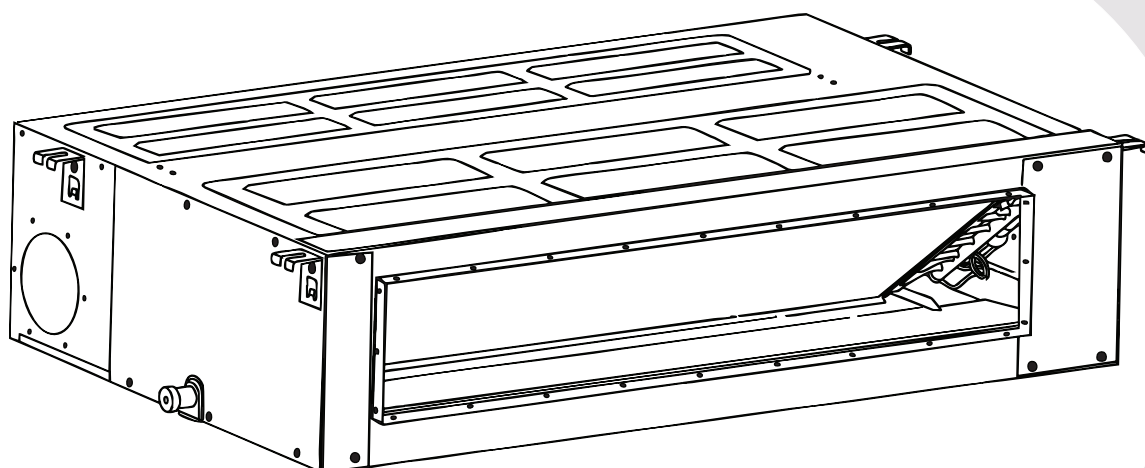


PIONEER®

RYB-20 Inverter Series

For 36,000-48,000 BTU/hr Systems

Quantum Ultra (R-454B) - UB Indoor and YN Outdoor



Expanded Parts Diagrams

IMPORTANT NOTICE:

Read this manual carefully before installing or operating your new air conditioning system. Be sure to save this manual for future reference.

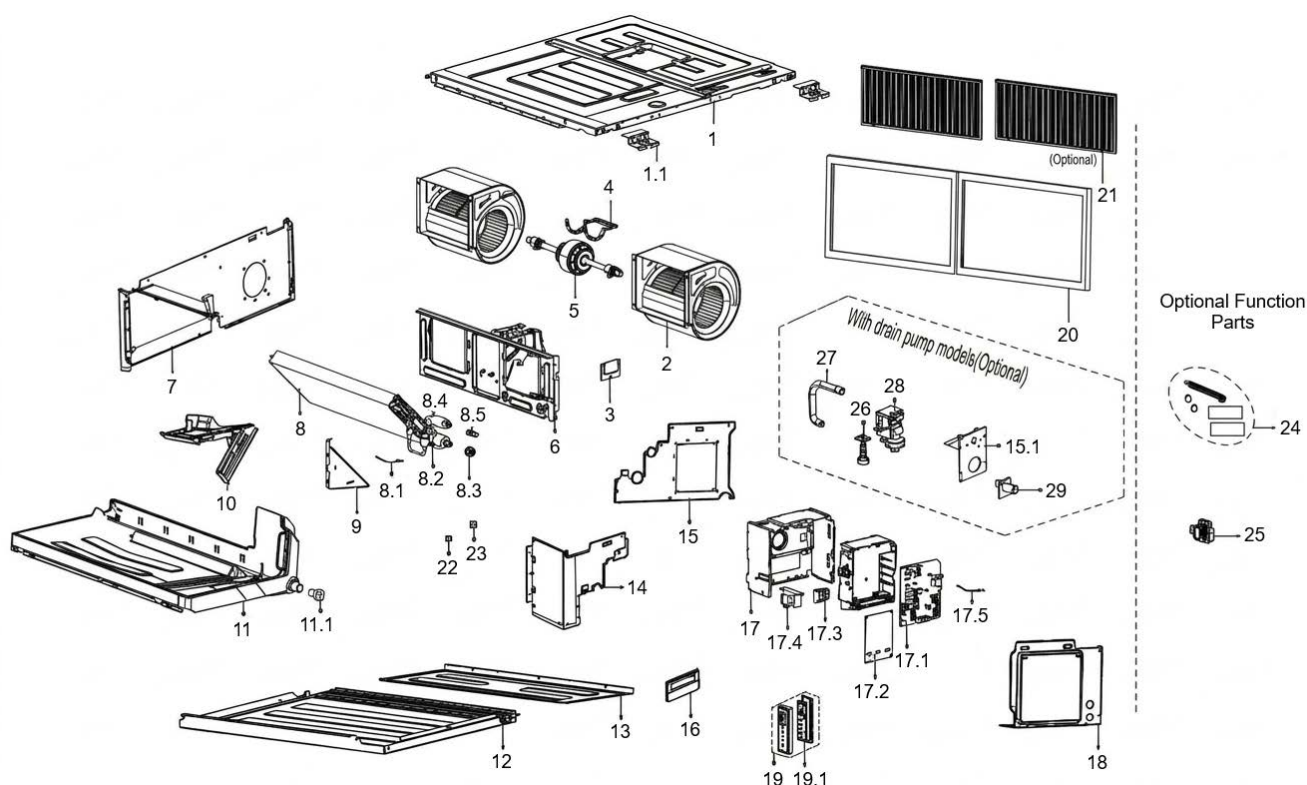
Model Numbers

Note

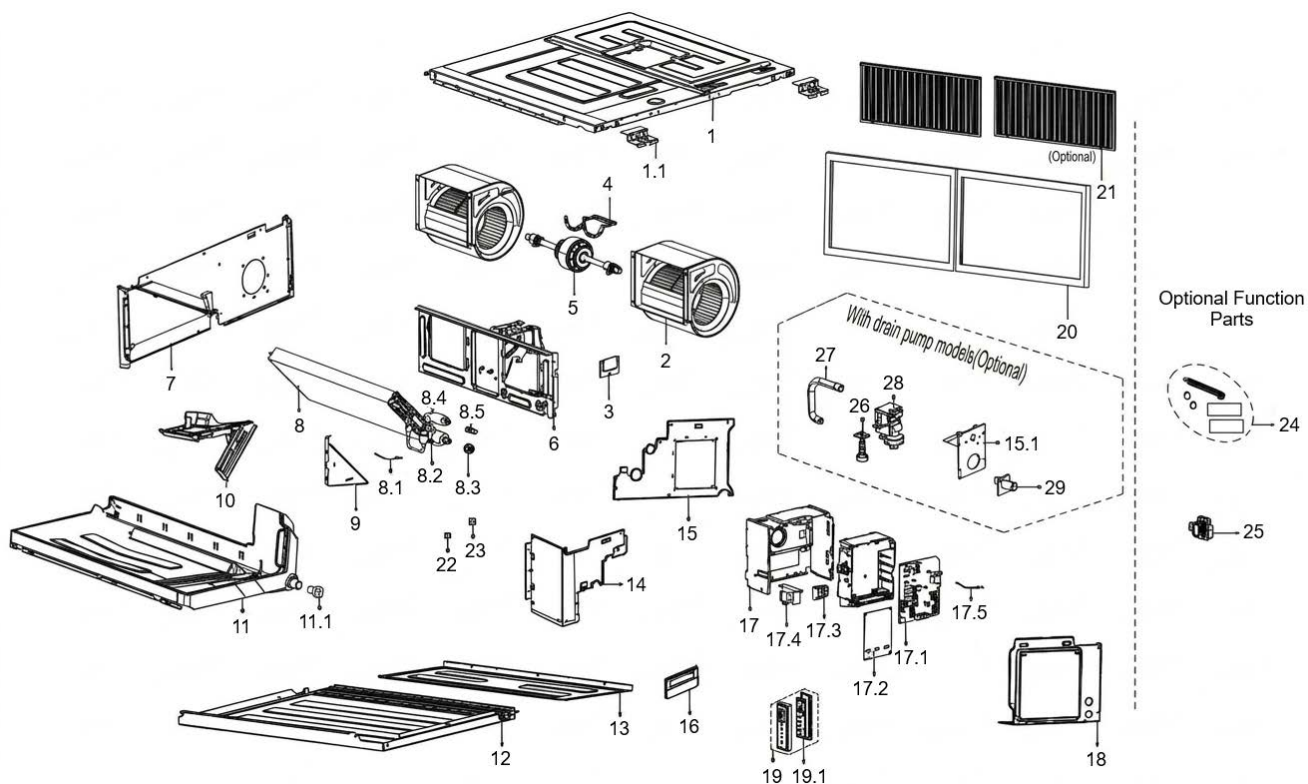
Serial numbers are typically located behind the electronic control box cover cap of each unit.

Model	Full System	Indoor Unit	Outdoor Unit
36K	RYB036GMSI20RL	RB036GMSILDFHG	YN036GMSI20RUG
48K	RYB048GMSI20RL	RB048GMSILDFHG	YN048GMSI20RUG

Indoor Unit: RB036GMSILDFHG

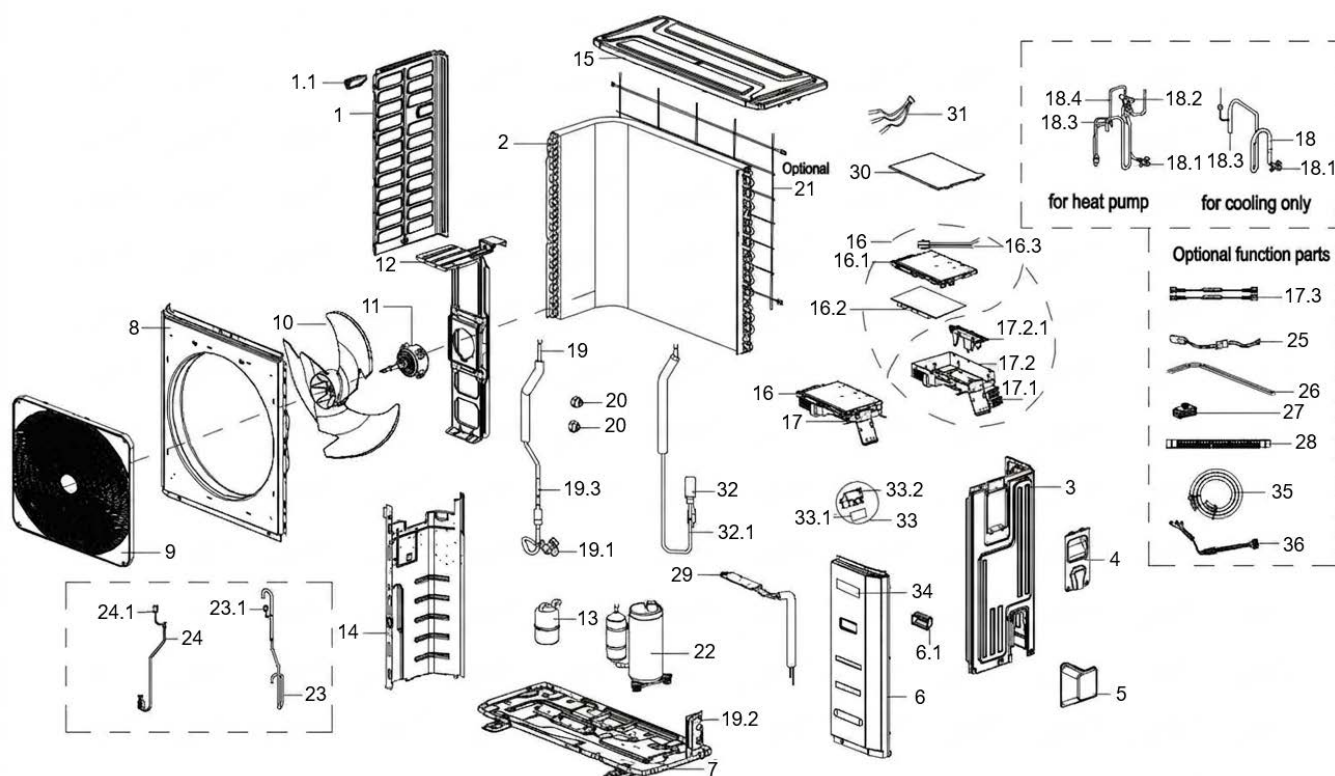


No.	Part No.	Part Name	Qty.	Remark
1	12223000017648	Chassis	1	
1.1	12223000016988	Hook	1	
2	12200101000333	Blower Wheel	1	
3	12222200008378	Cover Assembly	1	
4	12223000017049	Fan Motor Mounting Bracket	1	
5	11002015019437	Fan Motor (Brushless DC)	1	
6	12223000017637	Middle Beam Subassembly	1	
7	12223000017634	Left Clapboard	1	
8	15823000008486	Indoor Coil	1	
8.1	11201007003444	Pipe Temperature Sensor	1	
8.2	15123000014507	Suction Line	1	
8.3	15500404000008	Pipe Nut	1	
8.4	15123000014050	Refrigerant Distributor	1	
8.5	15500209000002	Pin Valve	1	
9	12223000017636	Evaporator Right Support Board Subassembly	1	
10	12123000003460	Condensate Drain Pan	1	
11	12123000003480	Condensate Drain Pan	1	
11.1	12600801000883	Plug	1	
12	12223000017510	Cover Panel (Top)	1	
13	12223000017635	Cover Panel (Rear)	1	
14	12223000017639	Right Clapboard	1	
15	12223000017638	Clamp Board	1	
15.1	12223000017032	Exhaust Pump Support Welding	1	
16	17317100A44202	Wired Controller	1	
17	17223000013585	Control Box	1	
17.1	17123000015630	Printed Circuit Board (PCB)	1	
17.2	17122000063314	Inverter Module	1	

Indoor Unit: RB036GMSILDFHG

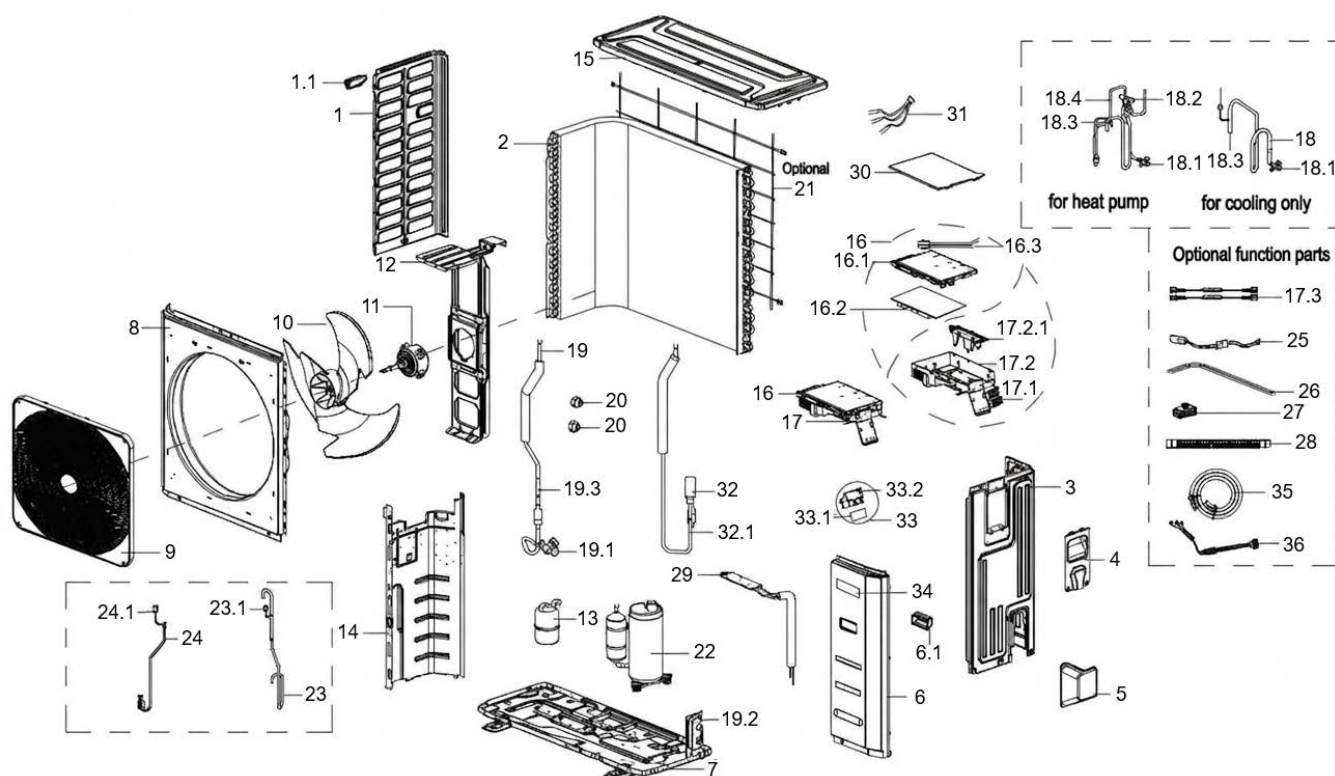
No.	Part No.	Part Name	Qty.	Remark
17.3	17400401000085	Wire Joint	1	
17.4	17400306000070	Reactor	1	
17.5	11201007007443	Room Temperature Sensor	1	
18	12223000017509	Control Box Cover	1	
19	17223000000003	Display Panel Assembly	1	
19.1	171230000002712	Display Panel	1	
20	12223000017513	Right Clapboard	1	
21	12223000017514	Air Filter	1	
22	15500406000010	Copper Flare Nut	1	
23	15500406000008	Copper Flare Nut	1	
24	12011600A00310	Condensate Drain Kit	1	
25	11201003000344	Gas Leak Detector	1	
26	17400511001544	Water Level Switch	1	
27	126230000000294	Rubber Tube	1	
28	11001012001251	Wet Rotor Circulator	1	
29	12100510000021	Drain Hose	1	

Outdoor Unit: YN036GMSI20RUG



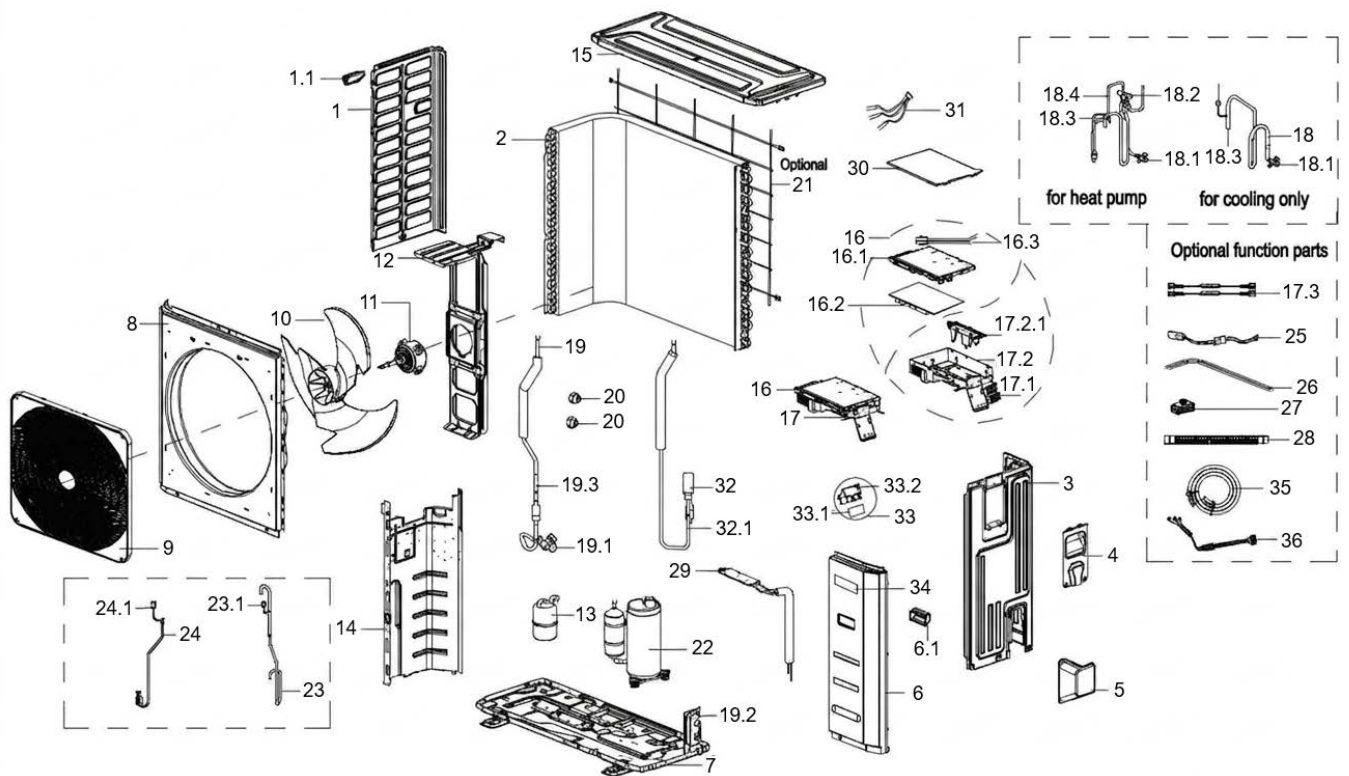
No.	Part No.	Part Name	Qty.	Remark
1	12222000006665	Left Side Panel	1	
1.1	12100701000033	Small Handle	1	
2	15822000014546	Condensing Unit	1	
3	12222000019926	Right Side Panel	1	
4	12222000011085	Large Handle	1	
5	12122200002695	Condensate Drain Pan	1	
6	12222500003152	Front Right Panel	1	
6.1	12100702000038	Handle	1	
7	12222000004018	Chassis	1	
8	12222000A01431	Front Panel	1	
9	12222000014845	Air Outlet Grille	1	
10	12100105000084	Fan Blade (Axial Flow)	1	
11	11002015020443	Fan Motor (Brushless DC)	1	
12	12222000005162	Fan Motor Mounting Bracket	1	
13	15500508000002	Liquid-Storage Tank	1	
14	12222000023005	Partition Board	1	
15	12222500000587	Top Cover	1	
16	17222000048811	Control Box	1	
16.1	12122000034104	Electronic Installation Box	1	
16.2	17122000070100	Printed Circuit Board (PCB)	1	
16.3	17401203026201	HV Junction Cable	1	
17	17222000043453	Terminal Board	1	
17.1	17400401006536	Wire Joint	1	
17.2	12222000018888	Electronic Installation Box	1	
17.2.1	12122000033782	U-Typed Support with Copper Pipe	1	
17.3	17401203032140	HV Junction Cable	1	

Outdoor Unit: YN036GMSI20RUG



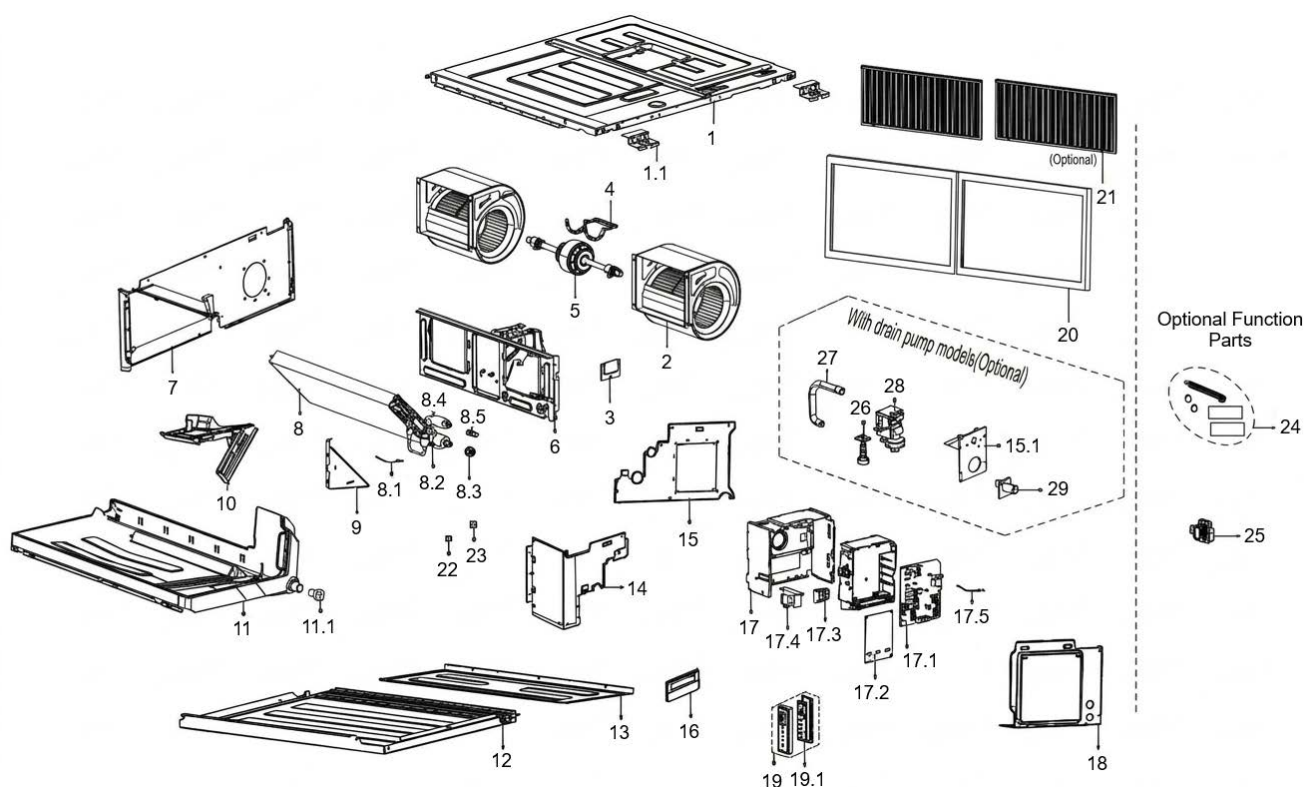
No.	Part No.	Part Name	Qty.	Remark
18	15422500001296	4-Way Valve Assembly	1	
18.1	15500204000662	Gas Valve	1	
18.2	15500216002483	4-Way Valve	1	
18.3	15123000008207	Suction Line	1	
18.4	15123000003661	Discharge Line	1	
19	15422000025717	Liquid Valve Assembly	1	
19.1	15500208000286	Liquid Valve	1	
19.2	1222200000611	Valve Installation Plate	1	
19.3	15500210003208	Throttle Valve	1	
20	15500406000008	Flare Nut	1	
	15500406000010	Flare Nut	1	
21	12222000006604	Rear Grille	1	
22	11103020000719	Compressor (Rotary Inverter)	1	
23	15122500001076	Suction Line Assembly	1	
23.1	17400516000848	Pressure Controller	1	
24	15122000028897	Discharge Line Assembly	1	
24.1	17400516000849	Pressure Controller	1	
25	17402001001059	Crankcase Heater	1	
26	17402002000466	Heater	1	
27	12600401000813	Rubber Pad	1	
28	12100509000038	Drain Hose	1	
29	15122000033880	Radiator	1	
30	12222000018405	Cover Plate Assembly	1	
31	11201011001107	Temperature Sensor	1	
32	15422000017858	Electronic Expansion Valve Assembly	1	
32.1	15500213002289	Electronic Expansion Valve	1	

Outdoor Unit: YN036GMSI20RUG



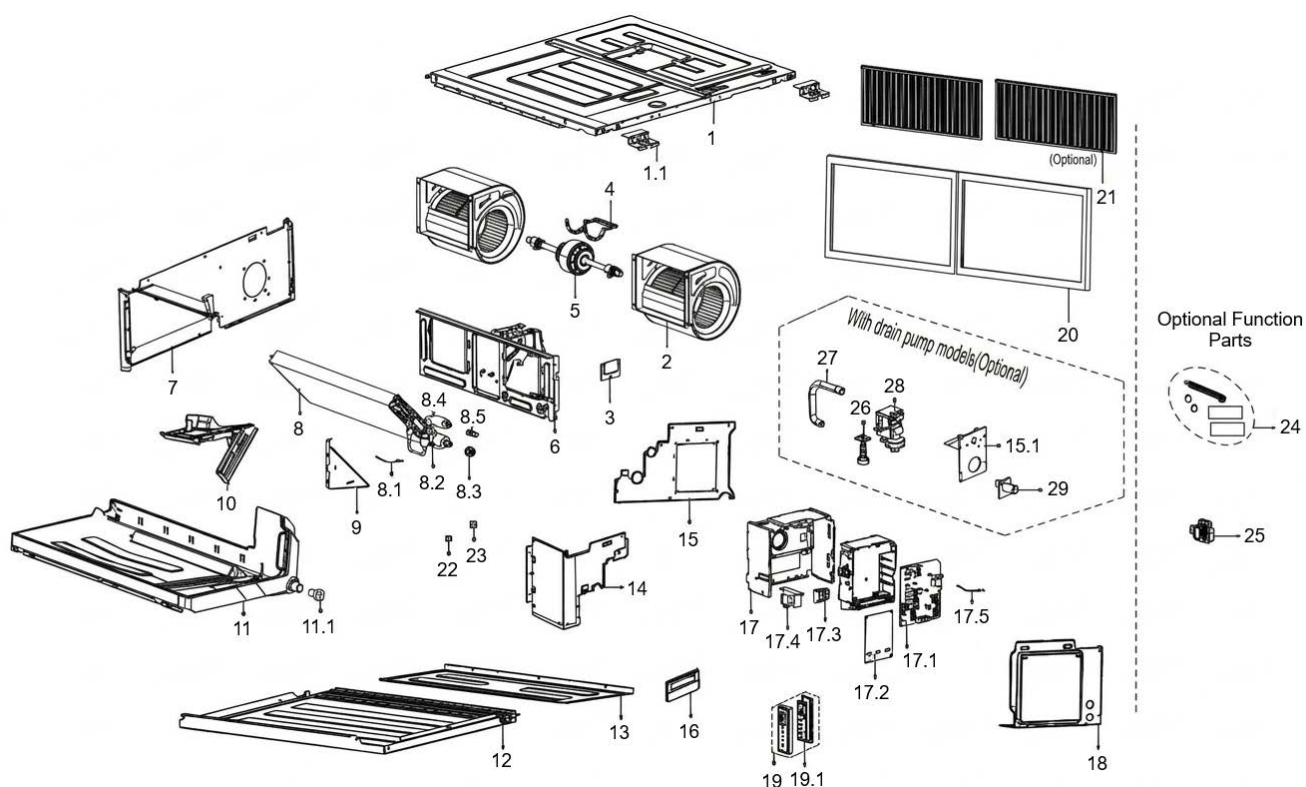
No.	Part No.	Part Name	Qty.	Remark
33	17222000043452	Keyboard Box	1	
33.1	17122000063037	Keyboard	1	
33.2	12122000025661	DR Installation Foundation	1	
34	16022000B78474	Trademark	1	
35	12011600A00350	Accessory Kit	1	
36	17401203000751	Compressor Wires	1	

Indoor Unit: RB048GMSILDFHG



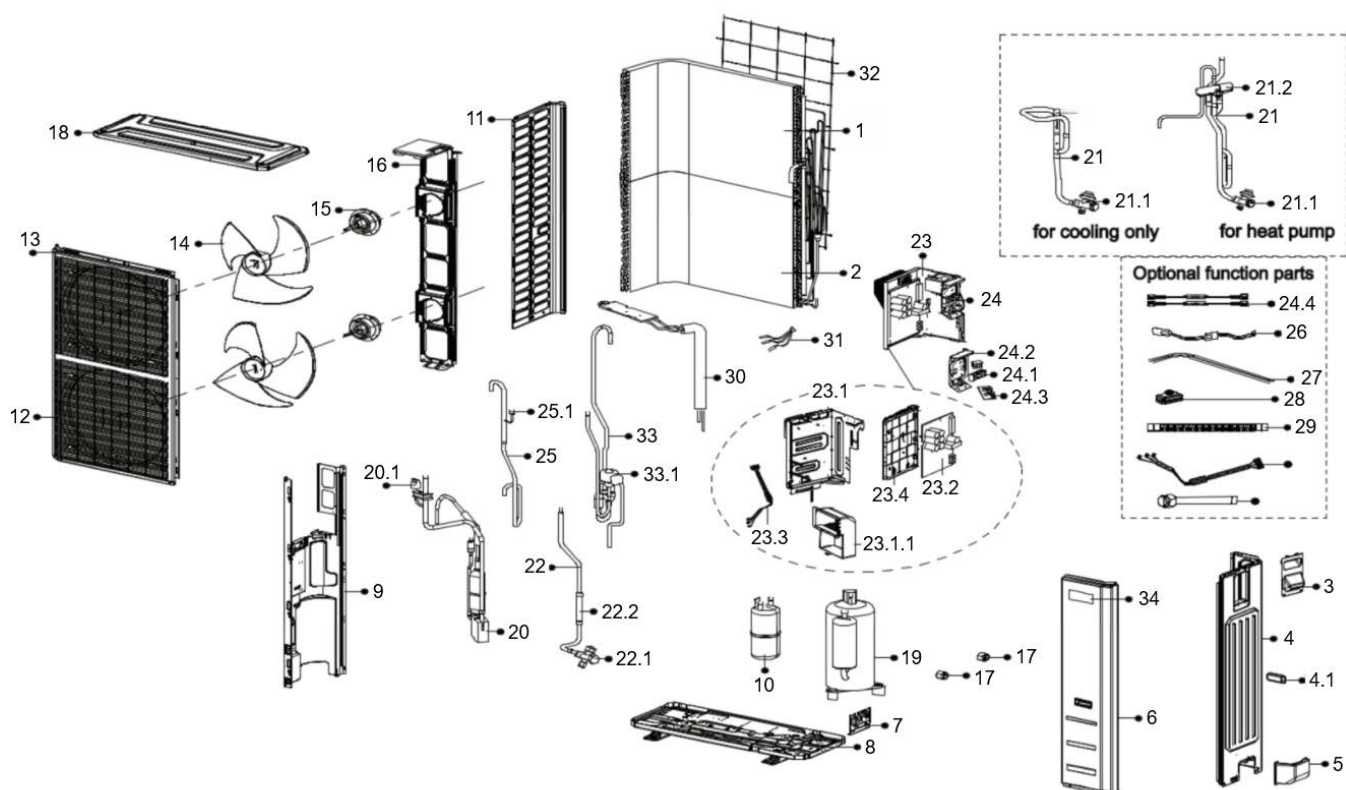
No.	Part No.	Part Name	Qty.	Remark
1	12223000017648	Chassis	1	
1.1	12223000016988	Hook	1	
2	12200101000333	Blower Wheel	1	
3	12222200008378	Cover Assembly	1	
4	12223000017049	Fan Motor Mounting Bracket	1	
5	11002015019434	Fan Motor (Brushless DC)	1	
6	12223000017637	Middle Beam Subassembly	1	
7	12223000017634	Left Clapboard	1	
8	15823000008486	Indoor Coil	1	
8.1	11201007003444	Pipe Temperature Sensor	1	
8.2	15123000014507	Suction Line	1	
8.3	15500404000008	Pipe Nut	1	
8.4	15123000014050	Refrigerant Distributor	1	
8.5	155002090000002	Pin Valve	1	
9	12223000017636	Evaporator Right Support Board Subassembly	1	
10	12123000003460	Condensate Drain Pan	1	
11	12123000003480	Condensate Drain Pan	1	
11.1	12600801000883	Plug	1	
12	12223000017510	Cover Panel (Top)	1	
13	12223000017635	Cover Panel (Rear)	1	
14	12223000017639	Right Clapboard	1	
15	12223000017638	Clamp Board	1	
15.1	12223000017032	Exhaust Pump Support Welding	1	
16	17317100A44202	Wired Controller	1	
17	17223000013589	Control Box	1	
17.1	17123000015627	Printed Circuit Board (PCB)	1	
17.2	17122000063311	Inverter Module	1	

Indoor Unit: RB048GMSILDFHG



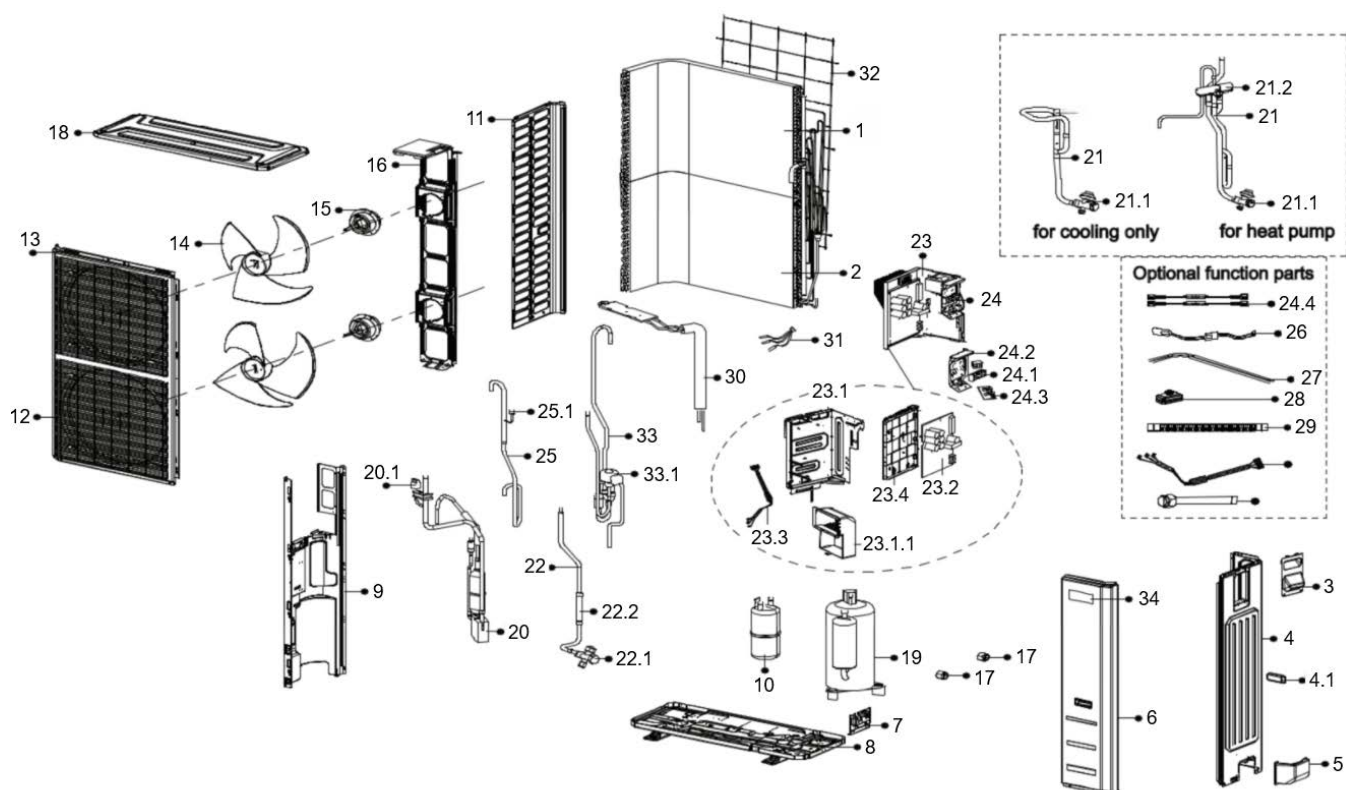
No.	Part No.	Part Name	Qty.	Remark
17.3	17400401000085	Wire Joint	1	
17.4	17400306000070	Reactor	1	
17.5	11201007007443	Room Temperature Sensor	1	
18	12223000017509	Control Box Cover	1	
19	17223000000003	Display Panel Assembly	1	
19.1	171230000002712	Display Panel	1	
20	12223000017513	Right Clapboard	1	
21	12223000017514	Air Filter	1	
22	15500406000010	Copper Flare Nut	1	
23	15500406000008	Copper Flare Nut	1	
24	12011600A00310	Condensate Drain Kit	1	
25	11201003000344	Gas Leak Detector	1	
26	17400511001544	Water Level Switch	1	
27	126230000000294	Rubber Tube	1	
28	11001012001251	Wet Rotor Circulator	1	
29	12100510000021	Drain Hose	1	

Outdoor Unit: YN048GMSI20RUG



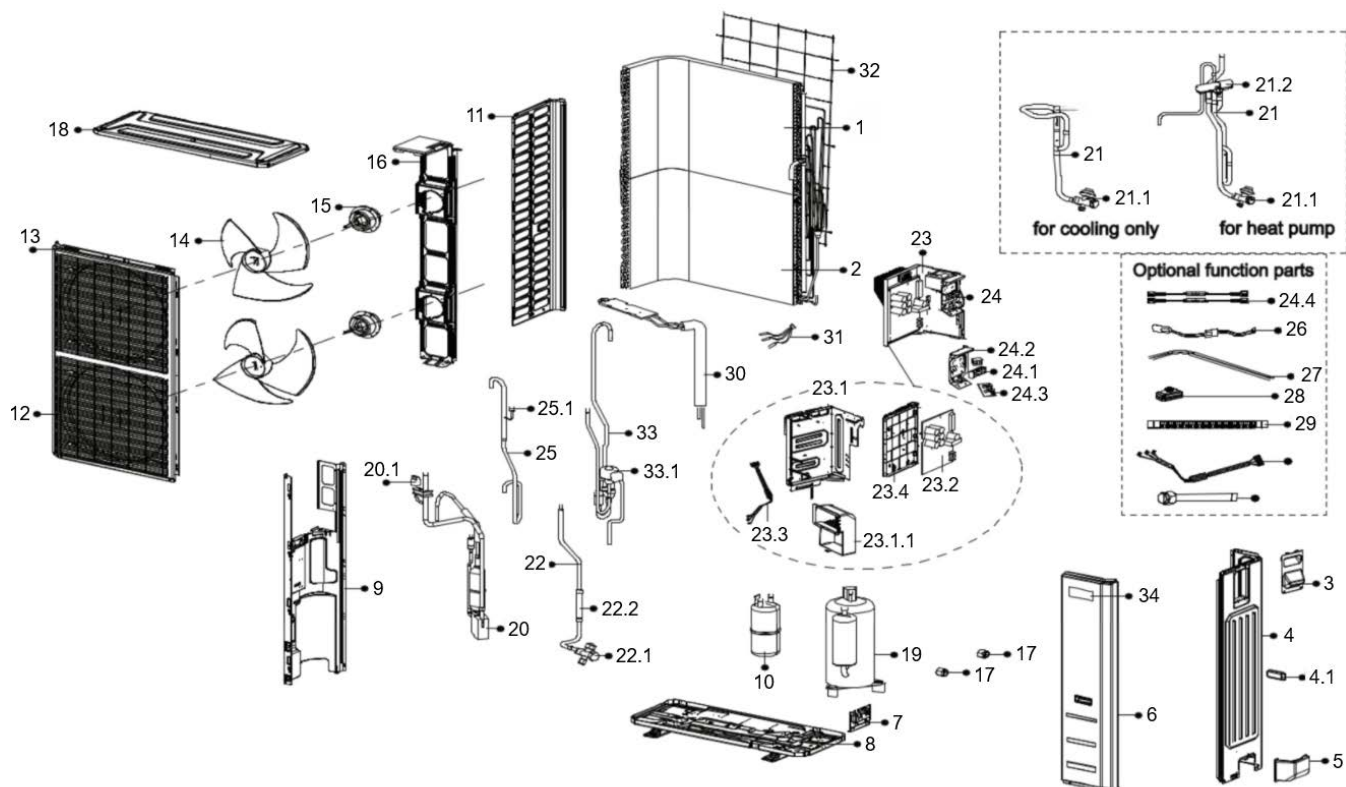
No.	Part No.	Part Name	Qty.	Remark
1	15822000010762	Top Condensing Unit	1	
2	15822000015346	Bottom Condensing Unit	1	
3	12222000018396	Large Handle	1	
4	12222000019916	Right Side Panel	1	
4.1	12100702000038	Handle	1	
5	12122000014023	Condensate Drain Pan	1	
6	12222000020285	Front Right Panel	1	
7	1222200002361	Valve Installation Plate	1	
8	12222000006290	Chassis	1	
9	12222000005733	Partition Board	1	
10	15500508000009	Liquid-Storage Tank	1	
11	1222200002363	Left Side Panel	1	
12	12222000014845	Air Outlet Grille	1	
13	12222000007564	Front Panel	1	
14	12100105000022	Fan Blade (Axial Flow)	1	
15	11002015019452	Fan Motor (Brushless DC)	1	
16	12222000006288	Fan Motor Mounting Bracket	1	
17	15500406000010	Flare Nut	1	
	15500406000008	Flare Nut	1	
18	12222000008695	Top Cover	1	
19	11103020002859	Compressor (Rotary Inverter)	1	
20	15122000034248	Discharge Line	1	
20.1	17400516000851	Pressure Controller	1	
21	15422000025739	4-Way Valve Assembly	1	
21.1	15500204000662	Gas Valve	1	
21.2	15500216002623	Reversing Valve	1	

Outdoor Unit: YN048GMSI20RUG



No.	Part No.	Part Name	Qty.	Remark
22	15422000019292	Liquid Valve Assembly	1	
22.1	15500208000286	Liquid Valve	1	
22.2	15500210001888	Throttle Valve	1	
23	17222000048790	Control Box	1	
23.1	12222000019348	Electronic Parts Installation Plate	1	
23.1.1	12122000020942	Air Duct	1	
23.2	17122000070098	Printed Circuit Board (PCB)	1	
23.3	17401203000936	Compressor Wires	1	
23.4	12122000032939	Electronic Installation Box	1	
24	17222000043432	Terminal Board	1	
24.1	17400401000085	Wire Joint	1	
	17400401006516	Wire Joint	1	
24.2	12222000019625	Terminal Installation Subassembly	1	
24.3	17122000063054	Keyboard	1	
24.4	17401203032144	HV Junction Cable	1	
25	15122000034249	Suction Line Assembly	1	
25.1	17400516000008	Pressure Controller	1	
26	17402001000602	Crankspace Heater	1	
27	17402002000466	Heater	1	
28	12600401000813	Rubber Pad	1	
29	12100509000038	Drain Hose	1	
30	15122000034194	Radiator	1	
31	11201011001207	Temperature Sensor	1	
32	12222000007944	Rear Grille	1	
33	15422000025740	Electronic Expansion Valve Assembly	1	
33.1	15500213000265	Electronic Expansion Valve	1	

Outdoor Unit: YN048GMSI20RUG



No.	Part No.	Part Name	Qty.	Remark
34	16022000B78474	Trademark	1	

The design and specifications of this product are subject to change without prior notice as development continues. Consult with the sales agency or manufacturer for details. Refer to the equipment nameplate for all other applicable specifications.

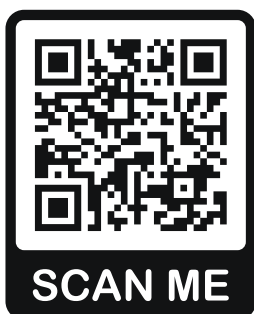


is a registered trademark of Parker Davis HVAC International, LLC.

Parker Davis HVAC International
7290 NW 77 Court, Miami, FL 33166 - USA
Tel : (305) 513-4488
Fax : (305) 513-4499
E-mail : info@pdhvac.com
Website: www.pdhvac.com

Pioneer product line, parts, and supplies are
available online for convenient ordering at:
www.highseer.com
www.pioneerminisplit.com

Scan the below code to visit our support page
where you can find more installation materials:



Copyright © Parker Davis HVAC International, LLC. All rights reserved.
