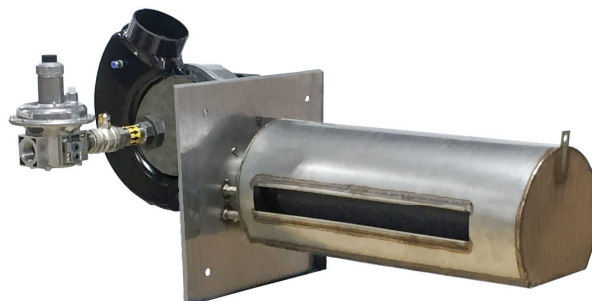


# Replacement Parts

## Low NO<sub>x</sub> Burners - 24V Model LNB500 & LNB1000

with Combustion Chamber



*Installation and Service Manual - 8471-91*

*Date Code - 3811*

*First Manufactured October 23, 2011*

*The air and gas are premixed through a modulating premix gas blower. The air and gas is ignited using a simple direct spark ignition system not requiring an additional pilot burner. Once the air and gas are premixed it is distributed through a high efficient metal fiber burner head. Premixing the fuel and air before ignition assures complete combustion with minimal levels of CO and NO<sub>x</sub>.*



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**AVOID ERROR IN PARTS SELECTION.** When ordering use complete MIDCO Part Number and Description. Furnish Burner Model Number, Bill of Material Number and Serial Number (if available) from the specification plate found on the product.

**IMPORTANT:** Availability of parts as well as specifications are subject to change without notice. Please consult factory for item availability.



# Exploded View - Low NOx Burner - LNB500 & LNB1000

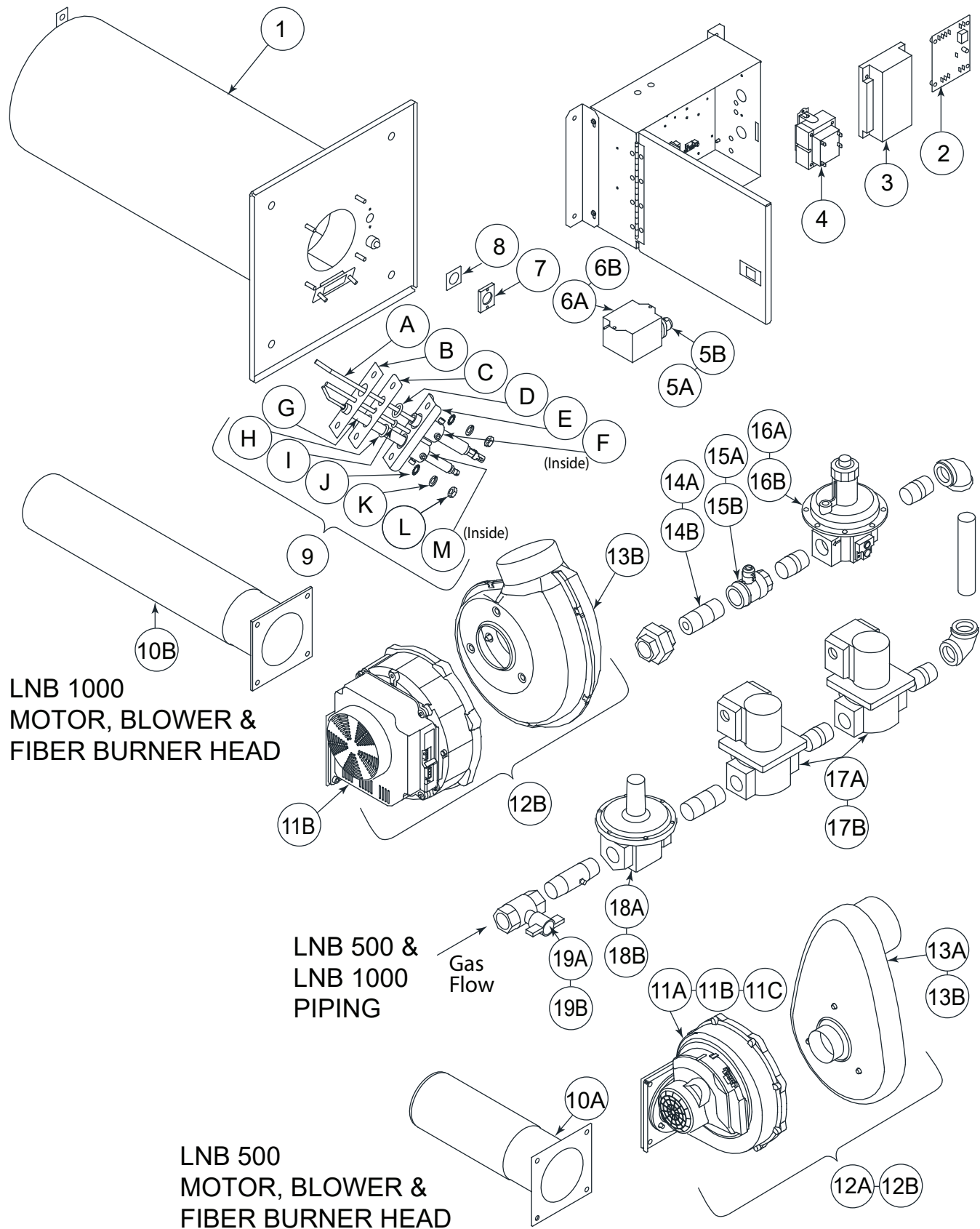


Figure 1 - LNB 500 and LNB 1000 - Expanded View

# Proof #2b ECN 10152 to AE 2/27/25 8473-00

## Low NOx - LNB500 & LNB1000 - Burner Parts List

Item	Part #	Description	Qty	Item	Part #	Description	Qty
1	5246-03	LNB 500 / LNB 1000 - 1" Insertion Combustion Chamber	1				
2	8429-02	RTC Board DC Signal to PWM	1				
3	8429-64	LNB 500 / LNB 1000 - Ignition Control - 24V	1				
4	8447-27	LNB 500 / LNB 1000 - 120V to 24V 75VA Transformer	1				
5A	8408-94	10/32 Terminal Nut	1				
5B	2122-61	Thumb Screw	1				
6A	8447-22	Ignitor Spark Generator Honeywell	1				
6B	8447-39	Ignitor Spark Generator Allanson	1				
7	7122-90	Peep Sight Assembly	1				
8	5246-27P	Peep Sight Graphite Gasket	1				
9	5246-42R	Pilot Assembly Repair Kit (Complete)	1				
A	5246-17	Flame Rod LNB Assembly	1				
B	5246-48P	Ignitor Flange Gasket	1				
C	5246-22	Ignition & Flame Assembly Plate	1				
D	8432-21	O-Ring 1/2" X 11/16" X 3/32"	1				
E	5246-45	Ignition Assembly Weldment Only	1				
F	8451-06	Flame Rod Bushing	1				
G	5246-43	Spark Rod Assembly LNB	1				
H	8432-22	O-Ring 7/16" X 5/8" X 3/32"	1				
I	8432-20	O-Ring 5/32" X 11/32" X 3/32"	1				
J	Hardware	1/4" Star Lock Washer	2				
K	Hardware	1/4" Split Lock Washer	2				
L	Hardware	1/4-20 Hex Nut	2				
M	8451-05	Spark Rod Bushing	1				
10A	5246-79	LNB 500 - Fiber Burner Head - Weldment - 4" X 9"	1				
10B	5246-29	LNB 1000 - Fiber Burner Head - Weldment - 4" X 19"	1				
11A	8435-30	LNB 500 - EBM Blower Only	1				
11B	8435-23	LNB 1000 - EBM Blower Only	1				
11C	8435-37	LNB 1000 - Fasco Blower Only	1				
12A	5246-82R	LNB 500 Blower Assembly RG175/120	1				
12B	5246-04R	LNB 1000 Blower Assembly - G170 120V	1				
13A	8416-22	LNB 500 - Blower Inlet Kit	1				
13B	8416-18	LNB 1000 - Blower Inlet Kit	1				
14A	5246-85	LNB 500 - 3/4" x 3" Nipple with Orifice	1				
14B	5246-64	LNB 1000 - 1" x 3" Nipple with Orifice	1				
15A	8404-37	LNB 500 - 3/4" Quick Actuated Ball Valve	1				
15B	8404-38	LNB 1000 - 1" Quick Actuated Ball Valve	1				
16A	8416-21	LNB 500 - 3/4" NPT Ratio Regulator	1				
16B	8416-04	LNB 1000 - 1" NPT Ratio Regulator	1				
17A	8402-35	LNB 500 - 3/4" NPT Solenoid Valve 24V	2				
17B	8402-36	LNB 1000 - 1" Solenoid Valve 24V	2				
18A	8416-01	LNB 500 - 3/4" NPT Gas Regulator	1				
18B	8416-33	LNB 1000 - 1" NPT Gas Regulator	1				
19A	8404-30	LNB 500 - 3/4" T-Handle Ball Valve	1				
19B	8404-29	LNB 1000 - 1" NPT T-Handle Ball Valve	1				

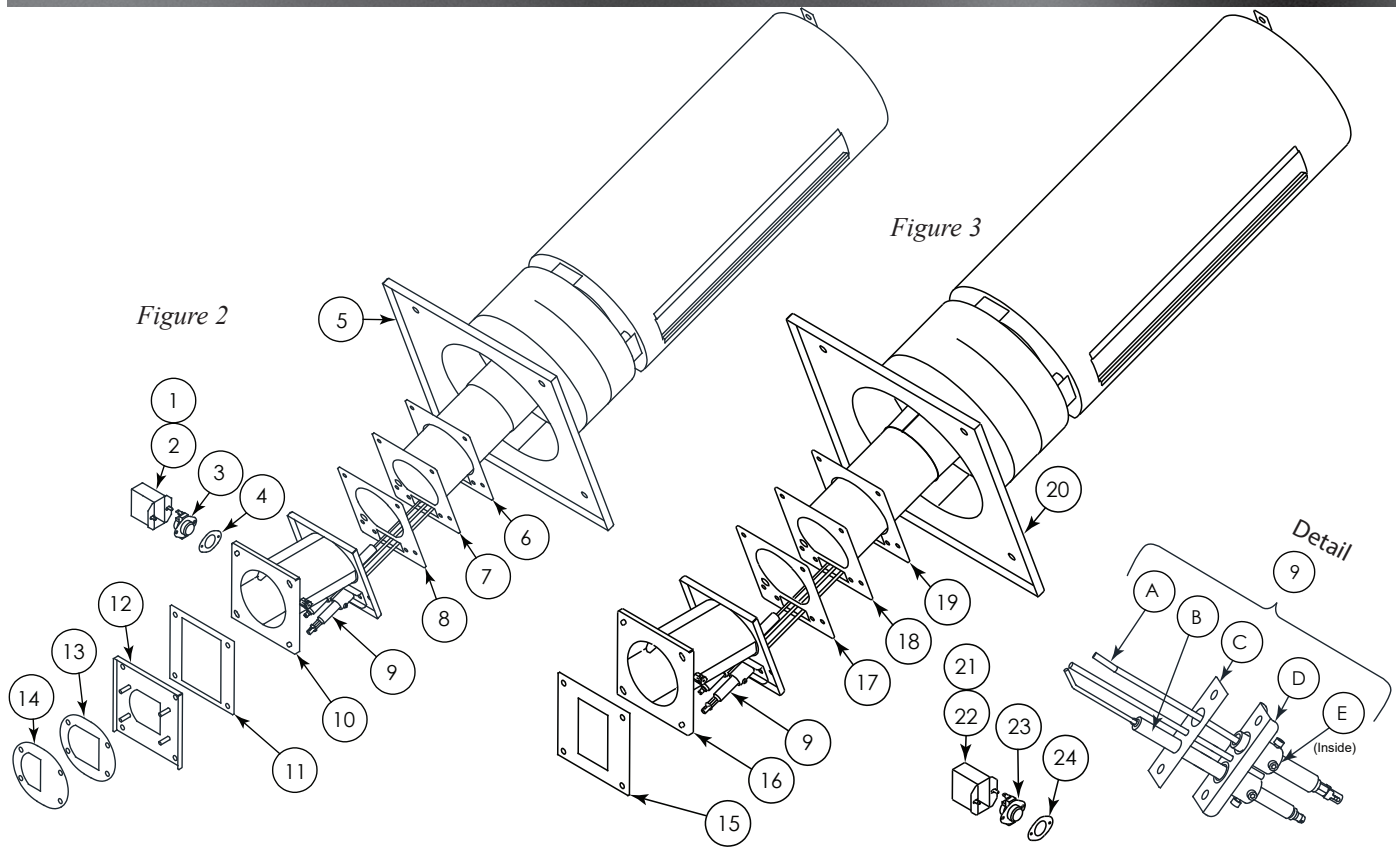
### Not Shown

2117-95	EBM Power Wire Harness	1
2117-96	EBM Control Wire Harness	1
5246-26P	LNB 1000 - Blower Assembly Gasket	1
5246-32P	LNB 500 / LNB 1000 - 4" Fiber Burner Head Gasket	1
5246-41	Flame Rod Wire	1
5246-49	Spark Rod Wire	1
5246-76P	LNB 500 - Blower Assembly Gasket	1
5246-77P	LNB 500 - Blower Assembly Gasket	1
5248-71	LNB 1000 - Air Restrictor	1
	LNB 500 & LNB 1000 - Air Filter *see note below	1
8425-58	Thermal Switch	1
8500-58	Fasco Power Wire Harness	1
8500-59	Fasco Control wire Harness	1

\* **Warning:** Replacement filter is supplied by the customer. Refer to manual for correct filter specifications to provide the recommended air flow for the burner.

Expanded views for the combustion chamber on page 4

# Low NOx - LNB500 & LNB1000 Combustion Chamber



**Figure 2 - LNB 500 6" Insertion Combustion Chamber Expanded View**

Item	Part #	Description	Qty
1	HW1-088	#8-18 X 3/8" Slotted Hex HD Tapping Screw	2
2	5248-79	LNB - Cover Conduit Box	1
3	8425-58	Thermal Switch (Spdt) 160-130	1
4	5247-39	Gasket for Thermal Switch	1
5	5248-50 or 5248-50P	Combustion Chamber Weldment of LNB 6" Wall Thickness	1
6	5247-30P	LNB (4NC) Burner Head Gasket	1
7	5248-68	Burner Head Weldment LNB 6NC	1
8	5247-31P	LNB (4NC) B-B Gasket	1
9	5247-09R	LNB (7") Ignition and Flame Sensing Assembly	1
A	5247-35	Flame Rod Assembly LNB 7"	
B	5247-12	Spark Rod Assembly LNB 7"	
C	5247-11P	Igniter Flange Gasket 7"	
D	5247-10	Ignition Assembly Weldment 7"	
E	5251-06	9/16" I.D. Electrode Bushing (Inside)	
10	5248-63	Connector Weldment LNB 6"	1
11	5246-76P	Flange Gasket	1
12	5246-80	Flange Weldment	1
13	5246-77P	Blower Gasket	1
14	5246-81	Air Restrictor "A"	1

**Figure 3 - LNB 1000 6" Insertion Combustion Chamber Expanded View**

Item	Part #	Description	Qty
9	5247-09R	LNB (7") Ignition and Flame Sensing Assembly	1
A	5247-35	Flame Rod Assembly LNB 7"	
B	5247-12	Spark Rod Assembly LNB 7"	
C	5247-11P	Igniter Flange Gasket 7"	
D	5247-10	Ignition Assembly Weldment 7"	
E	5251-06	9/16" I.D. Electrode Bushing (Inside)	
15	5246-26P	Flange Gasket	1
16	5248-63	Connector Weldment LNB 6"	1
17	5247-31P	B-B Gasket	1
18	5247-16	Burner Head Weldment	1
19	5247-30P	Burner Head Gasket	1
20	5248-50 or 5248-50P	Combustion Chamber Weldment of LNB 6" Wall Thickness	1
21	HW1-088	#8-18 X 3/8" Slotted Hex HD Tapping Screw	2
22	5248-79	LNB - Cover Conduit Box	1
23	8425-58	Thermal Switch (Spdt) 160-130	1
24	5247-39	Gasket for Thermal Switch	1

