEXIBLE BATCH BROILER REFURBISHMENT KIT:  
176838 NATURAL GAS AND 176841 LP GAS MODELS**



**FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION  
TOP, FRONT & CONTROL SIDE**

Item	Part Number	Description	Qty
1	175066	Mounting Bracket, Burner	2
2	175780	Kit, Spare Part, IR Burner (Ref-175504)	2
3	175867K	Conveyor Drive Motor and Label, 115V	1
4	175176	Mounting Bracket, Conveyor Drive Motor	1
5	175517	Sprocket, 21 Teeth x 3/8 Bore	1
6	175550	Light, Cook	1
7	175503	Switch, Main Power	1
8	175536	Igniter	3
Not Shown	175095K	Weldment, Igniter Guard (Ref-item 16 on pages 8 & 9)	1
9	175086	Shaft Plate, Rear	2
10	175525	Bushing Block, Conveyor	4
11	175038	Conveyor Shaft, Rear	1
Not Shown	175037	Conveyor Shaft, Front	1
12	175356	Frame, Control Board Mounting Bezel	1
13	176480	Control Assembly with Water Detection Label (120V Domestic & Canada Units)	1
	175873K	Control Assembly with Water Detection Label (120V International Units)	1
14	175510	Gasket, Control Bezel	1
15	175538	Ignition Suppression Cable, Lower Ignition Module	1
16	175507	Capacitor, Motor Conveyor	1
17	175868	Ignition Module with Water Detection Label, Natural Gas	1
	175872	Ignition Module with Water Detection Label, LP Gas	1
18	175869K	Ignition Module with Water Detection Label, IR Burners	1
19	175516	Transformer, 40VA, 120VAC-24VAC	2
20	175870K	Relay, Solid State with Water Detection Label	2
21	175537	Ignition Suppression Cable, Upper Ignition Module	2
22	175553	Terminal Strip, 10 MM	1
23	175531	Valve, Natural Gas Combo, 120VAC ( <b>Natural Gas Only</b> )	1
	175766	Valve, LP Gas Combo, 120VAC ( <b>LP Gas Only</b> )	1
Not Shown	175612	Kit, LP Gas Conversion, 120V International	1
	175613	Kit, Natural Gas Conversion, 120V International	1
	176538	Kit, Natural Gas Conversion, US & Canada	1
	176543	Kit, LP Gas Conversion, US & Canada, Burners & Grease Pans, Back Mount	1
	176571	Kit, LP Gas Conversion, US & Canada, Burners & Grease Pans, Base Mount	1
24	175540	Brass Fitting, Gas Valve to Burner Supply Tube	2
25	600290	Kit, Lower Orifice holder Replacement (Ref-176368)	1
26	175823	Orifice, Lower Burner, #31, Natural Gas, 120/230V International/High Altitude	1
	175737	Orifice, Lower Burner, #49, LP Gas, 120V Domestic/International/High Altitude	1
	176404	Orifice, Lower Burner, #30, Natural Gas, 120V Domestic/Canada/High Altitude	1
	176412	Orifice, Lower Burner, #46, LP Gas, 120V Domestic/Canada/High Altitude	1
Not Shown	176514	Kit, Natural & LP Gas Orifices, High Altitude	1
27	175511	Gasket, Blower Motor	1
28	600249K	Kit, Domestic Blower Motor & Gasket, 120V 60Hz (Ref-176185 & 175511)	1
29	175380	Shield, Ignition Cable	2
30	175477	Aluminum Tube, IR to Valve	1
31	175535	Sensor, IR Burner	2

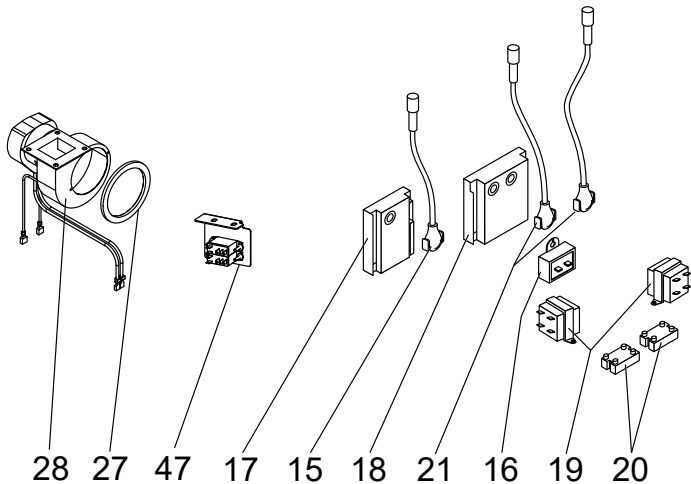
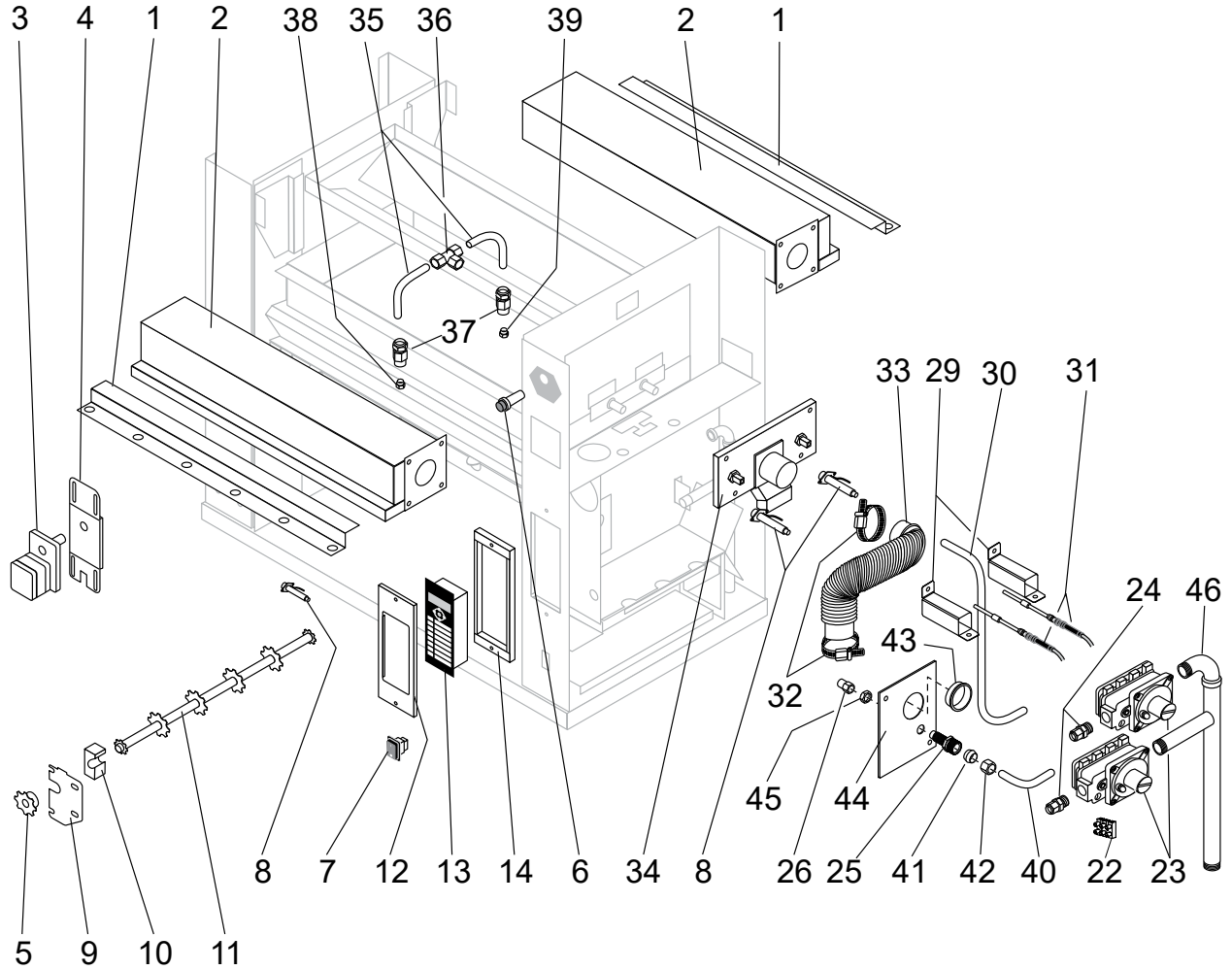
**FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION  
TOP, FRONT & CONTROL SIDE**



**FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION  
TOP, FRONT & CONTROL SIDE (Continued)**

Item	Part Number	Description	Qty
32	175549	Hose Clamp, 2-1/4"	2
Not Shown	175197	High Temperature Fiberglass Tape 3/4" Wide x 12" Long	2
33	175189	Blower Hose, 14" Long	1
34	175108	Blower Box Assembly with Plungers	1
35	175476	Aluminum Tube, Tee to IR	2
36	175541	Brass Tee, Compression Fitting	1
37	175542	Orifice Holder, IR Burner	1
38	175735	Orifice, IR Burner, #40, Natural Gas, 120V Domestic/International/High Altitude	1
	175767	Orifice, IR Burner, #52, LP Gas, 120V Domestic/International/High Altitude	1
39	175736	Orifice, IR Burner, #36, Natural Gas, 120V Domestic/International/High Altitude	1
	175768	Orifice, IR Burner, #51, LP Gas, 120V Domestic/International/High Altitude	1
Not Shown	176514	Kit, Natural & Lp Gas Orifices, High Altitude	1
40	175478	Aluminum Tube, Lower Burner to Valve	1
41	175547	Brass Sleeve, 3/8" Compression Fitting	1
42	175548	Brass Nut, 3/8" Compression Fitting	1
43	175514	Bushing, Heyco Shorty 1"	1
44	175376	Plate, Orifice Holder	1
45	175546	Jam Nut, Orifice Holder, Lower Burner	1
46	175571	Piping, Gas Manifold	1
47	600286	Kit, Blower Upgrade Components (Ref-176188)	1
Not Shown	175607	Wire Harness, Low Voltage	1
Not Shown	175608	Wire Harness, Line Voltage	1
Not Shown	175609	Wire Harness, Conveyor Motor	1
Not Shown	175610	Wire Harness, Ground	1
Not Shown	175479	Wire Harness, Test Cord, Flame Sensor	1
Not Shown	176570	Instructions, BK Flame Sensor Test Harness (Ref-175479)	1
Not Shown	175261	Kit, Full PM, LP Gas (120V Domestic & Canada Units)	1
Not Shown	600342	Kit, Full PM, LP Gas (120V International Units)	1
Not Shown	175262	Kit, Full PM, Natural Gas (120V Domestic & Canada Units)	1
Not Shown	600341	Kit, Full PM, Natural Gas (120V International Units)	1
Not Shown	176366	Kit, Full PM, Natural Gas (120V High Altitude Units)	1
Not Shown	176367	Kit, Full PM, LP Gas (120V High Altitude)	1
Not Shown	600298	Kit, Mini PM, LP Gas, 120V	1
Not Shown	600308	Kit, Mini PM, LP Gas, 120V High Altitude	1
Not Shown	600299	Kit, Mini PM, Natural Gas, 120V	1
Not Shown	600307	Kit, Mini PM, Natural Gas, 120V High Altitude	1
Not Shown	176851	Upper Gas Line Kit (Ref-175476-175477-175541-175548-175547)	1
Not Shown	176852	Harness Kit (Ref-175538-175537-175607-175610-175608)	1

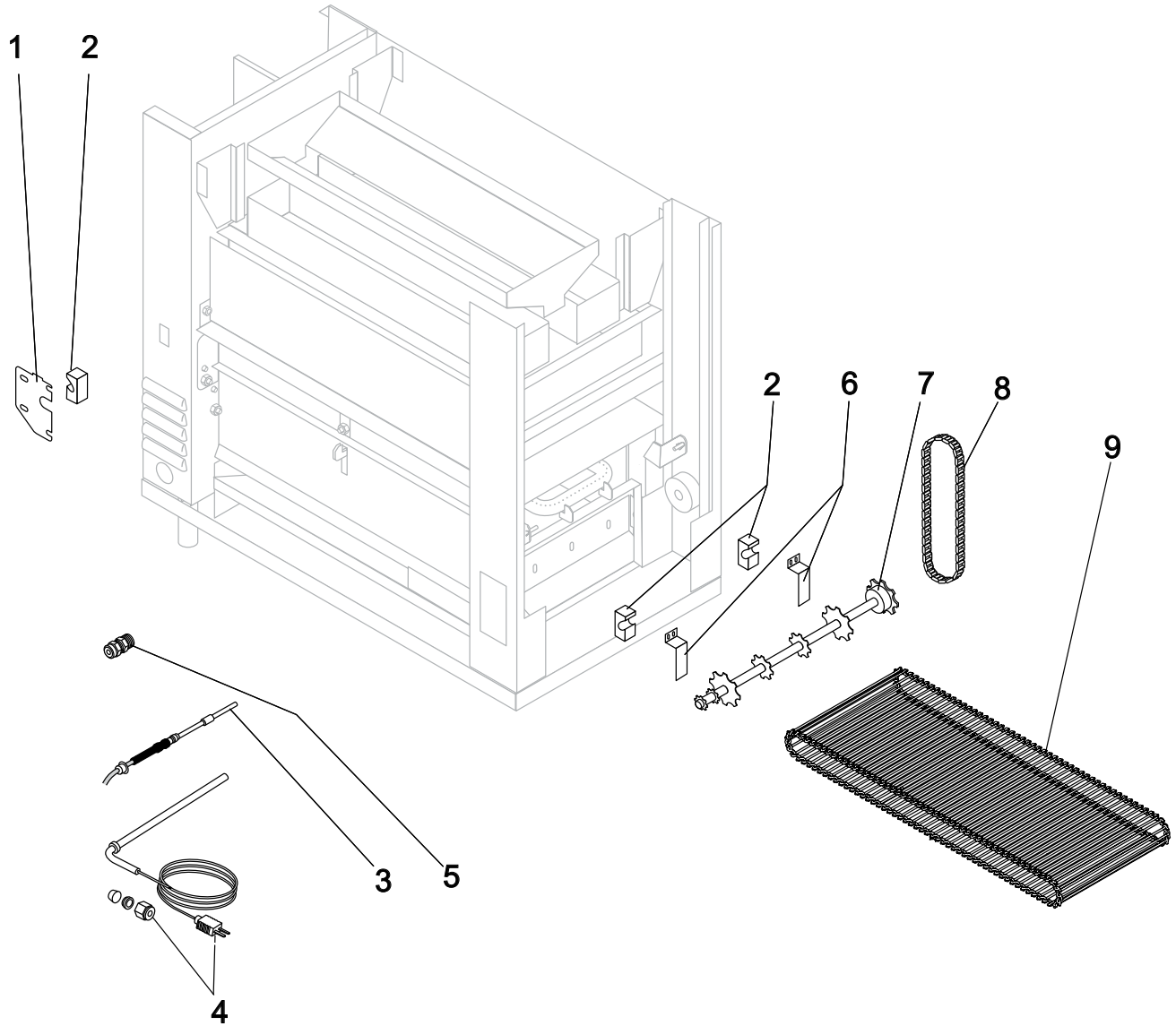
**FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION  
TOP, FRONT & CONTROL SIDE (Continued)**



**FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION  
REAR AND FRONT DISCHARGE**

<b>Item</b>	<b>Part Number</b>	<b>Description</b>	<b>Qty</b>
1	175086	Plate, Shaft, Rear	2
2	175525	Bushing Block, Conveyor	4
3	175534	Sensor, Lower Burner	1
4	175977K	Kit, Temperature Probe ( <i>Ref-175518 &amp; 175138</i> )	1
5	175515	Strain Relief, Power Cord	1
6	175022	Clip, Front Bushing	2
7	175037K	Discharge Shaft, Front	1
8	175551	Drive Chain	1
9	175674	Cook Chain Conveyor	1
Not Shown	524934	Sanigrid Pliers	1

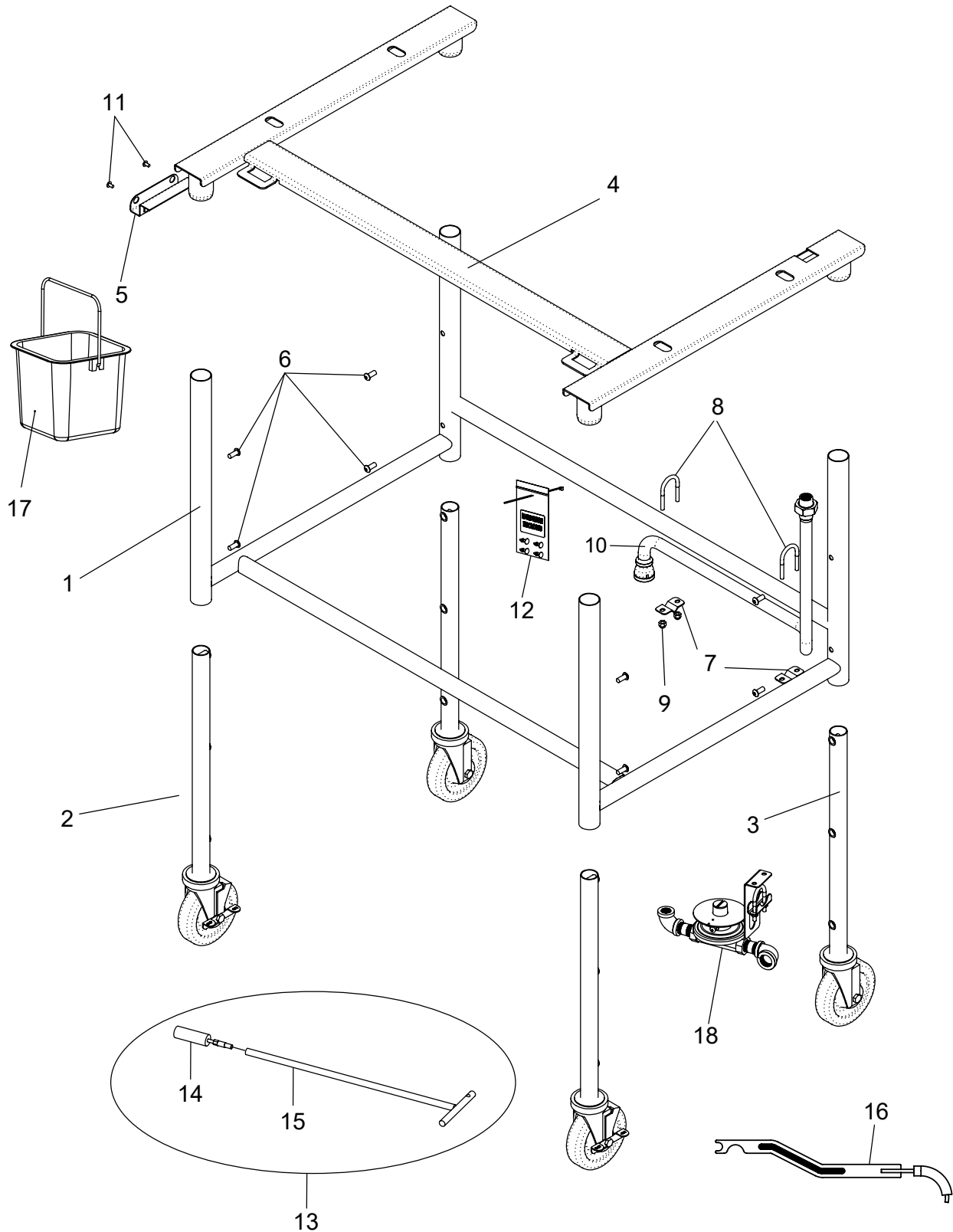
**FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION  
REAR AND FRONT DISCHARGE**



**FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION  
175173 STAND COMPONENTS**

Item	Part Number	Description	Qty
1	175999	Weldment, Broiler Stand	1
2	175462PC	Assembly, Leg Extension with Brake	2
Not Shown	175562	Caster, Stem with Brake	2
3	175463PC	Assembly, Leg Extension without Brake	2
Not Shown	175563	Caster, Stem without Brake	2
4	175961MAKE	Weldment, Top Broiler Stand	1
5	175748	Weldment, Sanitizer Bracket	1
6	175468	Screw, 5/16-18 x 3/4" SS Button Head	8
7	175459	U-Bolt Saddle	2
8	175565	U-Bolt, 1/4-20 x 1-1/4	2
9	0220750SED	Nut, 1/4-20 Acorn SS	4
10	175570	Piping, Gas Supply	1
11	213028	Screw, 10-24 x 3/8" PTHMS S/S	2
12	175722PC	Kit, Nylon Rivet (4-175720 Rivets)	1
13	175701	Assembly, Flame Rod Tube Cleaner ( <i>Includes 175705 Brush</i> )	1
14	175705	Brush, Flame Rod Tube Cleaner	1
15	175702	Weldment, Flame Rod	1
16	175485	Weldment, Cleaning Tool	1
17	175842	Sanitation Pal	1
18	175689	Kit, High Pressure Regulator	1
Not Shown	175690	Kit, Gas Connection Components ( <i>See 177218 Stand on the following pages</i> )	1

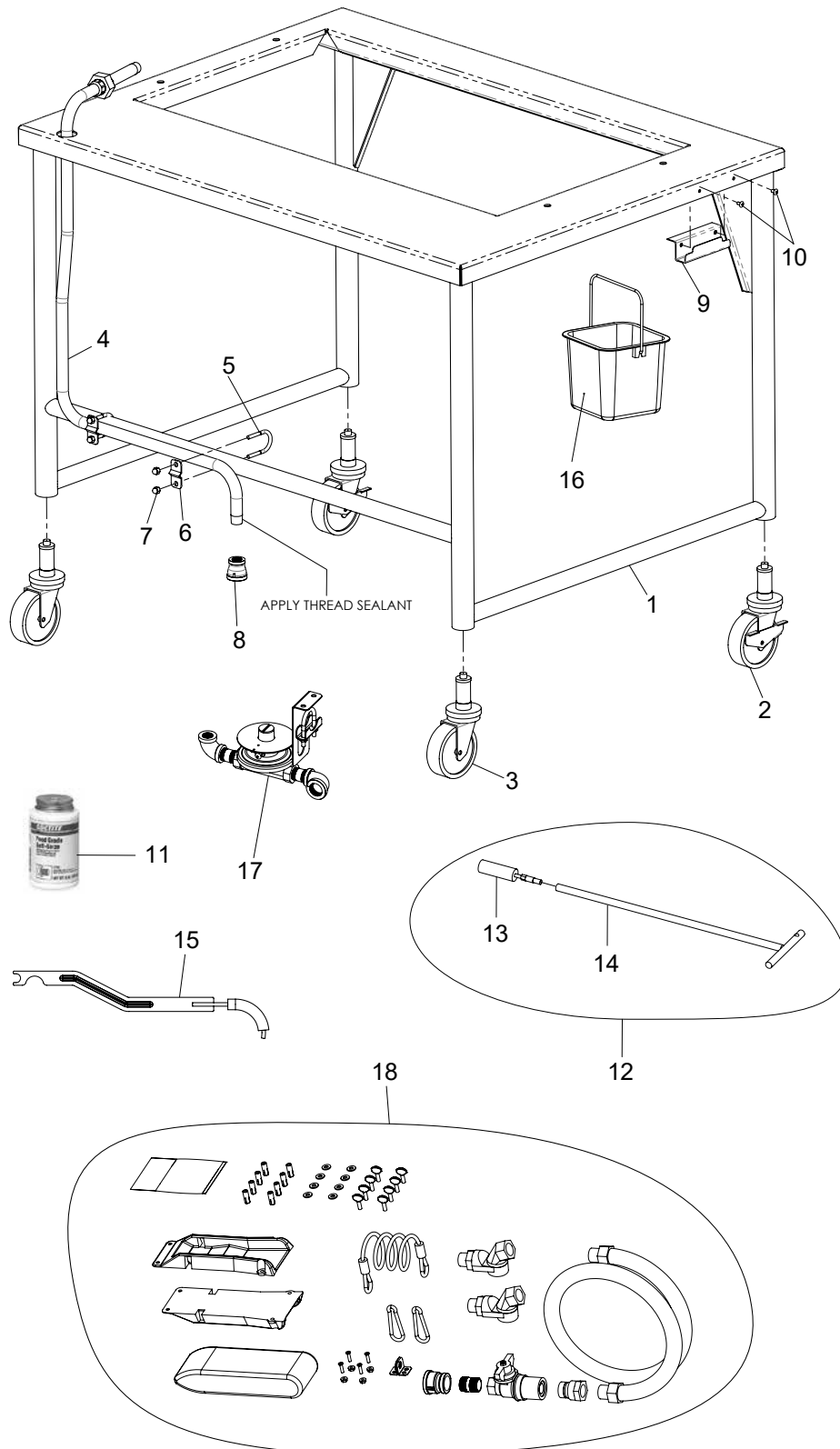
**FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION  
175173 STAND COMPONENTS**



**FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION  
177218 SOLID TOP STAND COMPONENTS**

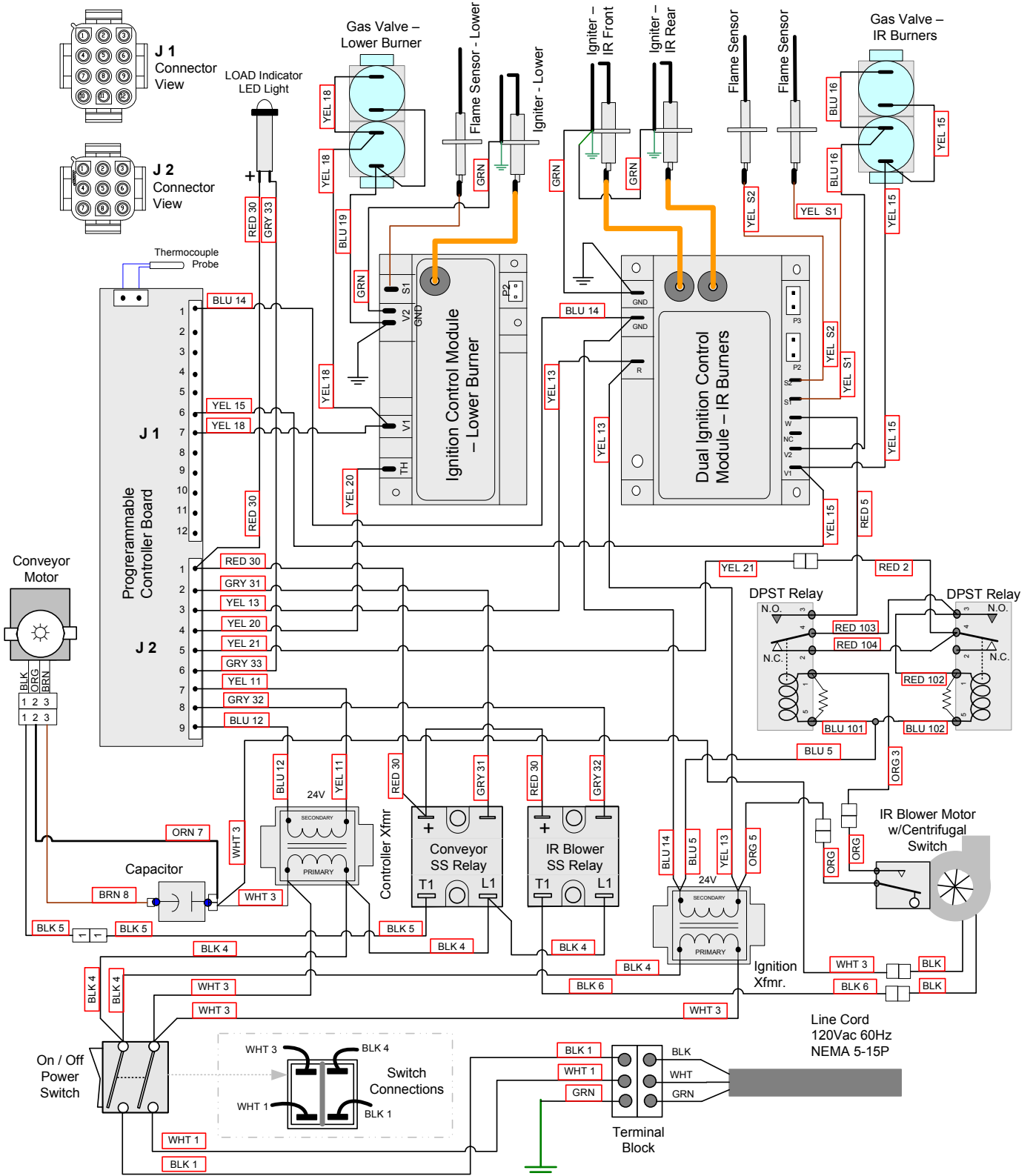
Item	Part Number	Description	Qty
1	177205	Weldment, Stand, Solid Top	1
2	224528	Caster, 4" Swivel with Brake, 1-5/8" Tubing	2
3	224527	Caster, 4" Swivel without Brake, 1-5/8" Tubing	2
4	224531	Piping, Gas Supply	1
5	175565	U-Bolt, 1/4-20 x 1-1/4	2
6	175459	U-Bolt Saddle	2
7	0220750SED	Nut, 1/4-20 Acorn SS	4
8	149440	Reducer, Bell 3/4" x 1/2"	1
9	177221	Weldment, Sanitizer Bracket	1
10	213028	Screw, 10-24 x 3/8" PTHMS S/S	2
11	168174	Anti-Seize Lubricant, Food Grade, Loctite #51168	1
12	175701	Assembly, Flame Rod Tube Cleaner	1
13	175705	Brush, Flame Rod Tube Cleaner	1
14	175702	Weldment, Flame Rod	1
15	175485	Weldment, Cleaning Tool	1
16	175842	Sanitation Pal	1
17	175689	Kit, High Pressure Regulator	1
18	175690	Kit, Gas Connection Components	1

# FLEXIBLE BATCH BROILER, GAS DOMESTIC VERSION 177218 SOLID TOP STAND COMPONENTS



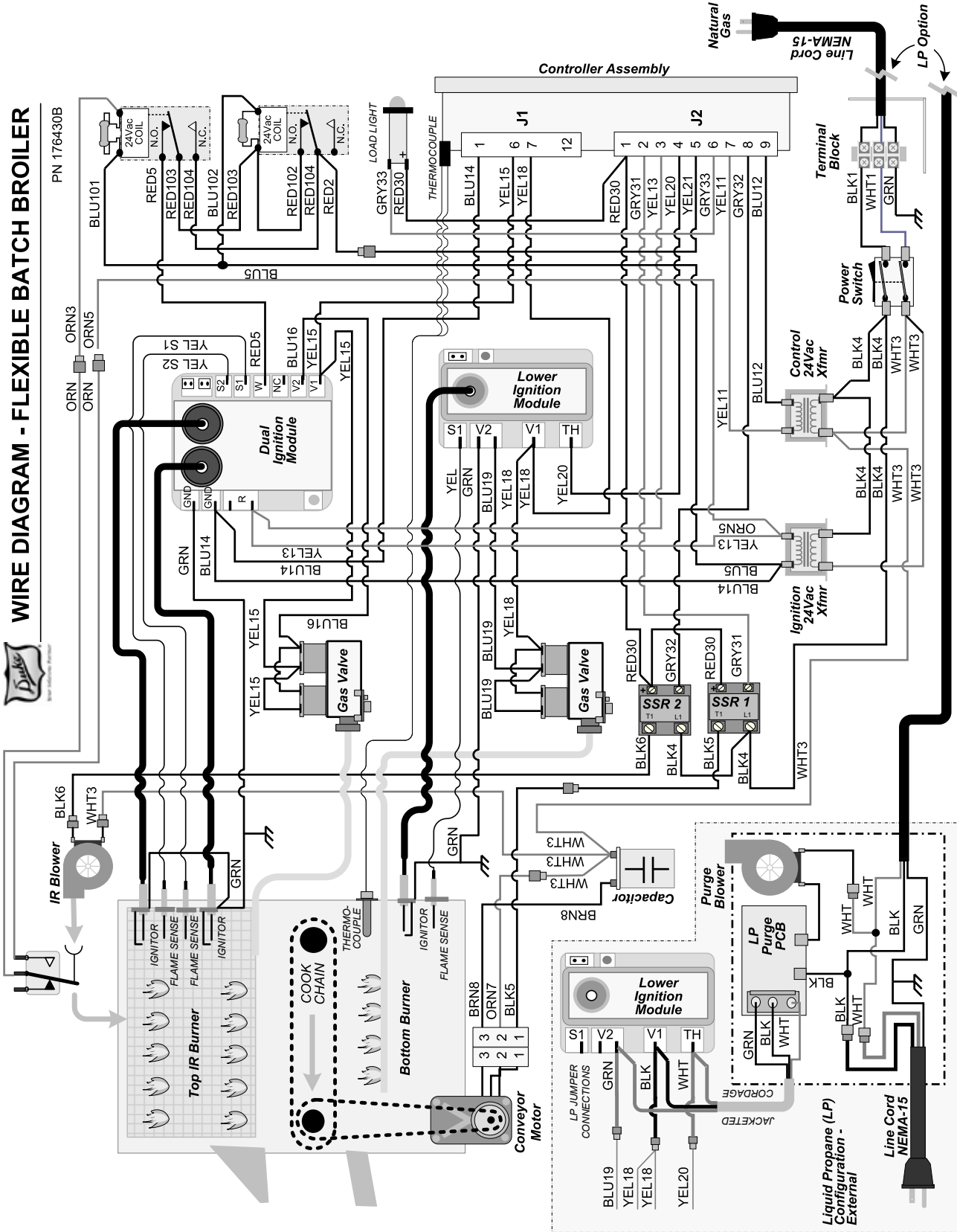
# ELECTRICAL SCHEMATIC - FLEXIBLE BATCH BROILER

DUKE MFG. PN 175611 Rev. E



# WIRE DIAGRAM - FLEXIBLE BATCH BROILER

## LP Lower Burner Upgrade





Your Solutions Partner

## **Duke Manufacturing Co.**

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