

---

# REPLACEMENT PARTS MANUAL

---

## Wall Mounted Gas/Electric

Models:

WG2SF-A	WG2SFDA	WG3SF-A	WG3SFDA
WG2SF-B	WG2SFDB	WG3SF-B	WG3SFDB
WG2SF-C	WG2SFDC	WG3SF-C	WG3SFDC

---

### Contents

<i>Description</i>	<i>Page</i>
Cabinet Components	
♦ Exploded View .....	2
♦ Usage List .....	3
♦ Usage List .....	4
Functional Components	
♦ Exploded View .....	6
♦ Usage List - Standard .....	7
♦ Usage List - Dehumidification .....	8
Burner Components	
♦ Exploded View .....	10
♦ Usage List .....	11
Control Panel	
♦ Layout View .....	12
♦ Usage List .....	13
♦ Usage List .....	14
Blower Assembly	
♦ Exploded View .....	15
♦ Usage List .....	15

### General Notes

- Revised and/or additional pages may be issued from time to time.
- A complete and current manual consists of pages shown in the following contents section.

### Important

- Contact the installing and/or local Bard distributor for all parts requirements. Make sure to have the complete model and serial number available from the unit rating plates.



**Intertek**

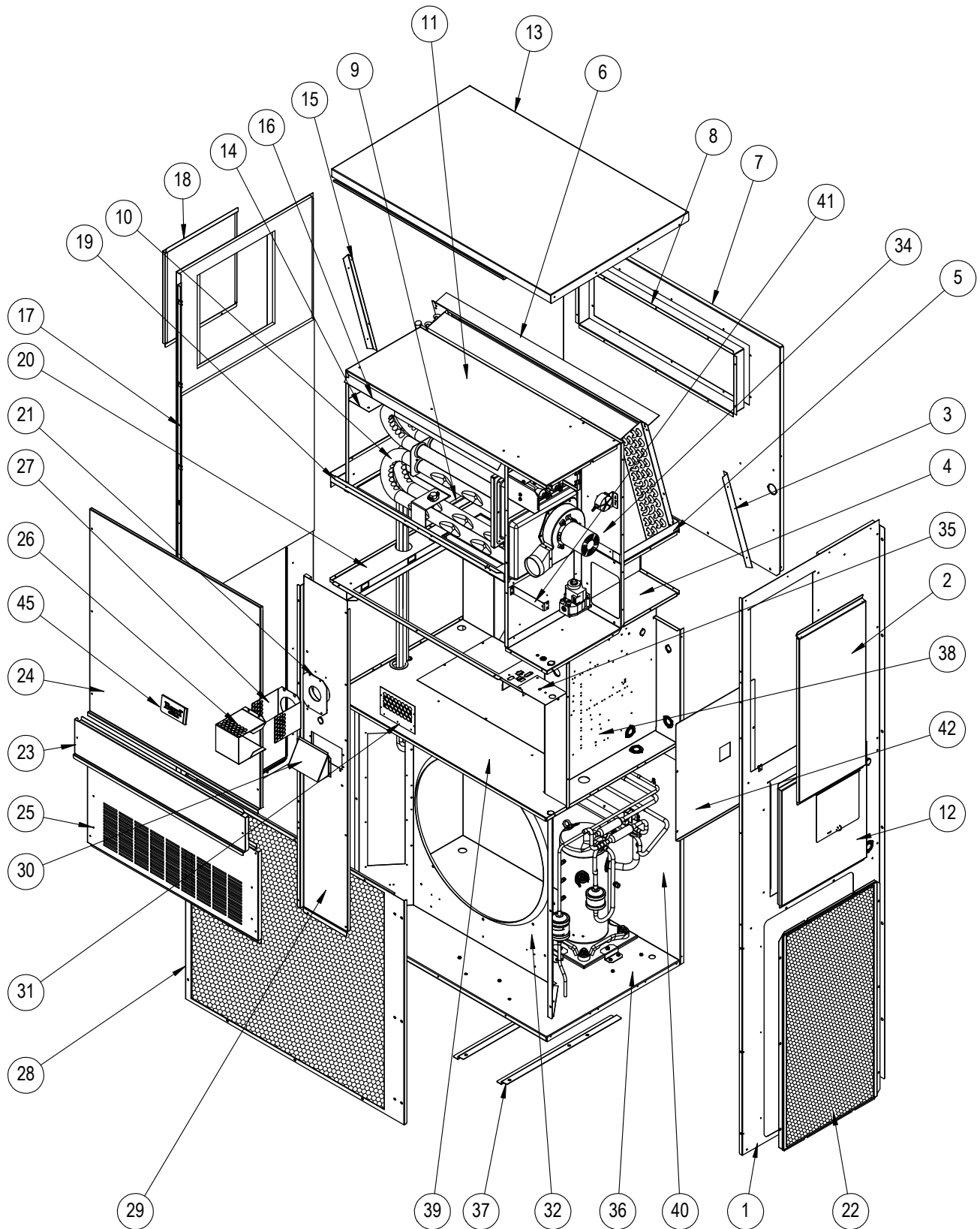


**Climate Control Solutions**

Bard Manufacturing Company, Inc.  
Bryan, Ohio 43506  
www.bardhvac.com

Manual: 2110-824A  
Supersedes: 2110-824  
Date: 9-25-25

# CABINET COMPONENTS



SEXP-1151

This drawing to be used for reference for pages 3 and 4

## CABINET COMPONENTS

Drawing No.	Part No.	Description	WG2SF	WG2SFD	WG3SF	WG3SFD
1	501-1180-*BX	Right Side Assembly	X	X	X	X
2	553-801BX	Vestibule Service Door	X	X	X	X
3	105X1073BX	Right Evaporator Support Angle	X	X	X	X
4	541-285BX	Right Drain Pan Support Assembly	X	X	X	X
5	523-124BX	Drain Pan Assembly	X	X	X	X
6	105-1115BX	Evaporator Coil Fill Angle	X	X	X	X
7	509-496BX	Upper Back	X	X	X	X
8	111-091BX	Supply Air Frame	X	X	X	X
9	103-452BX	Heat Exchanger Support Angle	X	X	X	X
10	Heat Exch Assy	See <b>BURNER COMPONENTS</b> on page 10	X	X	X	X
11	135-217BX	Inner Air Baffle	X	X	X	X
12	533-364-*BX	Control Panel Cover Assembly	X	X	X	X
13	507-434-*BX	Top Assembly	X	X	X	X
14	135-201BX	Right Heat Exchanger Panel	X	X	X	X
15	105Y1073BX	Left Evaporator Support Angle	X	X	X	X
16	105-1113BX	Top Heat Exchanger Deflector	X	X	X	X
17	501-1181-*BX	Left Side Assembly	X	X	X	X
18	543-070-*BX	Left Access Cover	X	X	X	X
19	121-469BX	Blower Partition	X	X	X	X
20	919-0008BX	Filter Tray	X	X	X	X
21	1921-051BX	Vent Terminal Gasket	X	X	X	X
22	118-083-*BX	Side Grille (2)	X	X	X	X
23	553-560-*BX	Filter Access Panel Assembly	X	X	X	X
24	553-804-*BX	Front Door Assembly	X	X	X	X
25	553-346-*BX	Vent Option Door Assembly	X	X	X	X
26	169-119BX	Outer Vent Hood	X	X	X	X
27	169-120BX	Inner Vent Hood	X	X	X	X
28	118-059-*BX	Condenser Grille	X	X	X	X
29	549-144BX	Right Front Corner	X	X	X	X
30	135-181-*BX	Air Intake Hood	X	X	X	X
31	134-182-*BX	Air Intake Back	X	X	X	X
32	125-115BX	Fan Shroud	X	X	X	X
33	542-138BX	Condenser Partition Blank-Off Plate	X	X	X	X
34	541-402BX	Heat Exchanger Support Assembly	X	X	X	X
35	142-080BX	Filter Blank-Off Plate	X	X	X	X
<i>Continued on page 4</i>						

\* Exterior cabinet parts are manufactured with various paint color options. To ensure the proper paint color is received, include the complete model number and serial number of the unit for which parts are being ordered.

# CABINET COMPONENTS

---

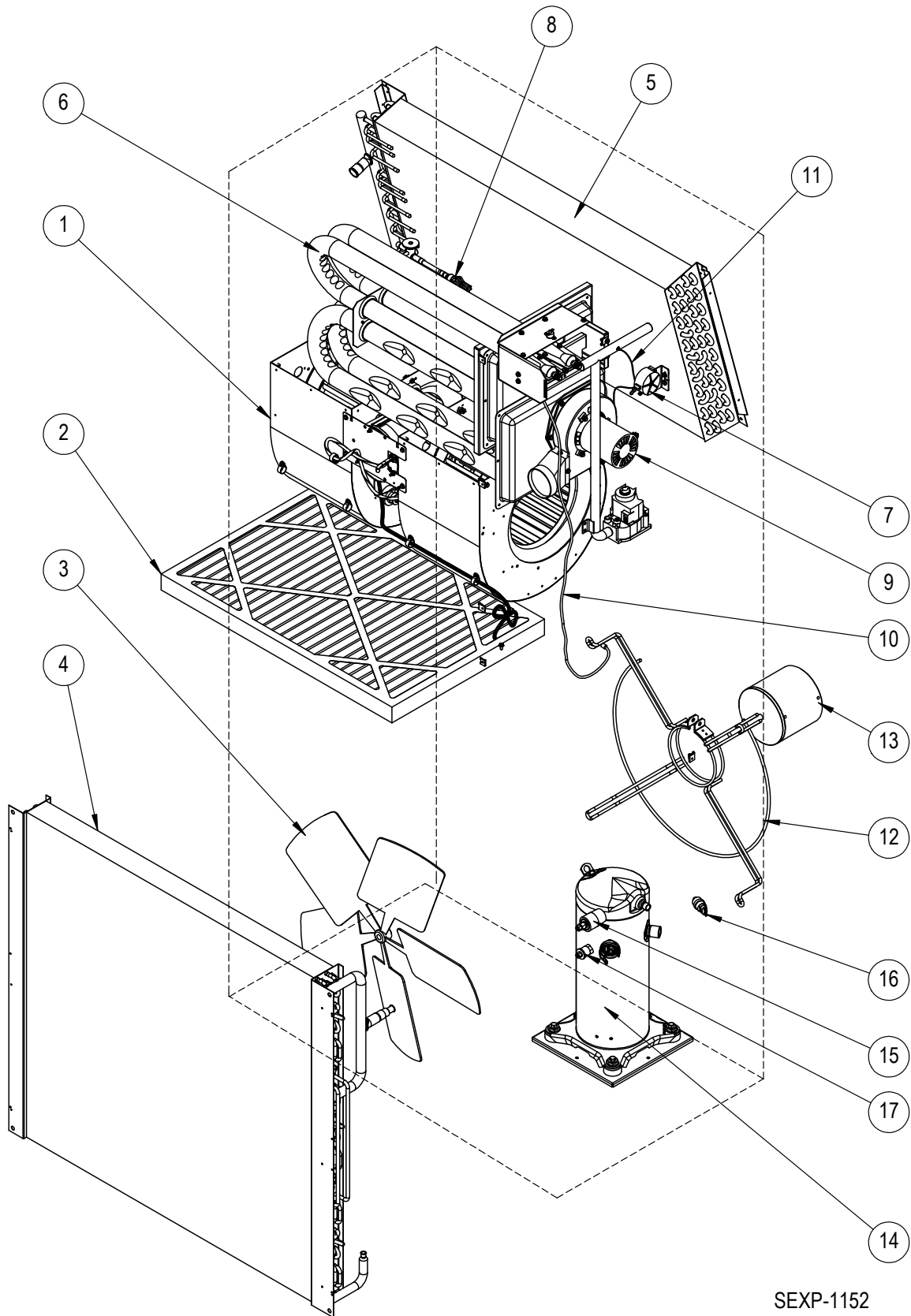
Drawing No.	Part No.	Description	WG2SF	WG2SFD	WG3SF	WG3SFD
<i>Continued from page 3</i>						
36	549-636BX	Lower Base	X	X	X	X
37	103-449BX	Lower Base Offset	X	X	X	X
38	517-364BX	Control Panel Assembly	X	X	X	X
39	521-441BX	Condenser Partition Assembly	X	X	X	X
40	509-491BX	Lower Back Assembly	X	X	X	X
41	113-268BX	Manifold Bracket	X	X	X	X
42	133-376BX	Inner Control Panel Door	X	X	X	X
NS	134-199BX	Conduit Access Panel	X	X	X	X
NS	156-030BX	Conduit Entrance Plate	X	X	X	X
45	5252-033BX	Bard Nameplate	X	X	X	X

NS - Not Shown

Refer to drawing on page 2

*This page intentionally left blank*

# FUNCTIONAL COMPONENTS – STANDARD & DEHUMIDIFICATION



SEXP-1152

## FUNCTIONAL COMPONENTS - STANDARD

Drawing No.	Part No.	Description	WG2SF-A	WG2SF-B	WG2SF-C	WG3SF-A	WG3SF-B	WG3SF-C
1	900-375-0278BX	Complete Blower Assembly 230/208	X	X				
1	900-376-0280BX	Complete Blower Assembly 460V			X			
1	900-375-0277BX	Complete Blower Assembly 230/208				X	X	
1	900-376-0279BX	Complete Blower Assembly 460V						X
2	7004-040	20 x 25 x 2 MERV 8 Filter (Standard)	X	X	X	X	X	X
2	7003-042	20 x 25 x 1 AF Filter	0	0	0	0	0	0
2	7004-071	20 x 25 x 2 MERV 13 Filter	0	0	0	0	0	0
2	7004-074	20 x 25 x 2 MERV 11 Filter	0	0	0	0	0	0
3	5151-045BX	Fan Blade	X	X	X	X	X	X
4	5051-066BX	Condenser Coil	X	X	X			
4	5054-066BX	Coated Condenser Coil	0	0	0			
4	5051-234BX	Condenser Coil				X	X	X
4	5054-234BX	Coated Condenser Coil				0	0	0
5	5060-148BX	Evaporator Coil	X	X	X			
5	5062-148BX	Coated Evaporator Coil	0	0	0			
5	5060-149BX	Evaporator Coil				X	X	X
5	5062-149BX	Coated Evaporator Coil				0	0	0
6	Heat Exchanger	See <b>BURNER COMPONENTS</b> on page 10	X	X	X	X	X	X
7	8406-103BX	.55" + .05" Pressure Switch	X	X	X	X	X	X
8	5625-007BX	Distributor 4 Tube	X	X	X			
8	5625-008BX	Distributor 6 Tube				X	X	X
9	8109-014BX	Induced Draft Blower 230V w/Transition	X	X		X	X	
9	8109-015BX	Induced Draft Blower 460V w/Transition			X			X
10	8600-011BX	Suppression Ignition Cable	X	X	X	X	X	X
11	3000-1615BX	Wire Assembly	X	X	X	X	X	X
12	8200-001BX	Fan Motor Mount	X	X	X	X	X	X
13	8103-029BX	Motor 230/208V	X	X		X	X	
13	8103-030BX	Motor 460V			X			X
14	8000-530BX	Compressor YAS20K1E-PFV-ASE	X					
14	8000-531BX	Compressor YAS20K1E-TF5-ASE		X				
14	8000-532BX	Compressor YAS20K1E-TFD-ASE			X			
14	8000-518BX	Compressor YAS30K1E-PFV-ASE				X		
14	8000-519BX	Compressor YAS30K1E-TF5-ASE					X	
14	8000-520BX	Compressor YAS30K1E-TFD-ASE						X
15	8406-112BX	Low Ambient Control	0	0	0	0	0	0
16	8406-166BX	Low Pressure Switch	X	X	X	X	X	X
17	8406-167BX	High Pressure Switch	X	X	X	X	X	X
NS	910-2277BX	RDS Assembly	X	X	X	X	X	X
NS	8408-048BX	Freeze Stat	0	0	0	0	0	0
NS	6031-009	Coremax Valve Core	X	X	X	X	X	X

NS - Not Shown

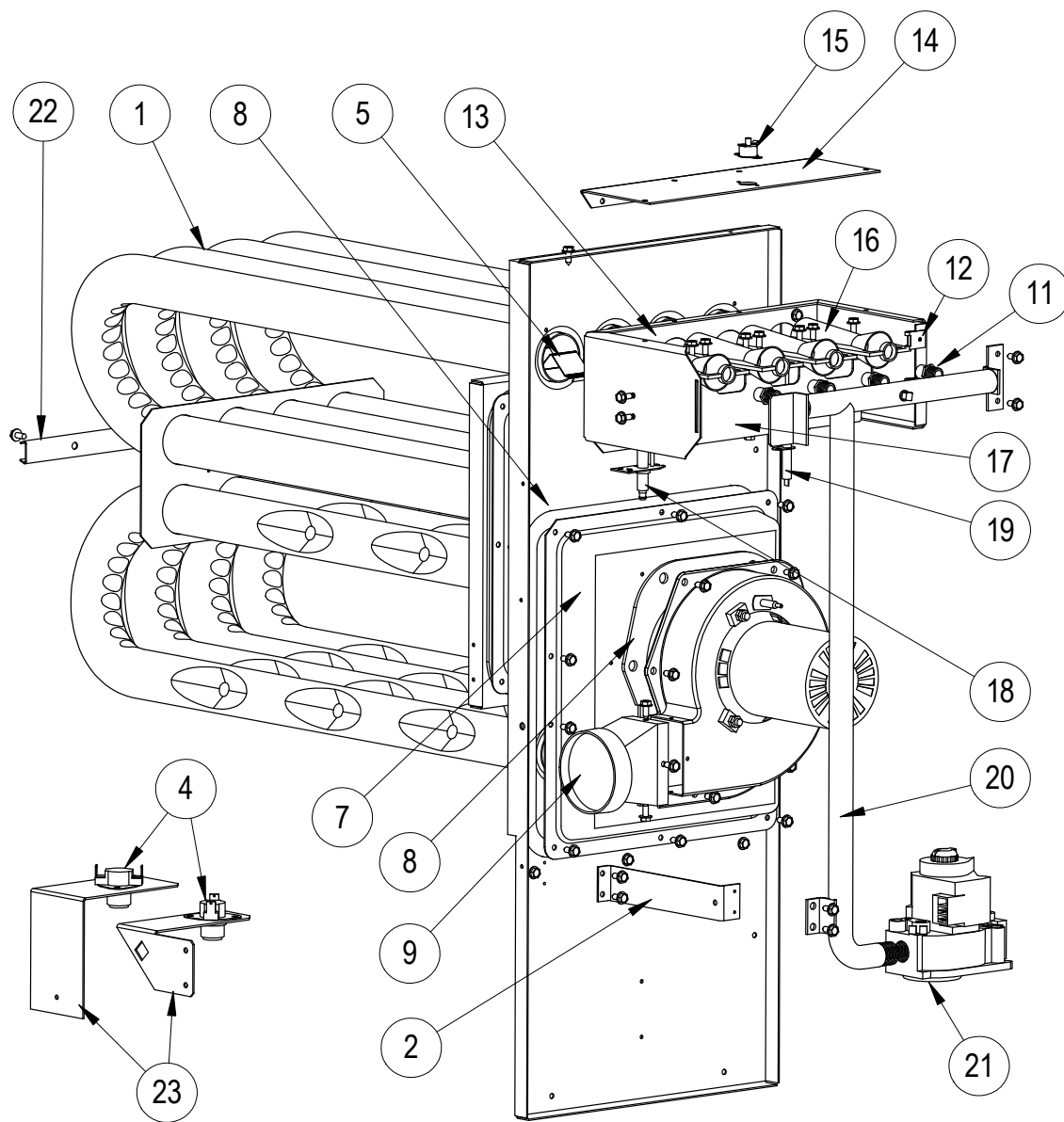
X - Standard  
0 - Optional

# FUNCTIONAL COMPONENTS – DEHUMIDIFICATION

Drawing No.	Part No.	Description	WG2SFDA	WG2SFDB	WG2SFDC	WG3SFDA	WG3SFDB	WG3SFDC
1	900-375-0278BX	Complete Blower Assembly 230/208	X	X				
1	900-376-0280BX	Complete Blower Assembly 460V			X			
1	900-375-0277BX	Complete Blower Assembly 230/208				X	X	
1	900-376-0279BX	Complete Blower Assembly 460V						X
2	7004-040	20 x 25 x 2 MERV 8 Filter (Standard)	X	X	X	X	X	X
2	7003-042	20 x 25 x 1 AF Filter	O	O	O	O	O	O
2	7004-071	20 x 25 x 2 MERV 13 Filter	O	O	O	O	O	O
2	7004-074	20 x 25 x 2 MERV 11 Filter	O	O	O	O	O	O
3	5151-045BX	Fan Blade	X	X	X	X	X	X
4	5051-066BX	Condenser Coil	X	X	X			
4	5054-066BX	Coated Condenser Coil	O	O	O			
4	5051-234BX	Condenser Coil				X	X	X
4	5054-234BX	Coated Condenser Coil				O	O	O
5	917-0154BX	Evaporator Coil	X	X	X			
5	917-0155BX	Coated Evaporator Coil	O	O	O			
5	917-0156BX	Evaporator Coil				X	X	X
5	917-0157BX	Coated Evaporator Coil				O	O	O
6	Heat Exchanger	See <b>BURNER COMPONENTS</b> on page 10	X	X	X	X	X	X
7	8406-103BX	.55" + .05" Pressure Switch	X	X	X	X	X	X
8	5625-007BX	Distributor	X	X	X			
8	5625-008BX	Distributor				X	X	X
9	8109-014BX	Induced Draft Blower 230V w/Transition	X	X		X	X	
9	8109-015BX	Induced Draft Blower 460V w/Transition			X			X
10	8600-011BX	Suppression Ignition Cable	X	X	X	X	X	X
11	3000-1615BX	Wire Assembly	X	X	X	X	X	X
12	8200-001BX	Fan Motor Mount	X	X	X	X	X	X
13	8103-029BX	Motor 230/208V	X	X		X	X	
13	8103-030BX	Motor 460V			X			X
14	8000-530BX	Compressor YAS20K1E-PFV-ASE	X					
14	8000-531BX	Compressor YAS20K1E-TF5-ASE		X				
14	8000-532BX	Compressor YAS20K1E-TFD-ASE			X			
14	8000-518BX	Compressor YAS30K1E-PFV-ASE				X		
14	8000-519BX	Compressor YAS30K1E-TF5-ASE					X	
14	8000-520BX	Compressor YAS30K1E-TFD-ASE						X
15	8406-112BX	Low Ambient Control	O	O	O	O	O	O
16	8406-166BX	Low Pressure Switch	X	X	X	X	X	X
17	8406-167BX	High Pressure Switch	X	X	X	X	X	X
NS	910-2277BX	RDS Assembly	X	X	X	X	X	X
NS	8408-048BX	Freeze Stat	O	O	O	O	O	O
NS	6031-009	Coremax Valve Core	X	X	X	X	X	X
NS	5651-219BX	Check Valve	X	X	X	X	X	X
NS	5650-051BX	Three Way Valve with Solenoid	X	X	X	X	X	X
NS	5651-245BX	Expansion Valve	X	X	X	X	X	X
NS	5651-246BX	EEV Cable and Stator	X	X	X	X	X	X
NS	8408-056BX	EEV Thermistor	X	X	X	X	X	X
NS	8406-158BX	Transducer	X	X	X	X	X	X
NS	5201-021BX	Filter Drier	X	X	X	X	X	X
NS	5650-046BX	Solenoid Coil	X	X	X	X	X	X

*This page intentionally left blank*

# BURNER COMPONENTS



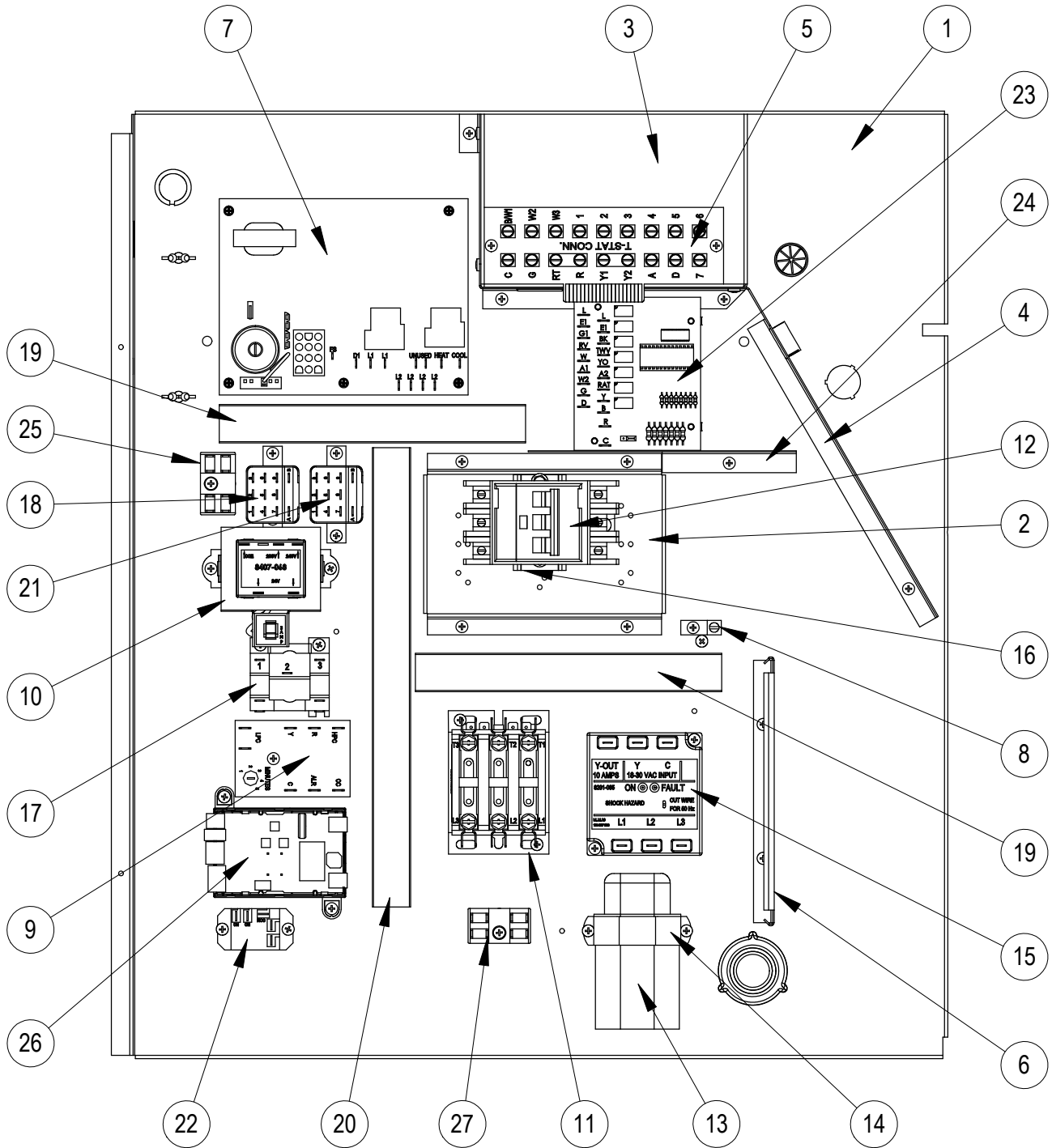
SEXP-678 A

# BURNER COMPONENTS

Drawing No.	Part No.	Description	WG2SF**XA	WG2SF**XB	WG2SF**XC	WG3SF**XA	WG3SF**XB	WG3SF**XC
1	171-303BX	Heat Exchanger Assembly (2 Burner)	X			X		
1	171-305BX	Heat Exchanger Assembly (3 Burner)		X			X	
1	171-307BX	Heat Exchanger Assembly (4 Burner)			X			X
2	113-268BX	Manifold Bracket	X	X	X	X	X	X
4	8402-180BX	Limit Control L140-30	X			X		
4	8402-178BX	Limit Control L120-30		X			X	
4	8402-177BX	Limit Control L115-30			X			X
7	168-142BX	Collector Box	X			X		
7	168-143BX	Collector Box		X			X	
7	168-144BX	Collector Box			X			X
8	1921-043BX	Gasket Set	X	X	X	X	X	X
9	5809-013BX	3" Cast Inducer Transition	X	X	X	X	X	X
11	9010-082BX	Orifice 2.30mm (.0885 diameter)	2	3	4	2	3	4
11	9010-087BX	Orifice 2.20mm (10% derate)	2	3	4	2	3	4
12	1012-314	U Clip Fastener	2	2	2	2	2	2
13	163-050BX	Burner Box	X			X		
13	163-049BX	Burner Box		X			X	
13	163-052BX	Burner Box			X			X
14	141-493BX	Flame Rollout Support	X	X		X	X	
14	141-494BX	Flame Rollout Support			X			X
15	8402-124BX	Flame Rollout Switch L270	X	X	X	X	X	X
16	9010-078BX	In-Shot Burner 2.5 x 4.5	2	3	4	2	3	4
17	163-048BX	Burner Support	X			X		
17	163-041BX	Burner Support		X			X	
17	163-043BX	Burner Support			X			X
18	8554-024BX	DSI Spark Igniter	X	X	X	X	X	X
19	8554-025BX	Flame Sensor	X	X	X	X	X	X
20	5818-053BX	2-Hole Gas Manifold - 1/2"	X			X		
20	5818-054BX	3-Hole Gas Manifold - 1/2"		X			X	
20	5818-055BX	4-Hole Gas Manifold - 1/2"			X			X
21	5651-160BX	Natural Gas Valve 1/2 x 1/2	X	X	X	X	X	X
22	168-140BX	Tube Brace 2 Burner	X			X		
22	168-135BX	Tube Brace 3 Burner		X			X	
22	168-134BX	Tube Brace 4 Burner			X			X
23	112-355BX	Limit Bracket	X			X		
23	112-475BX	Limit Bracket		X	X		X	X
NS	400-0203BX	Orifice Parts Bag 2 Tube 45K	X			X		
NS	400-0204BX	Orifice Parts Bag 3 Tube 67.5K		X			X	
NS	400-0205BX	Orifice Parts Bag 4 Tube 90K			X			X
NS	8600-011BX	Ignition Cable	X	X	X	X	X	X

NS – Not Shown

# CONTROL PANEL



SEXP-1013

This drawing to be used for reference for pages 13 and 14

# CONTROL PANEL

Dwg. No.	Part No.	Description	WG2SF-A	WG2SF-B	WG2SF-C	WG2SFDA	WG2SFDB	WG2SFDC	WG3SF-A	WG3SF-B	WG3SF-C	WG3SFDA	WG3SFDB	WG3SFDC
1	517-463BX	Control Panel	X	X	X	X	X	X	X	X	X	X	X	X
2	113-269BX	Circuit Breaker Mounting Bracket	X	X		X	X		X	X		X	X	
2	127-590BX	460V Disconnect Base			X			X			X			X
3	117-410BX	Low Voltage Box	X	X	X	X	X	X	X	X	X	X	X	X
4	117-409BX	Low Voltage Partition	X	X	X	X	X	X	X	X	X	X	X	X
5	8607-062BX	Terminal Strip	X	X	X	X	X	X	X	X	X	X	X	X
6	135-130BX	Wire Shield	X	X	X	X	X	X	X	X	X	X	X	X
7	5651-159BX	Integrated Furnace Control	X	X	X	X	X	X	X	X	X	X	X	X
8	8611-281	Terminal	X	X	X	X	X	X	X	X	X	X	X	X
9	8201-176BX	Compressor Control Module	X	X	X	X	X	X	X	X	X	X	X	X
10	8407-068BX	Transformer	X	X		X	X		X	X		X	X	
10	8407-069BX	Transformer			X			X			X			X
11	8401-002BX	Compressor Contactor		X	X		X	X		X	X		X	X
11	8401-025BX	Compressor Contactor	X			X			X			X		
12	8615-035BX	Circuit Breaker 20A 2-Pole	X			X								
12	8615-037BX	Circuit Breaker 30A 2-Pole							X			X		
12	8615-051BX	Circuit Breaker 25A 3-Pole								X			X	
12	8615-056BX	Circuit Breaker 15A 3-Pole		X			X							
12	8615-095BX	Toggle Disconnect			X			X			X			X
12	8615-096BX	Toggle Disconnect Cover			X			X			X			X
13	8552-002BX	Capacitor 5MFD 370V		X	X		X	X		X	X		X	X
13	8552-047BX	Capacitor 30/5MFD 370V	X			X								
13	8552-052BX	Capacitor 45/5MFD 370V							X			X		
14	8550-003BX	Capacitor Bracket 1-1/4" Oval		X	X		X	X		X	X		X	X
14	8550-008BX	Capacitor Bracket 2-1/2" Round	X			X			X			X		
15	8201-174BX	Phase Monitor		X	X		X	X		X	X		X	X
16	8611-209BX	DIN Rail		X	X	X	X	X		X	X	X	X	X
16	8611-210BX	DIN Rail	X	X	X	X	X	X	X	X	X	X	X	X
17	8201-032BX	Inducer Relay	X	X	X	X	X	X	X	X	X	X	X	X
18	8201-159BX	Blower Relay	X	X	X	X	X	X	X	X	X	X	X	X
19	8611-140-0800	Cable Duct - 8" x 1" Wide	X	X	X	X	X	X	X	X	X	X	X	X
20	8611-140-1200	Cable Duct - 12" x 1" Wide	X	X	X	X	X	X	X	X	X	X	X	X
21	8201-159BX	Lockout Relay				X	X	X				X	X	X
22	8201-130BX	Dehumidification Control Relay				X	X	X				X	X	X
23	8201-113BX	Dehumidification Logic Board				X	X	X				X	X	X
24	135-266BX	Wire Shield	X	X	X	X	X	X	X	X	X	X	X	X
25	8607-017BX	Terminal Block	X	X	X	X	X	X	X	X	X	X	X	X
26	8301-079-0005BX	EEV Control Board (see also page 8)				X	X	X				X	X	X
27	8607-017BX	Terminal Block - LAC Kit	0	0	0	0	0	0	0	0	0	0	0	0

Continued on page 14

X - Standard  
O - Optional

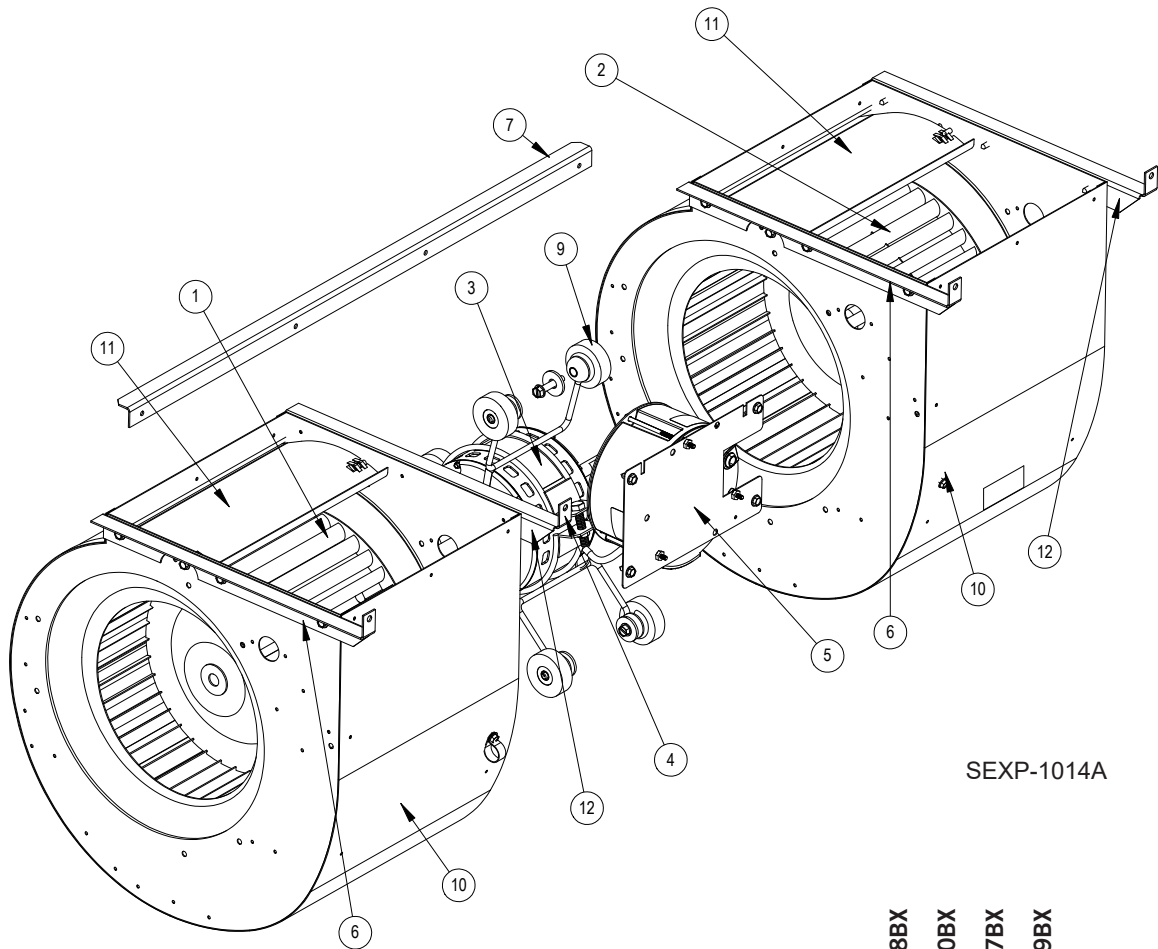
# CONTROL PANEL

Drawing No.	Part No.	Description	WG2SF-A	WG2SF-B	WG2SF-C	WG2SFDA	WG2SFDB	WG2SFDC	WG3SF-A	WG3SF-B	WG3SF-C	WG3SFDA	WG3SFDB	WG3SFDC
<i>Continued from page 13</i>														
NS	4218-101	Wiring Diagram	X						X					
NS	4218-102	Wiring Diagram				X						X		
NS	4218-201	Wiring Diagram		X						X				
NS	4218-202	Wiring Diagram					X						X	
NS	4218-301	Wiring Diagram			X						X			
NS	4218-302	Wiring Diagram						X						X
NS	3000-1616BX	Blower Power Plug	X	X	X	X	X	X	X	X	X	X	X	X
NS	3000-1617BX	Blower Speed Plug	X	X	X	X	X	X	X	X	X	X	X	X
NS	3000-1224BX	Compressor Power Plug	X			X			X			X		
NS	3000-1231BX	Compressor Power Plug		X	X		X	X		X	X		X	X
NS	3000-1223BX	Compressor Staging Solenoid Plus	X	X	X	X	X	X	X	X	X	X	X	X
NS	3003-212BX	Control Panel Wire Harness	X						X					
NS	3003-213BX	Control Panel Wire Harness		X	X					X	X			
NS	3003-214BX	Control Panel Wire Harness				X						X		
NS	3003-215BX	Control Panel Wire Harness					X	X					X	X
NS	3000-1618BX	Integrated Furnace Control Plug	X	X	X	X	X	X	X	X	X	X	X	X

NS - Not Shown

Refer to drawing on page 12

# BLOWER ASSEMBLY



SEXP-1014A

Drawing No.	Part No.	Description	900-375-0278BX	900-376-0280BX	900-375-0277BX	900-376-0279BX
1	5152-096BX	Blower Wheel	X	X	X	X
2	5152-072BX	Blower Wheel	X	X	X	X
3	8106-068-0278BX	Blower Motor & Control (230/208V)	X			
3	8106-068-0280BX	Blower Motor & Control (460V)		X		
3	8106-068-0277BX	Blower Motor & Control (230/208V)			X	
3	8106-068-0279BX	Blower Motor & Control (460V)				X
4	8200-040BX	Motor Mount	X	X	X	X
5	112-775BX	Motor Control Bracket	X	X	X	X
6	105Y1075BX	Angle – Left	2	2	2	2
7	105-1109BX	Angle – Back	X	X	X	X
9	5451-011	Grommet	6	6	6	6
10	151-117BX	Blower Housing	2	2	2	2
11	144-167BX	Diffuser	2	2	2	2
12	105X1075BX	Angle – Right	2	2	2	2