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# REPLACEMENT PARTS MANUAL

# WALL MOUNTED PACKAGE HEAT PUMPS

Models: **S38H1**      **W38H1**  
**S43H1**      **W43H1**  
**S49H1**      **W49H1**  
**S61H1**      **W61H1**

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## 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 you have the complete model and serial number available from the unit rating plates.

## Contents

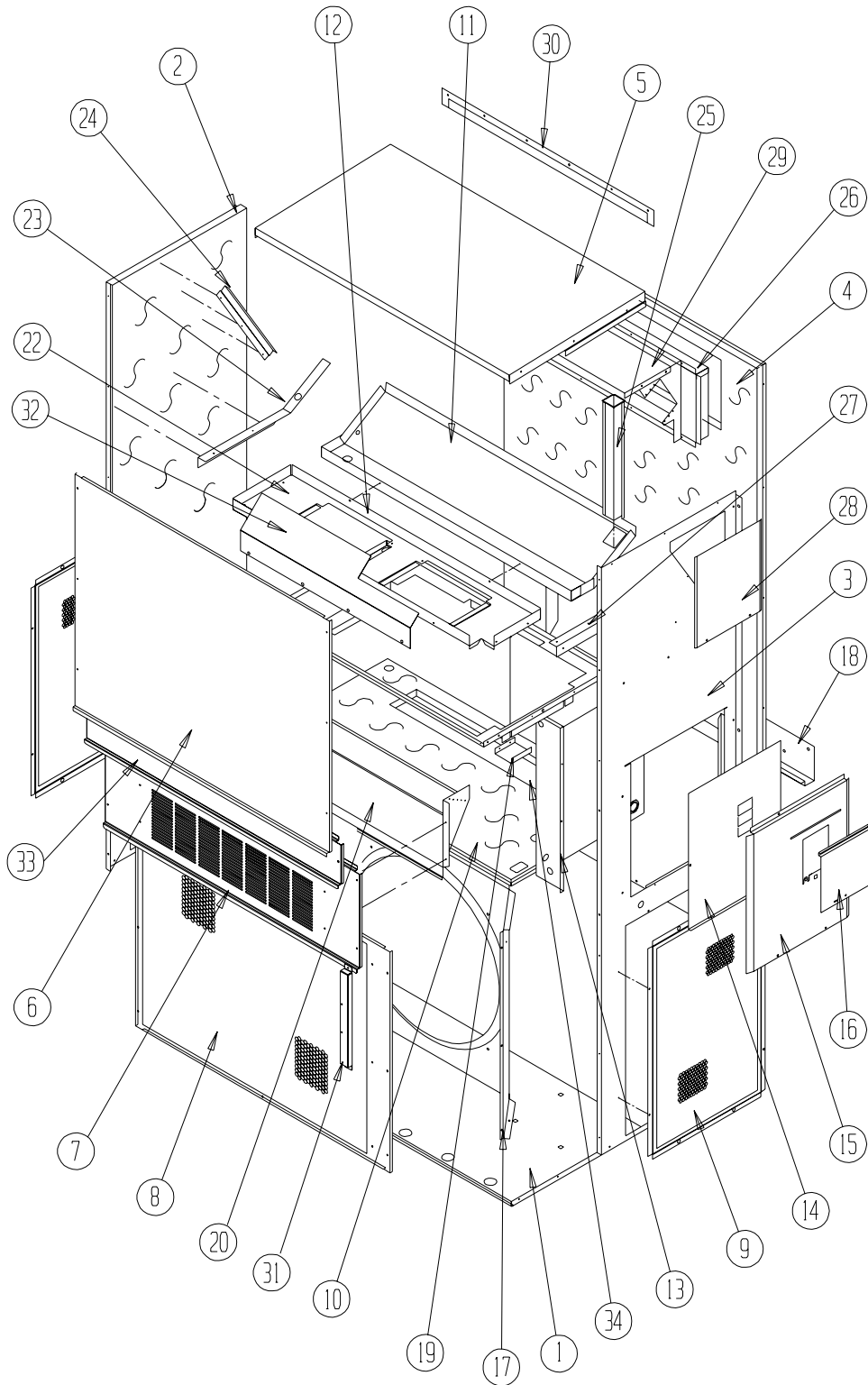
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Bard Manufacturing Company, Inc.  
Bryan, Ohio 43506  
*Since 1914...Moving ahead, just as planned.*

Manual: 2110-578  
Supersedes: **NEW**  
File: Tab 17  
Date: 10-02-09

# CABINET COMPONENTS



SEXP-545

# CABINET COMPONENTS

Dwg. No.	Part Number	Description	S38H1-A, B	S38H1-C	S43H1-A, B	S43H1-C	S49H1-A, B	S49H1-C	S61H1-A, B	S61H1-C
1	S127X214	Lower Base	X	X	X	X	X	X	X	X
2	S500-262-* ①	Left Side	X	X	X	X	X			
2	S500-316-* ①	Left Side							X	X
3	S500-261-* ①	Right Side	X	X	X	X	X	X		
3	S500-315-* ①	Right Side							X	X
4	S508-098	Back	X	X	X	X	X	X		
4	S508-129	Back							X	X
5	S506-142-* ①	Top	X	X	X	X	X	X	X	X
6	S514-144-* ①	Upper Front	X	X	X	X	X	X	X	X
7	S552-24 ①	Service Door	X	X	X	X	X	X	X	X
8	118-048-* ①	Condenser Grille	X	X	X	X	X	X		
8	118-052-* ①	Condenser Grille							X	X
9	118-057-* ①	Side Grille	2	2	2	2	2	2		
9	118-058-* ①	Side Grille							2	2
10	S521X258	Condenser Partition	X	X	X	X	X	X	X	X
11	S123-102	Drain Pan	X	X	X	X	X	X	X	X
12	121X216	Blower Partition	X	X	X	X	X	X	X	X
13	Control Panel Assembly	See Control Panel Assembly Drawing and Parts List Assembly	X	X	X	X	X	X	X	X
14	S132-114	Control Panel Cover (Inner)	X		X		X		X	
14	S132-183	Control Panel Cover (Inner)		X		X		X		X
15	S533-113-* ①	Control Panel Cover (Outer)	X	X	X	X	X	X	X	X
16	S153-218-* ①	Disconnect Access Door	X	X	X	X	X	X	X	X
17	125-024	Fan Shroud	X	X	X	X	X	X		
17	125-029	Fan Shroud							X	X
18	113-140	Bottom Mounting Bracket	X	X	X	X	X	X	X	X
19	137-209	Fill	X	X	X	X	X	X	X	X
20	BFAD-5	Fresh Air Damper Assembly	X	X	X	X	X	X	X	X
22	131X099	Filter Tray	X	X	X	X	X	X	X	X
23	105X877	Left Side Support	X	X	X	X	X	X	X	X
24	147-046	Left Evaporator Support	X	X	X	X	X	X	X	X
25	135-128	Raceway	2	2	2	2	2	2	2	2
26	S111X034	Outlet Air Frame Assembly	X	X	X	X	X	X	X	X
27	105X878	Right Side Support	X	X	X	X	X	X	X	X
28	S143-042-* ①	Right Side Cover Plate (Outer)	X	X	X	X	X	X	X	X
29	135-129	Heat Shield	X	X	X	X	X	X	X	X
30	113-150-* ①	Top Rain Flashing	X	X	X	X	X	X	X	X
32	135-175	Air Baffle	X	X	X	X	X	X	X	X
33	S553-384-* ①	Filter Door Assembly	X	X	X	X	X	X		
34	S536-258	Condenser Part. Blank-Off Plate	X	X	X	X	X	X	X	X

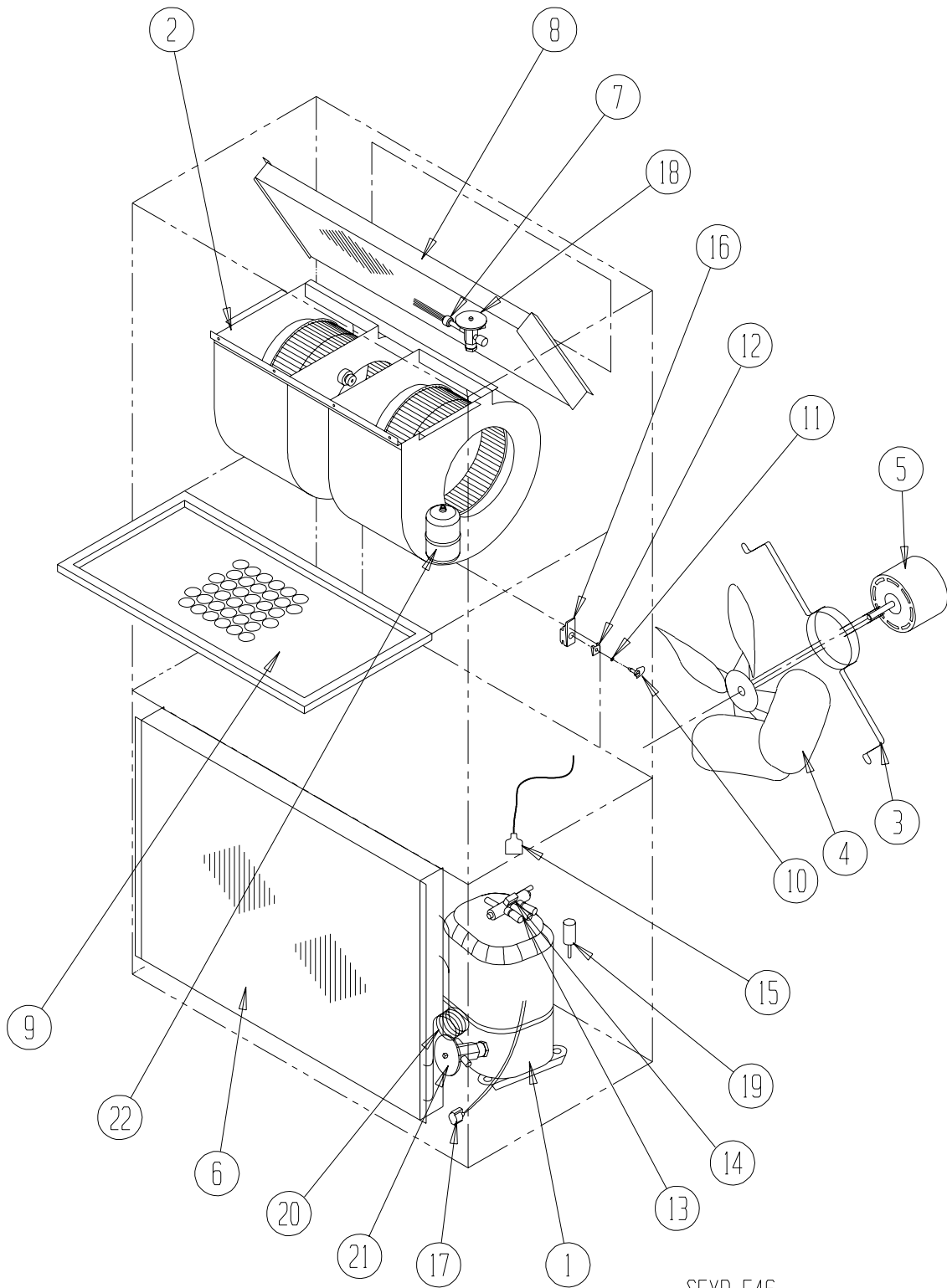
① Exterior cabinet parts are manufactured with various paint color options. To insure that you receive the proper paint color, you must include the complete model and serial number of the unit for which cabinet parts are being ordered.

# CABINET COMPONENTS

Dwg. No.	Part Number	Description	W38H1-A, B	W38H1-C	W43H1-A, B	W43H1-C	W49H1-A, B	W49H1-C	W61H1-A, B	W61H1-C
1	S127-299	Lower Base	X	X	X	X	X	X	X	X
2	S500-262-* ①	Left Side	X	X	X	X	X	X		
2	S500-316-* ①	Left Side							X	X
3	S500-261-* ①	Right Side	X	X	X	X	X	X		
3	S500-315-* ①	Right Side							X	X
4	S508-098	Back	X	X	X	X	X	X		
4	S508-129	Back							X	X
5	S506-142-* ①	Top	X	X	X	X	X	X	X	X
6	S514-144-* ①	Upper Front	X	X	X	X	X	X	X	X
7	S552-24 ①	Service Door	X	X	X	X	X	X	X	X
8	118-054-* ①	Condenser Grille	X	X	X	X	X	X		
8	118-055-* ①	Condenser Grille							X	X
9	118-057-* ①	Side Grille	2	2	2	2	2	2		
9	118-058-* ①	Side Grille							2	2
10	S521X258	Condenser Partition	X	X	X	X	X	X	X	X
11	S123-102	Drain Pan	X	X	X	X	X	X	X	X
12	121X216	Blower Partition	X	X	X	X	X	X	X	X
13	Control Panel Assembly	See Control Panel Assembly Drawing and Parts List Assembly	X	X	X	X	X	X	X	X
14	S132-114	Control Panel Cover (Inner)	X		X		X		X	
14	S132-183	Control Panel Cover (Inner)		X		X		X		X
15	S533-113-* ①	Control Panel Cover (Outer)	X	X	X	X	X	X	X	X
16	S153-322-* ①	Disconnect Access Door	X	X	X	X	X	X	X	X
17	125-036	Fan Shroud	X	X	X	X	X	X		
17	125-038	Fan Shroud							X	X
18	113-140	Bottom Mounting Bracket	X	X	X	X	X	X	X	X
19	137-209	Fill	X	X	X	X	X	X	X	X
20	BFAD-5	Fresh Air Damper Assembly	X	X	X	X	X	X	X	X
22	131X099	Filter Tray	X	X	X	X	X	X	X	X
23	105X877	Left Side Support	X	X	X	X	X	X	X	X
24	147-046	Left Evaporator Support	X	X	X	X	X	X	X	X
25	135-128	Raceway	2	2	2	2	2	2	2	2
26	S111X034	Outlet Air Frame Assembly	X	X	X	X	X	X	X	X
27	105X878	Right Side Support	X	X	X	X	X	X	X	X
28	S143-042-* ①	Right Side Cover Plate (Outer)	X	X	X	X	X	X	X	X
29	135-129	Heat Shield	X	X	X	X	X	X	X	X
30	113-150-* ①	Top Rain Flashing	X	X	X	X	X	X	X	X
31	113-259-* ①	Thermostat Shield	X	X	X	X	X	X	X	X
32	135-175	Air Baffle	X	X	X	X	X	X	X	X
33	S553-384-* ①	Filter Door Assembly	X	X	X	X	X	X	X	X

① Exterior cabinet parts are manufactured with various paint color options. To insure that you receive the proper paint color, you must include the complete model and serial number of the unit for which cabinet parts are being ordered.

# FUNCTIONAL COMPONENTS



SEXP-546

# FUNCTIONAL COMPONENTS

Drawing No.	Part No.	Description	S38H1-A	S38H1-B	S38H1-C	S43H1-A	S43H1-B	S43H1-C	S49H1-A	S49H1-B	S49H1-C	S61H1-A	S61H1-B	S61H1-C
1	8000-309	Compressor	X											
1	8000-310	Compressor		X										
1	8000-311	Compressor			X									
1	8000-349	Compressor				X								
1	8000-350	Compressor					X							
1	8000-351	Compressor						X						
1	8000-343	Compressor							X					
1	8000-344	Compressor								X				
1	8000-345	Compressor									X			
1	8000-324	Compressor										X		
1	8000-325	Compressor											X	
1	8000-326	Compressor												X
2	S900-272-003	Blower Assembly	X	X	X		X	X						
2	S900-272-004	Blower Assembly					X	X						
2	S900-273-007	Blower Assembly						X	X	X				
2	S900-273-006	Blower Assembly									X	X		
3	8200-004	Fan Motor Mount	X	X	X	X	X	X	X	X	X	X	X	X
4	5151-027	Fan Blade	X	X	X	X	X	X	X	X	X	X	X	X
5	8105-039	Condenser Motor	X	X		X	X		X	X		X	X	
5	8105-030	Condenser Motor			X		X				X			X
6	5051-107BX	Condenser Coil	X	X	X	X	X	X						
6	5051-077BX	Condenser Coil							X	X	X			
6	5051-160BX	Condenser Coil										X	X	X
7	800-0342	Cooling Distributor Assembly	X	X	X									
7	800-0287	Cooling Distributor Assembly				X	X	X						
7	800-0288	Cooling Distributor Assembly							X	X	X	X	X	X
8	5060-070BX	Evaporator Coil	X	X	X									
8	5060-138BX	Evaporator Coil				X	X	X						
8	5060-082BX	Evaporator Coil							X	X	X			
8	5060-0107BX	Evaporator Coil										X	X	X
9	7004-016	Air Filter 1" Throw Away	X	X	X	X	X	X	X	X	X	X	X	X
9	7003-030	Air Filter 1" Washable ①	X	X	X	X	X	X	X	X	X	X	X	X
9	7004-027	Air Filter 2" Pleated ①	X	X	X	X	X	X	X	X	X	X	X	X
10	1171-022	1/4" Turn Fastener	X	X	X	X	X	X	X	X	X	X	X	X
11	1171-024	1/4" Turn Retainer	X	X	X	X	X	X	X	X	X	X	X	X
12	1171-023	1/4" Receptacle	X	X	X	X	X	X	X	X	X	X	X	X
13	5650-039	Reversing Valve with 24V Solenoid Coil	X	X	X	X	X	X						
13	5650-040	Reversing Valve with 24V Solenoid Coil							X	X	X	X	X	X
14	5650-042	Rev. Valve Solenoid, Red Casing (Ranco)	X	X	X	X	X	X	X	X	X	X	X	X
14	5650-043	Rev. Valve Solenoid, Black Casing (Wilspec)	X	X	X	X	X	X	X	X	X	X	X	X
14	5650-046	Rev. Valve Solenoid, Black Casing (San Hua)	X	X	X	X	X	X	X	X	X	X	X	X
15	5650-037	Molded Plug 36" Lead	X	X	X	X	X	X	X	X	X	X	X	X
17	8620-095	Defrost Sensor	X	X	X	X	X	X	X	X	X	X	X	X
18	5651-174	Expansion Valve Cooling	X	X	X									
18	5651-178	Expansion Valve Cooling				X	X	X						
18	5651-198	Expansion Valve Cooling							X	X	X			
18	5651-199	Expansion Valve Cooling										X	X	X
19	1804-0385	High Pressure Switch (Flare) ①	X	X	X	X	X	X	X	X	X	X	X	X
20	800-0210	Heating Distributor Assembly	X	X	X	X	X	X						
20	800-0399	Heating Distributor Assembly							X	X	X			
20	800-0343	Heating Distributor										X	X	X
21	5651-178	Expansion Valve Heating	X	X	X	X	X	X	X	X	X			
21	5651-184	Expansion Valve Heating										X	X	X
22	5201-010	Filter Drier	X	X	X	X	X	X	X	X	X	X	X	X
NS	1804-0107	Low Pressure Switch (Flare) ①	X	X	X	X	X	X	X	X	X			
NS	CMA-28	Low Ambient Control (Flare) ①	X	X	X	X	X	X	X	X	X			
NS	3000-1222	Molded Compressor Plug										X		
NS	3000-1230	Molded Compressor Plug											X	X
NS	3000-1224	Molded Compressor Plug	X			X			X					
NS	3000-1231	Molded Compressor Plug		X	X		X		X	X				

NS – Not Shown

① – Optional

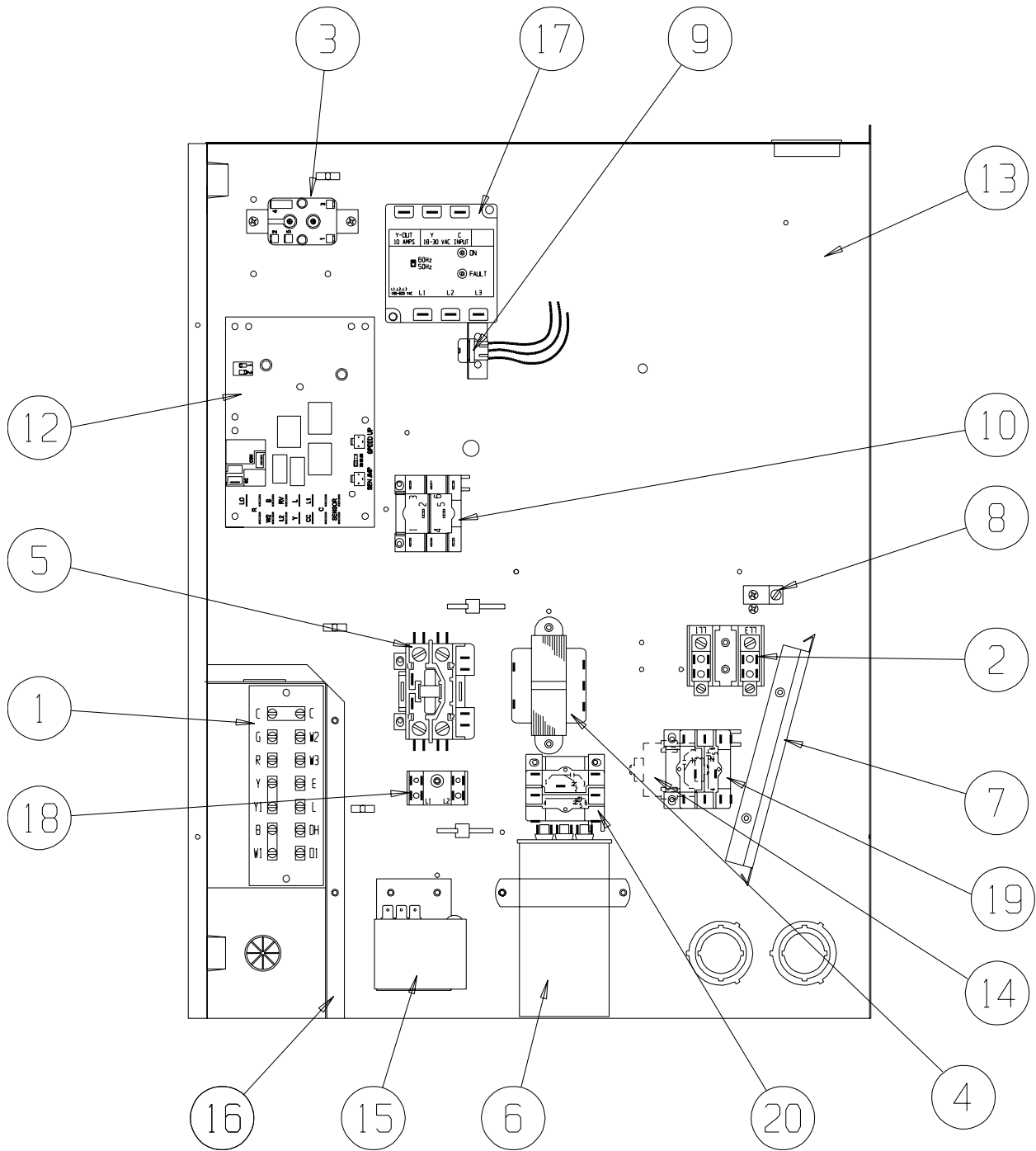
# FUNCTIONAL COMPONENTS

Drawing No.	Part No.	Description	W38H1-A	W38H1-B	W38H1-C	W43H1-A	W43H1-B	W43H1-C	W49H1-A	W49H1-B	W49H1-C	W61H1-A	W61H1-B	W61H1-C
1	8000-309	Compressor	X											
1	8000-310	Compressor		X										
1	8000-311	Compressor			X									
1	8000-349	Compressor				X								
1	8000-350	Compressor					X							
1	8000-351	Compressor						X						
1	8000-343	Compressor							X					
1	8000-344	Compressor								X				
1	8000-345	Compressor									X			
1	8000-324	Compressor										X		
1	8000-325	Compressor											X	
1	8000-326	Compressor												X
2	S900-272-003	Blower Assembly	X	X	X									
2	S900-272-004	Blower Assembly				X	X	X						
2	S900-273-007	Blower Assembly							X	X	X			
2	S900-273-006	Blower Assembly										X	X	X
3	8200-004	Fan Motor Mount	X	X	X	X	X	X	X	X	X	X	X	X
4	5151-054	Fan Blade	X	X	X	X	X	X	X	X	X	X	X	X
5	8105-039	Condenser Motor	X	X		X	X		X	X		X	X	
5	8105-030	Condenser Motor			X		X				X			X
6	5051-107BX	Condenser Coil	X	X	X	X	X	X						
6	5051-077BX	Condenser Coil							X	X	X			
6	5051-130BX	Condenser Coil										X	X	X
7	800-0342	Cooling Distributor Assembly	X	X	X									
7	800-0287	Cooling Distributor Assembly				X	X	X						
7	800-0288	Cooling Distributor Assembly							X	X	X	X	X	X
8	5060-070BX	Evaporator Coil	X	X	X									
8	5060-138BX	Evaporator Coil				X	X	X						
8	5060-082BX	Evaporator Coil							X	X	X			
8	5060-0107	Evaporator Coil										X	X	X
9	7004-016	Air Filter 1" Throw Away	X	X	X	X	X	X	X	X	X	X	X	X
9	7003-030	Air Filter 1" Washable ①	X	X	X	X	X	X	X	X	X	X	X	X
9	7004-027	Air Filter 2" Pleated ①	X	X	X	X	X	X	X	X	X	X	X	X
10	1171-022	1/4" Turn Fastener	X	X	X	X	X	X	X	X	X	X	X	X
11	1171-024	1/4" Turn Retainer	X	X	X	X	X	X	X	X	X	X	X	X
12	1171-023	1/4" Receptacle	X	X	X	X	X	X	X	X	X	X	X	X
13	5650-039	Reversing Valve with 24V Solenoid Coil	X	X	X	X	X	X						
13	5650-040	Reversing Valve with 24V Solenoid Coil							X	X	X	X	X	X
14	5650-042	Rev. Valve Solenoid, Red Casing (Ranco)	X	X	X	X	X	X	X	X	X	X	X	X
14	5650-043	Rev. Valve Solenoid, Black Casing (Wilspec)	X	X	X	X	X	X	X	X	X	X	X	X
14	5650-046	Rev. Valve Solenoid, Black Casing (San Hua)	X	X	X	X	X	X	X	X	X	X	X	X
15	5650-037	Molded Plug 3/8" Lead	X	X	X	X	X	X	X	X	X	X	X	X
16	1171-044	Latch - Locking	X	X	X	X	X	X	X	X	X	X	X	X
17	8620-095	Defrost Sensor	X	X	X	X	X	X	X	X	X	X	X	X
18	5651-174	Expansion Valve Cooling	X	X	X									
18	5651-178	Expansion Valve Cooling				X	X	X						
18	5651-198	Expansion Valve Cooling							X	X	X			
18	5651-199	Expansion Valve Cooling										X	X	X
19	1804-0385	High Pressure Switch (Flare) ①	X	X	X	X	X	X	X	X	X	X	X	X
20	800-0210	Heating Distributor Assembly	X	X	X	X	X	X						
20	800-0399	Heating Distributor Assembly							X	X	X			
20	800-0343	Heating Distributor										X	X	X
21	5651-178	Expansion Valve Heating	X	X	X	X	X	X	X	X	X			
21	5651-184	Expansion Valve Heating										X	X	X
22	5201-010	Filter Drier	X	X	X	X	X	X	X	X	X	X	X	X
NS	1804-0107	Low Pressure Switch (Flare) ①	X	X	X	X	X	X	X	X	X			
NS	CMA-28	Low Ambient Control (Flare) ①	X	X	X	X	X	X	X	X	X			
NS	3000-1222	Molded Compressor Plug										X		
NS	3000-1230	Molded Compressor Plug											X	X
NS	3000-1224	Molded Compressor Plug	X			X			X					
NS	3000-1231	Molded Compressor Plug		X	X	X	X		X	X				

NS – Not Shown

① – Optional

# CONTROL PANEL



SEXP-547



# CONTROL PANEL

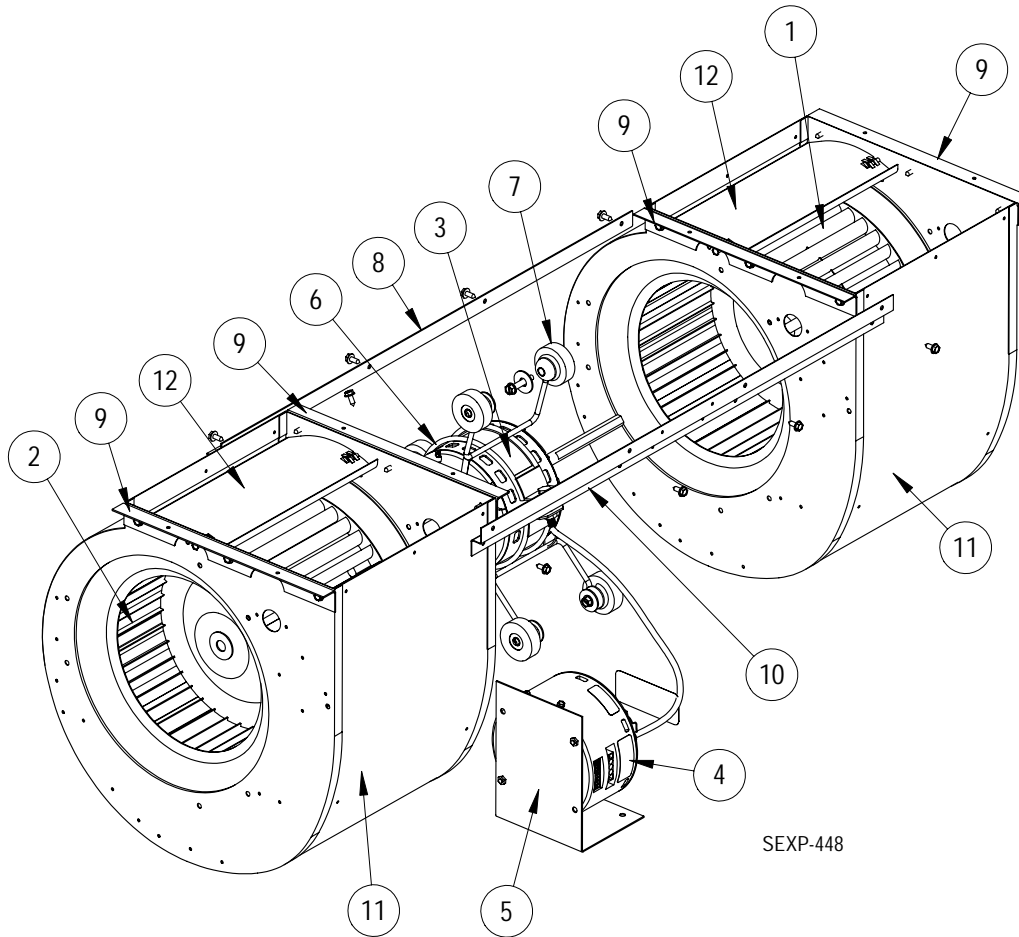
Drawing No.	Part No.	Description	S38H1-A, W38H1-A	S38H1-B, W38H1-B	S38H1-C, W38H1-C	S43H1-A, W43H1-A	S43H1-B, W43H1-B	S43H1-C, W43H1-C	S49H1-A, W49H1-C	S49H1-B, W49H1-C	S49H1-C, W49H1-C	S60H1-A, W60H1-C	S60H1-B, W60H1-C	S60H1-C, W60H1-C
1	8607-019	Low Voltage Terminal Strip	X	X	X	X	X	X	X	X	X	X	X	X
2	8607-013	Terminal Block 2 Pole	X			X		X				X		
2	8607-014	Terminal Block 3 Pole		X	X		X	X		X	X		X	X
2	8607-015	Phenolic Insulator			X			X			X			X
3	8201-009	Blower Control Relay	X	X		X	X	X	X	X		X	X	
3	8201-032	Blower Control Relay			X			X			X			X
4	8407-03	Transformer	X	X		X	X		X	X		X	X	
4	8407-042	Transformer			X			X			X			X
5	8401-002	Compressor Contactor		X	X		X	X			X			X
5	8401-016	Compressor Contactor	X			X		X	X	X		X	X	
6	8552-005	Outdoor Motor Capacitor		X	X		X	X		X	X			
6	8552-079	Compressor Capacitor	X			X								
6	8552-089	Compressor Capacitor						X				X		
6	8552-058	Compressor Capacitor										X		
7	135-130	Wire Shield	X	X	X	X	X	X	X	X	X	X	X	X
8	8611-006	Ground Terminal	X	X	X	X	X	X	X	X	X	X	X	X
9	3000-1324	6 Pin Connector	X	X	X	X	X	X	X	X	X	X	X	X
10	8201-086	Low Ambient Bypass Relay ①	X	X	X	X	X	X	X	X	X	X	X	X
12	8201-119	Heat Pump Control Board	X	X	X	X	X	X	X	X	X	X	X	X
13	117X143	Control Panel	X	X	X	X	X	X	X	X	X	X	X	X
14	8551-004	Start Device ① PTCR	X			X			X			X		
15	8408-034	Outdoor Fan Thermostat	X	X	X	X	X	X	X	X	X	X	X	X
16	117X139	Low Voltage Box	X	X	X	X	X	X	X	X	X	X	X	X
17	8201-085	Phase Monitor		X	X		X	X		X	X		X	X
18	8607-017	Terminal Block ①	X	X	X	X	X	X	X	X	X	X	X	X
19	8201-086	Motor Speed Relay			X			X			X			X
20	8201-032	Outdoor Fan Relay			X			X			X			X
NS	4096-149	Wiring Diagram	X			X			X			X		
NS	4096-249	Wiring Diagram		X			X			X			X	
NS	4096-349	Wiring Diagram			X			X			X			X
NS	8615-038	Circuit Breaker 35A 2 Pole (0Z)	X											
NS	8615-039	Circuit Breaker 45A 2 Pole (0Z)				X								
NS	8615-040	Circuit Breaker 50A 2 Pole (0Z)						X						
NS	8615-051	Circuit Breaker 25A 3 Pole (0Z)		X			X							
NS	8615-044	Circuit Breaker 35A 3 Pole (0Z)					X			X				
NS	8615-041	Circuit Breaker 60A 2 Pole (0Z)										X		
NS	8615-043	Circuit Breaker 40A 3 Pole (0Z)											X	
NS	S8615-068	Rotary Disconnect (0Z)			X			X			X			X

NS – Not Shown

① – Optional



# BLOWER ASSEMBLY



SEXP-448

Drawing No.	Part No.	Description	S900-272-003	S900-272-004	S900-273-006	S900-273-007
1	5152-011	10-Inch Wheel (CW)	X	X	X	X
2	5152-012	10-Inch Wheel (CCW)	X	X	X	X
3	S8106-041-0062	1/2 HP Programmed Motor	X			
3	S8106-041-0061	1/2 HP Programmed Motor		X		
3	S8107-011-0063	3/4 HP Programmed Motor			X	
3	S8107-011-0070	3/4 HP Programmed Motor				X
4	C8106-041-0062	Programmed Motor Control Only	X			
4	C8106-041-0061	Programmed Motor Control Only		X		
4	C8107-011-0063	Programmed Motor Control Only			X	
4	C8107-011-0070	Programmed Motor Control Only				X
5	112-314	Blower Motor Control Bracket	X	X	X	X
6	8200-040	Motor Mount	X	X	X	X
7	5451-011	Grommets	6	6	6	6
8	105-881	Back Brace	X	X	X	X
9	105-880	Side Angle	4	4	4	4
10	103-389	Front Brace	X	X	X	X
11	151-101	Housing	2	2	2	2
12	144-166	Diffuser	2	2	2	2