



**D E S I G N E D T O L E A D**

# BWC Series

**High Efficiency Gas-Fired Hot Water  
Direct Vent Condensing Boilers**

## **INSTALLATION INSTRUCTIONS**

**These instructions must be affixed on or adjacent to the boiler.**

### **Models:**

- **BWC070**
- **BWC090**
- **BWC120**
- **BWC151**



**Equipped with Honeywell  
SOLA Control**

**WARNING:** Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury, or loss of life. For assistance or additional information, consult a qualified installer, service agency or the gas supplier. This boiler requires a special venting system. Read these instructions carefully before installing.



Manufacturer of Hydronic Heating Products  
P.O. Box 14818 3633 I. Street  
Philadelphia, PA 19134  
[www.crownboiler.com](http://www.crownboiler.com)

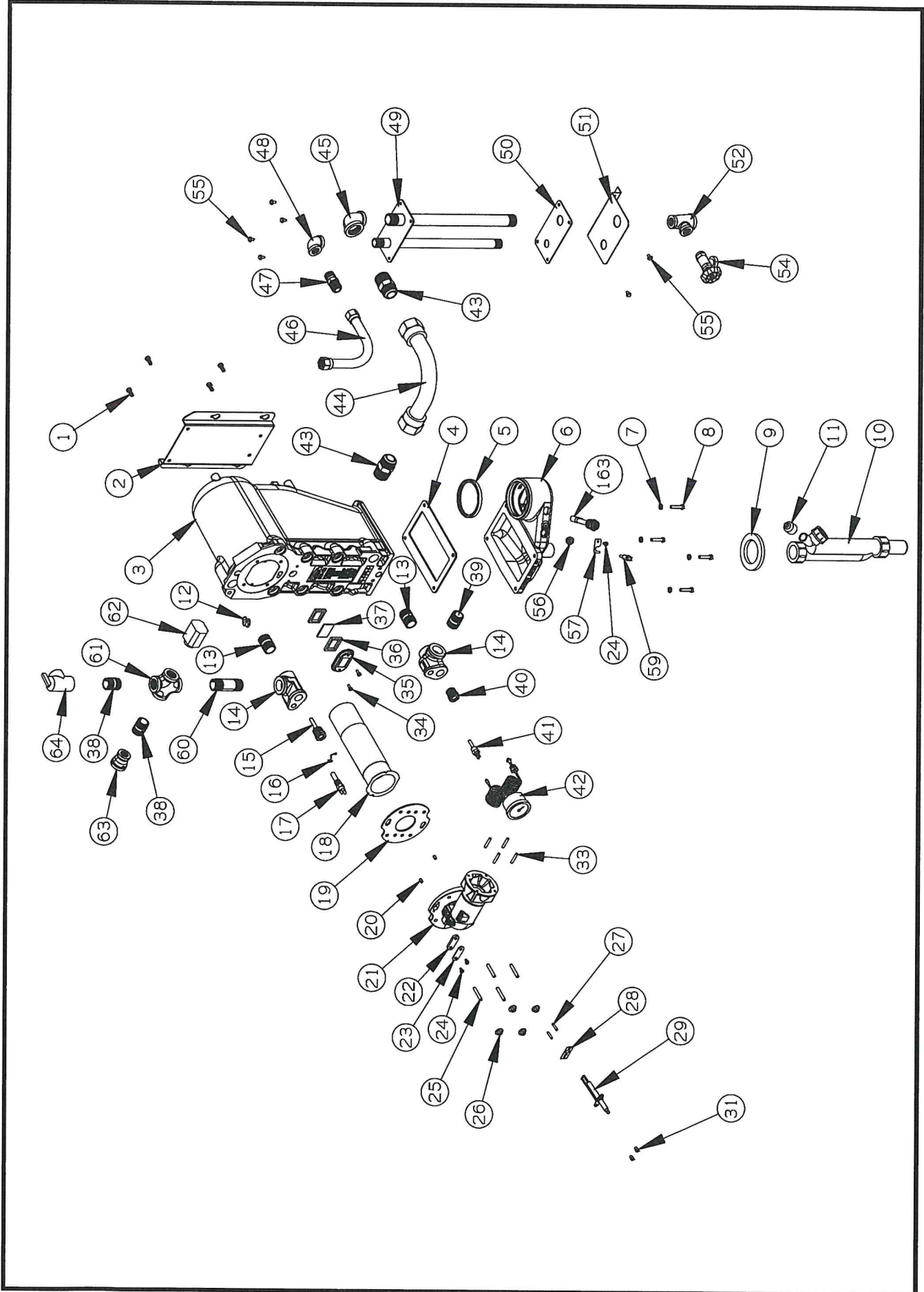
## XV Parts

The following parts may be obtained from any Crown distributor. To find the closest Crown distributor, consult the area Crown representative or the factory at:

Crown Boiler Co.  
Customer Service  
P.O. Box 14818  
Philadelphia, PA 19134  
[www.crownboiler.com](http://www.crownboiler.com)

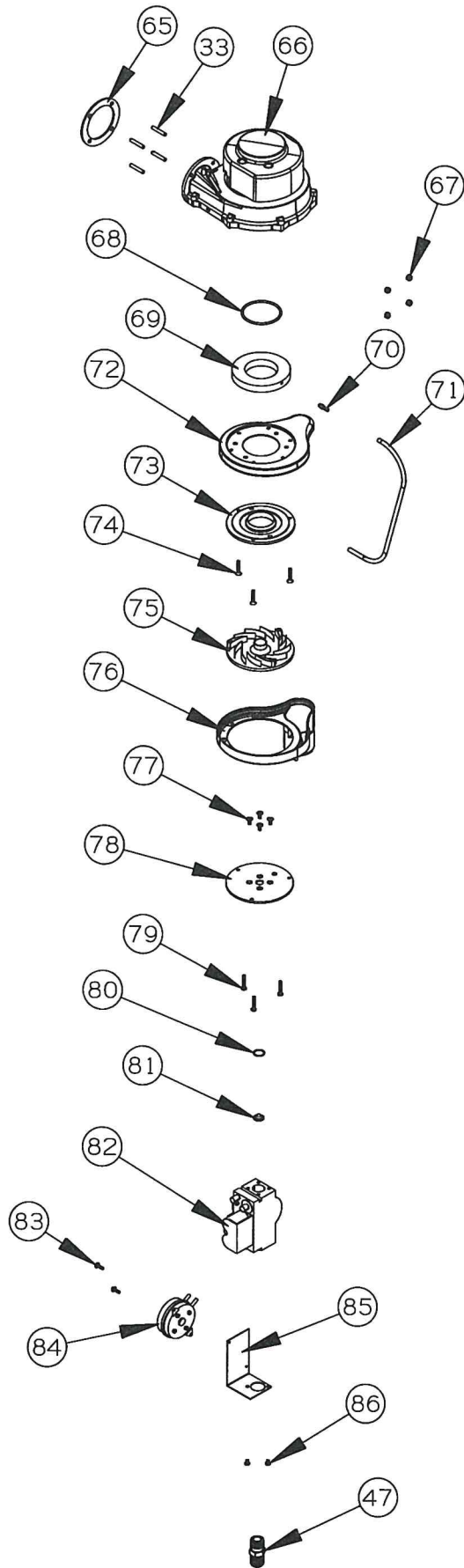
## PARTS LIST

Key	DESCRIPTION	BWC070		BWC090		BWC120		BWC151	
		Part #	QTY	Part #	QTY	Part #	QTY	Part #	QTY
*	Taco 008	950165	1						
*	Taco 0014			950160	1	950160	1	950160	1
*	Gas Cock	950615	1	950615	1	950615	1	950615	1
*	M4 x 30mm Machine Screw (for gas valve harness)	3507342	1	3507342	1	3507342	1	3507342	1
*	Outdoor Sensor	3503622	1	3503622	1	3503622	1	3503622	1
*	Nylon Wire Tie Shoe	960016	9	960016	9	960016	9	960016	9
1	M6 x 16mm Serrated Flange Head Hex Screw	900722	4	900722	4	900722	4	900722	4
2	AM Heat Exchanger Bracket	230413	1	230413	1	230414	1	230414	1
3	Heat Exchanger	230013	1	230013	1	230014	1	230015	1
4	Sump Gasket	230713	1	230713	1	230714	1	230716	1
5	80mm Vent Gasket	240039	1	240039	1	240039	1	240039	1
6	Sump	230703	1	230703	1	230704	1	230706A	1
7	M6 Washer	230906	4	230906	4	230906	4	230906	4
8	M6 x 30mm Cap Screw	230935	4	230935	4	230935	4	230935	8
9	Condensate Trap Gasket	240005	1	240005	1	240005	1	240005	1
10	Condensate Trap, 150mm	240955	1	240955	1	240955	1	240955	1
11	Red Vinyl Cap	240990	1	240990	1	240990	1	240990	1
12	Supply Temperature Sensor	230122	1	230122	1	230122	1	230122	1
13	3/4 BSP x 1 1/2" Steel Nipple	950140	2	950140	2	950140	2		
13	1" BSP x 1 1/2" Steel Nipple							950141	2
14	Supply/Return Fitting	230095	2	230095	2	230095	2	230096	2
15	Gauge Sensor Well	230102	1	230102	1	230102	1	230102	1
16	Gauge Cap Tube Clamp	230103	1	230103	1	230103	1	230103	1
17	High Limit	960124	1	960124	1	960124	1	960124	1
18	Burner	230035	1	230035	1	230045	1	230046	1
19	Burner Hood Gasket	230032	1	230032	1	230032	1	230032	1
20	5 x 8 Grooved Pin	230945	2	230945	2	230945	2	230945	2
21	Burner Hood, AM	230030	1	230030	1	230030	1	230030	1
22	Burner Hood Cover Plate Gasket	230050	1	230050	1	230050	1	230050	1
23	Burner Hood Cover Plate	230051	1	230051	1	230051	1	230051	1
24	M4 X 8 Machine Screw	230923	3	230923	3	230923	3	230923	3
25	M6 x 40mm Set Screw	230940	4	230940	4	230940	4	230940	4
26	M6 Nut With Captive Washer	240905	4	240905	4	240905	4	240905	4
27	M4 x 20mm Set Screw	240920	2	240920	2	240920	2	240920	2
28	Electrode Gasket	240011	1	240011	1	240011	1	240011	1
29	Electrode	240010	1	240010	1	240010	1	240010	1
31	M4 Shoulder Nut	240921	2	240921	2	240921	2	240921	2
33	M5 x 30mm Set Screw	230930	4	230930	4	230930	4	230930	4
34	M4 x 12mm PH Machine Screw	240925	2	240925	2	240925	2	240925	2
35	Sight Glass Holder	240951	1	240951	1	240951	1	240951	1
36	Sight Glass Gasket	240952	2	240952	2	240952	2	240952	2
37	Sight Glass	240950	1	240950	1	240950	1	240950	1
38	3/4 x Cl Blk Nipple	95-105	2	95-105	2	95-105	2	95-105	1
39	3/4 x Cl. Brass Nipple	950135	1	950135	1	950135	1		
40	Gauge Pressure Fitting	230101	1	230101	1	230101	1	230101	1
41	Return Temperature Sensor	230125	1	230125	1	230125	1	230125	1
42	Gauge	230100	1	230100	1	230100	1	230100	1
43	1" ID x 1" NPT CSST Adaptor	230710	2	230710	2	230710	2	230710	2
44	1" Gray Coated CSST, Nut by Nut	230700	1	230700	1	230700	1	230709	1
45	3/4 x 1 Blk Reducing Elbow	950116	1	950116	1	950116	1		
45	1" Blk Elbow							950190	1
46	1/2" Yellow Coated CSST, Nut by Nut	230705	1	230705	1	230705	1	230707	1
47	5/8" OD x 1/2" MPT CSST Adaptor	230715	2	230715	2	230715	2	230715	2



## PARTS LIST

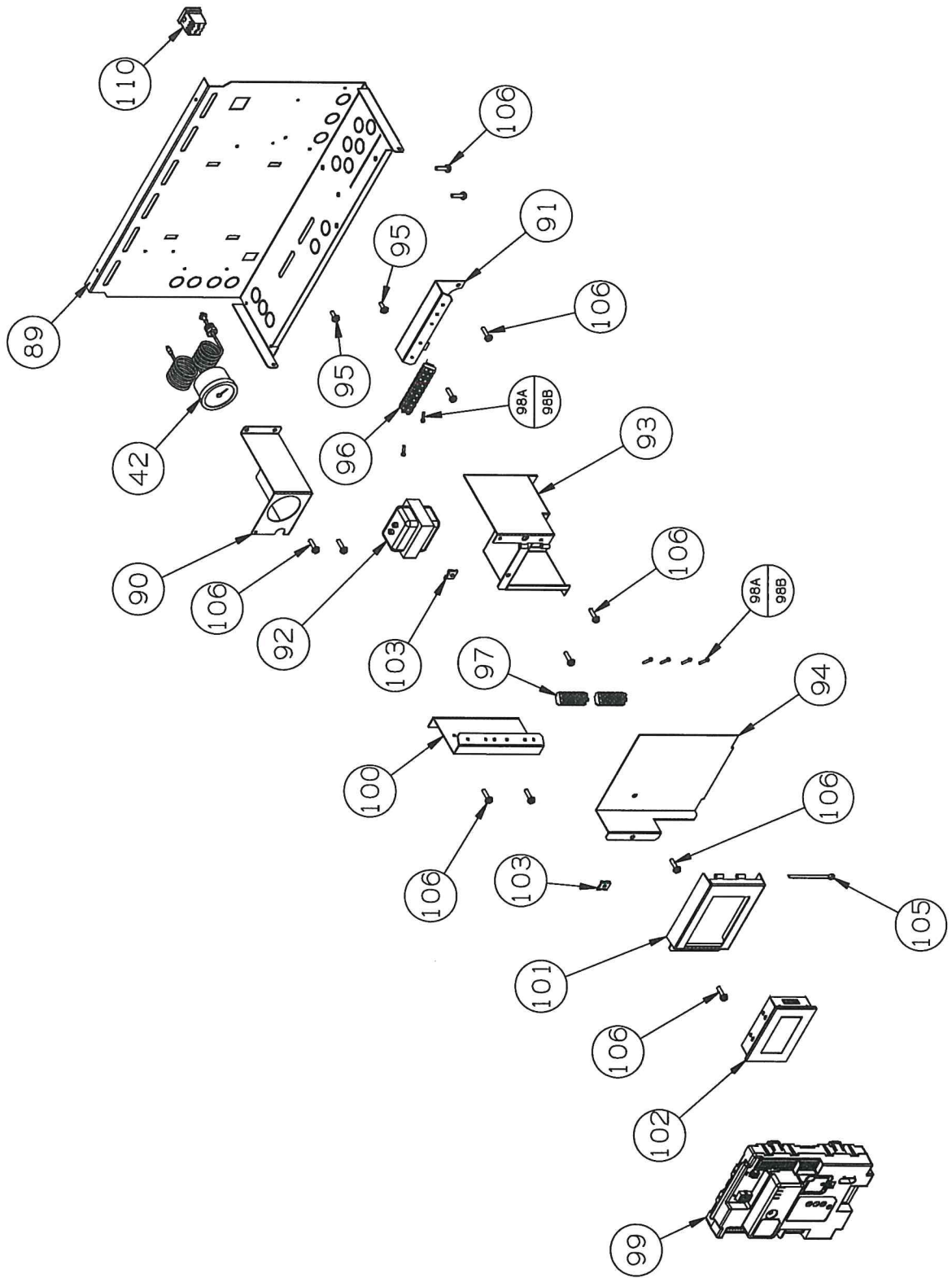
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48	1/2" Blk Elbow	950049	1	950049	1	950049	1	950049	1
49	Flanged Nipple Assy	950700	1	950700	1	950700	1	950701	1
50	Flanged Nipple Gasket	230401	1	230401	1	230401	1	230405	1
51	Pipe Support Bracket	230470	1	230470	1	230470	1	230480	1
52	3/4 x 1 x 3/4 Reducing Black Tee	950118	1	950118	1	950118	1		
52	1 x 1 x 3/4 Black Tee							950212	1
54	3/4 Boiler Drain	95-041	1	95-041	1	95-041	1	95-041	1
55	#10 x 1/2 Sheet Metal Screw	90-212	36	90-212	36	90-212	36	90-212	36
56	Fluegas Sensor Grommet	230056	1	230056	1	230056	1	230056	1
57	Fluegas NTC Mounting Plate	230055	1	230055	1	230055	1	230055	1
59	Fluegas Temperature Sensor	230120	1	230120	1	230120	1	230120	1
60	3/4 x 3" Nipple	95-027	1	95-027	1	95-027	1		
60	1 x 3" Nipple							950104	1
61	3/4 Black Cross	950130	1	950130	1	950130	1		
61	1" Black Cross							950105	1
62	Hydrolevel #1100 LWCO	450600	1	450600	1	450600	1	450600	1
63	3/4 x 1 Black Reducing Coupling	950120	1	950120	1	950120	1		
64	30 psi Relief Valve	95-040	1	95-040	1	95-040	1	95-040	1
65	Blower Gasket	240001	1	240001	1	240001	1	240001	1
66	Blower, RG128/1300-3612	230002	1	230002	1	230002	1	230002	1
67	M5 Locknut	900003	4	900003	4	900003	4	900003	4
68	3 x 63mm Buna-N O-Ring	230003	1	230003	1	230003	1	230003	1
69	Fan Inlet block	230150	1	230150	1	230150	1	230150	1
70	10-32 x 1/8 ID Hose Barb	90-222	1	90-222	1	90-222	1	90-222	1
71	1/8 ID Silicone Tubing (12")	14-008	1	14-008	1	14-008	1	14-008	1
72	Dungs Air Inlet Adaptor Part 2 (male)	3507345	1	3507345	1	3507345	1	3507345	1
73	42.5mm Short Fan Adaptor Plate	3507346	1	3507346	1	3507346	1	3507346	1
74	M4 x 25mm Flat Head Machine Screw	900010	3	900010	3	900010	3	900010	3
75	5mm Swirlplate (Blue)	3507337	1	3507337	1				
75	9mm Swirlplate (Red)					3507347	1		
75	12mm Swirlplate (Gray)							3507336	1
76	Dungs Air Inlet Adaptor Part 1 (female)	3507344	1	3507344	1	3507344	1	3507344	1
77	M4 x 10mm FH Machine Screw	900006	4	900006	4	900006	4	900006	4
78	Injector Plate	3507348	1	3507348	1	3507348	1	3507348	1
79	M4 x 25mm Positdrive Hd Screws	900734	3	900734	3	900734	3	900734	3
80	1.5 x 17mm O-Ring	3507349	1	3507349	1	3507349	1	3507349	1
81	7.0mm Orifice					3507339	1	3507339	1
81	5.0mm Orifice	3507338	1	3507338	1				
82	GB-WND 055 Head On Gas Valve	3507340	1	3507340	1	3507340	1	3507340	1
83	6-32 x 1/2 HWH type F Self Tapping Screw	900713	6	900713	6	900713	6	900713	6
84	Pressure Switch	230009	1	230009	1	230009	1	230009	1
85	Pressure Switch Bracket	230475	1	230475	1	230475	1	230475	1
86	M4 x 6mm Round Head Machine Screw	900011	2	900011	2	900011	2	900011	2
87	Concentric Vent Collar	230501	1	230501	1	230501	1	230501	1
88	Vent Kit	230500	1	230500	1	230500	1	230580	1
89	Control Box	230332	1	230332	1	230332	1	230332	1
90	Gauge Bracket	950705	1	950705	1	950705	1	950705	1
91	Line Voltage Terminal Strip Bracket	230334	1	230334	1	230334	1	230334	1
92	AT140 Transformer	35-2000	1	35-2000	1	35-2000	1	35-2000	1
93	J-Box	230335	1	230335	1	230335	1	230335	1
94	J-Box Cover	230336	1	230336	1	230336	1	230336	1
95	10-32 x 3/8" Ground Screw	146-95-301	2	146-95-301	2	146-95-301	2	146-95-301	2
96	10mm x 9 Pole Euro Terminal Strip	960098	2	960098	2	960098	2	960098	2
97	8mm x 9 Pole Euro Terminal Strip	960097	1	960097	1	960097	1	960097	1
98A	4-40 x 3/4 RH Machine Screw	900475	6	900475	6	900475	6	900475	6
*98B	4-40 ZP Hex Nut	900476	6	900476	6	900476	6	900476	6
99	Sola Boiler Control (Programmed)	3523120S	1	3523120S	1	3523120S	1	3523120S	1
100	Low Voltage Terminal Strip Bracket	230333	2	230333	2	230333	2	230333	2
101	Display Mounting Bracket	230337	1	230337	1	230337	1	230337	1
102	Panasonic GT01 Display (Programmed)	3511605	1	3511605	1	3511605	1	3511605	1



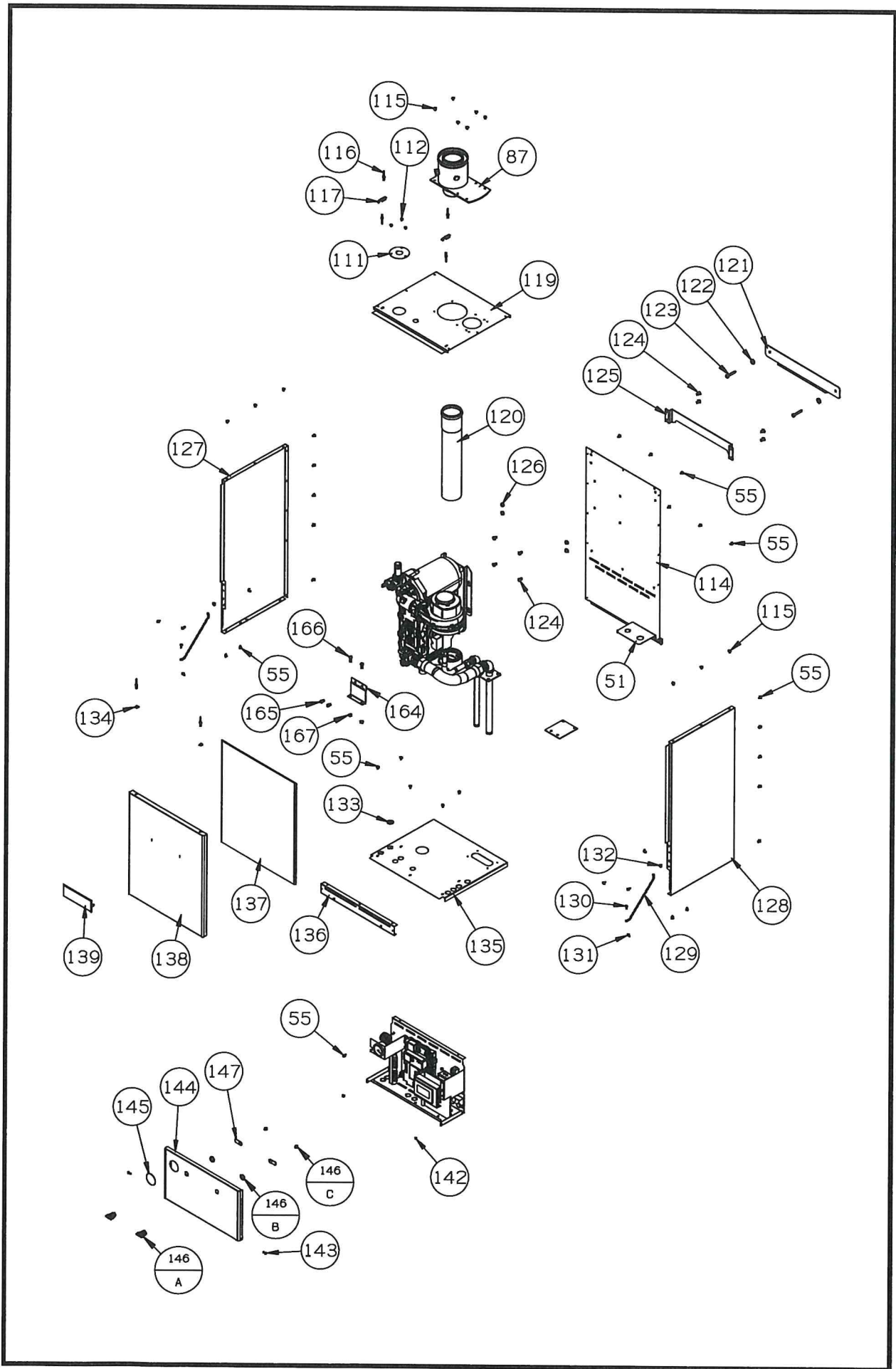
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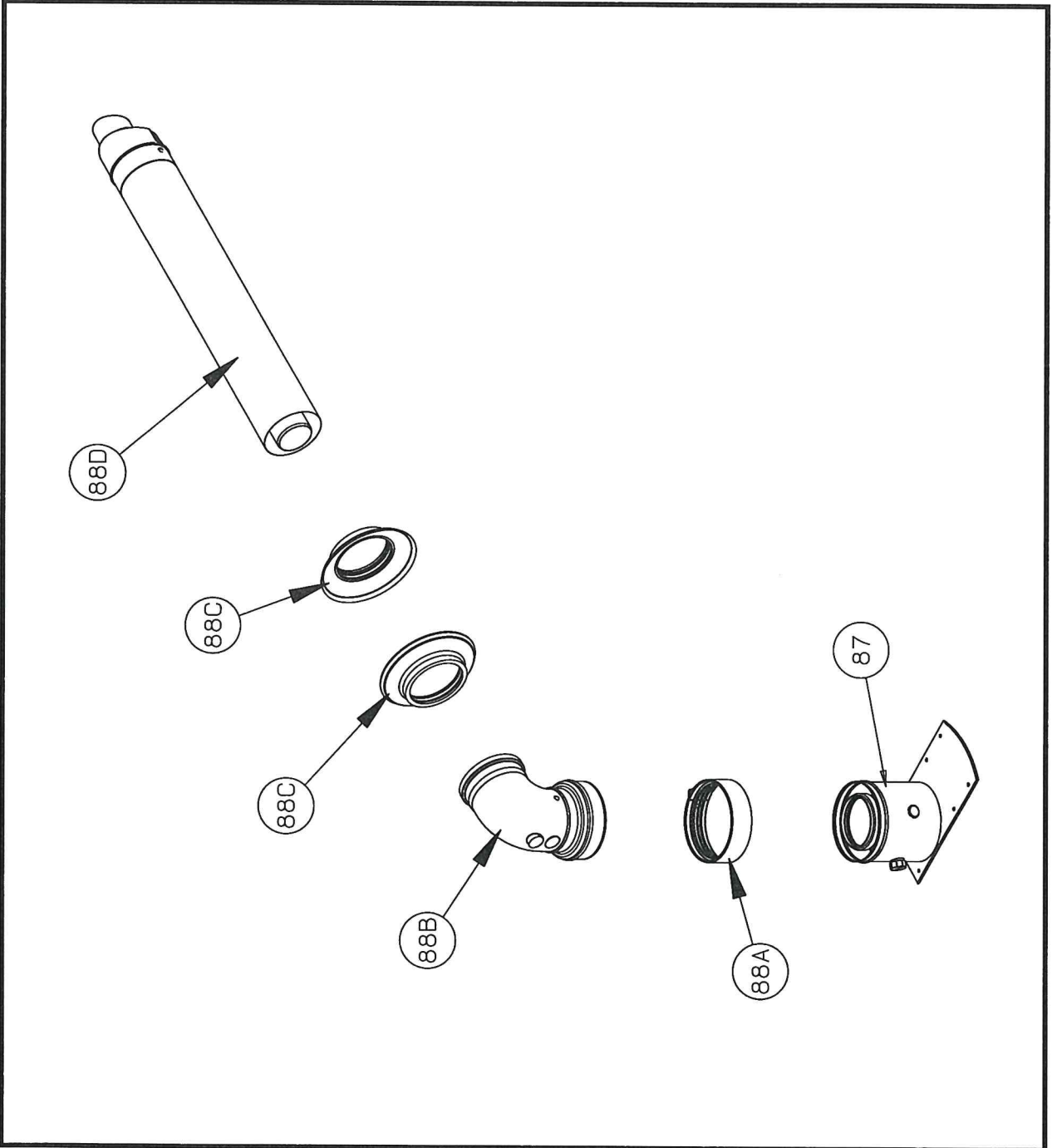
Key	DESCRIPTION	BWC070		BWC090		BWC120		BWC151	
		Part #	QTY	Part #	QTY	Part #	QTY	Part #	QTY
103	Tinnerman Nut	90-217	2	90-217	2	90-217	2	90-217	2
105	1/8 x 2-1/2" Cotter Pin	900485	1	900485	1	900485	1	900485	1
106	10-16 x 1/2" Thread Forming Screw	900725	12	900725	12	900725	12	900725	12
110	Condensate Pump Receptacle	960023	1	960023	1	960023	1	960023	1
111	Escutcheon Plate	230380	1	230380	1	230380	1	230385	1
112	#8 Self Drilling Screw	900055	3	900055	3	900055	3	900055	3
114	Rear Panel	230303	1	230303	1	230303	1	230303	1
115	#10 x 1/2 Truss Hd Screws	900120	12	900120	12	900120	12	900120	12
116	1/8" Aluminum Pop Rivet	90-068	8	90-068	8	90-068	8	90-068	8
117	Draw Latch	230202	2	230202	2	230202	2	230202	2
119	Top Panel	230323	1	230323	1	230323	1	230325	1
120	Vent Stub	230502	1	230502	1	230502	1	230502	1
121	Wall Hook	230410	1	230410	1	230410	1	230410	1
122	5/16" Flat Washer	900102	2	900102	2	900102	2	900102	2
123	5/16" x 2" Lag Screw	900726	2	900726	2	900726	2	900726	2
124	1/4-20 x 1/2 Phillips Pan Hd with Ext Washer	900720	8	900720	8	900720	8	900720	8
125	Boiler Hanging Bracket	230435	1	230435	1	230435	1	230435	1
126	1/4-20 Nylon Insert Lock Nut	900721	4	900721	4	900721	4	900721	4
127	LH Side Panel	230301	1	230301	1	230301	1	2303015	1
128	RH Side Panel	230300	1	230300	1	230300	1	2303005	1
129	8" Long Bead Chain Lanyard	230210	2	230210	2	230210	2	230210	2
130	6-32 x 1/2 HWH Type F Self Tapping Screw	900713	4	900713	4	900713	4	900713	4
131	6-32 Wing Nut	900724	4	900724	4	900724	4	900724	4
132	Rubber Bumper	230905	2	230905	2	230905	2	230905	2
133	Pinhole Grommet	10-026	2	10-026	2	10-026	2	10-026	2
134	Draw Keeper	230204	2	230204	2	230204	2	230204	2
135	Bottom Panel	230343	1	230343	1	230343	1	230345	1
136	Bottom Pan Support Bracket	230395	1	230395	1	230395	1	230395	1
137	AM Door Gasket	230400	1	230400	1	230400	1	230400	1
138	Upper Front Jacket Panel	230353	1	230353	1	230353	1	230353	1
139	Crown Aluminum Nameplate	98-004	1	98-004	1	98-004	1	98-004	1
142	Nylon Spacer, #10 x 0.125	230212	2	230212	2	230212	2	230212	2
143	3/16 x 1/2 Slic Pin	230200	2	230200	2	230200	2	230200	2
144	Lower Front Jacket Panel	230363	1	230363	1	230363	1	230363	1
145	Heyco 2" Window	900723	1	900723	1	900723	1	900723	1
146	Latch CM Cam	230206	2	230206	2	230206	2	230206	2
147	Straight Cam	230208	2	230208	2	230208	2	230208	2
150	24 Volt Outer Harness	9601700	1	9601700	1	9601700	1	9601700	1
151	High Temperature Circulator Harness	9601705	1	9601705	1	9601705	1	9601705	1
152	Line Voltage Blower Harness	9602309	1	9602309	1	9602309	1	9602309	1
153	Low Temperature Circulator Harness	9601710	1	9601710	1	9601710	1	9601710	1
154	DHW Thermostat Harness	9601715	1	9601715	1	9601715	1	9601715	1
155	Outdoor Sensor Harness	9601720	1	9601720	1	9601720	1	9601720	1
156	Neutral Harness	9601725	1	9601725	1	9601725	1	9601725	1
157	J-Box Ground Harness	9601735	1	9601735	1	9601735	1	9601735	1
158	Dungs AC Gas Valve Harness	9601740	1	9601740	1	9601740	1	9601740	1
159	Ignition Cable Harness	9601745	1	9601745	1	9601745	1	9601745	1
160	J1 Harness	9601750	1	9601750	1	9601750	1	9601750	1
161	Fan Control Harness	9601755	1	9601755	1	9601755	1	9601755	1
162	Limit String Harness	9601760	1	9601760	1	9601760	1		
163	Float Switch							240060	1
164	Heat Exchanger Support Bracket							230420	1
165	M6 x 12 Machine Screw							900015	2
166	1/4-20 x 3/4 Cap Screw							90-213	2
167	1/4-20 Nut							90-202	2
168	Low Temperature Thermostat Harness	9601765	1	9601765	1	9601765	1	9601765	1
169	Limit String Harness with Float Switch							9601770	1
170	Display Harness	9601775	1	9601775	1	9601775	1	9601775	1
171	J-Box Auxillary Jumper	9601780	1	9601780	1	9601780	1	9601780	1
172	Alarm Harness	9601785	1	9601785	1	9601785	1	9601785	1
173	Sensor Harness	9601790	1	9601790	1	9601790	1	9601790	1
174	Blower Power Harness (Inner)	9601795	1	9601795	1	9601795	1	9601795	1

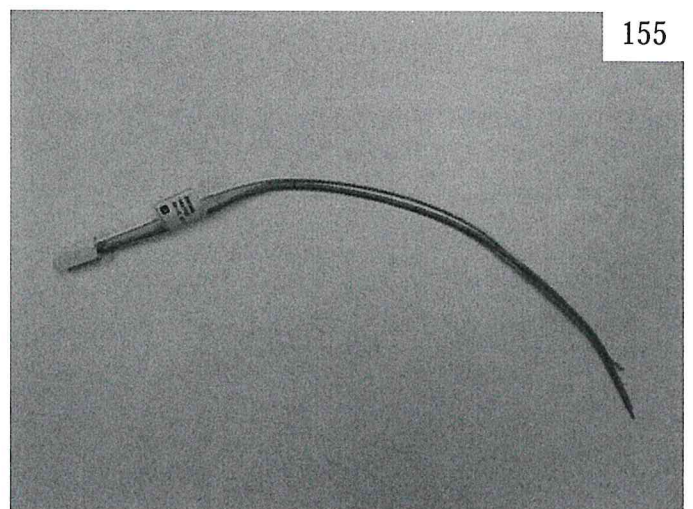
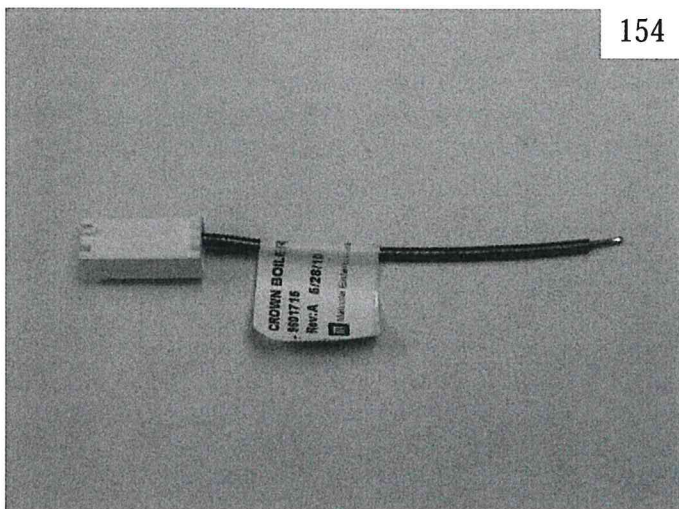
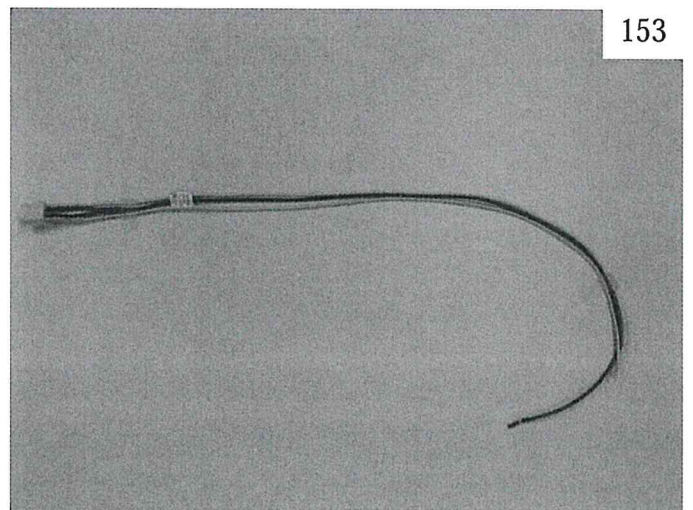
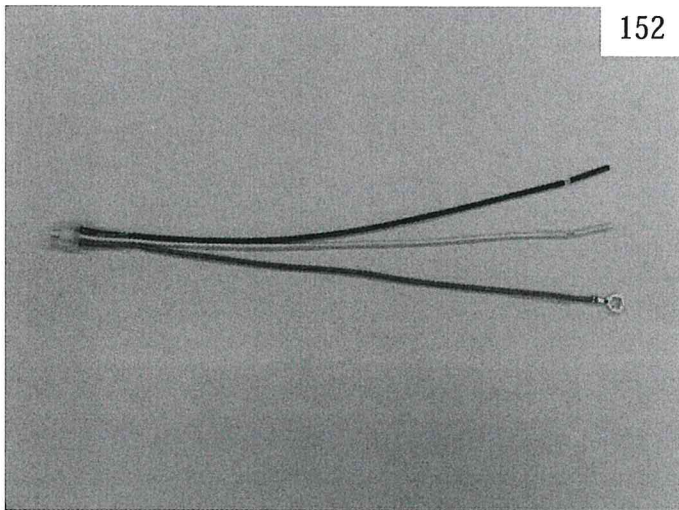
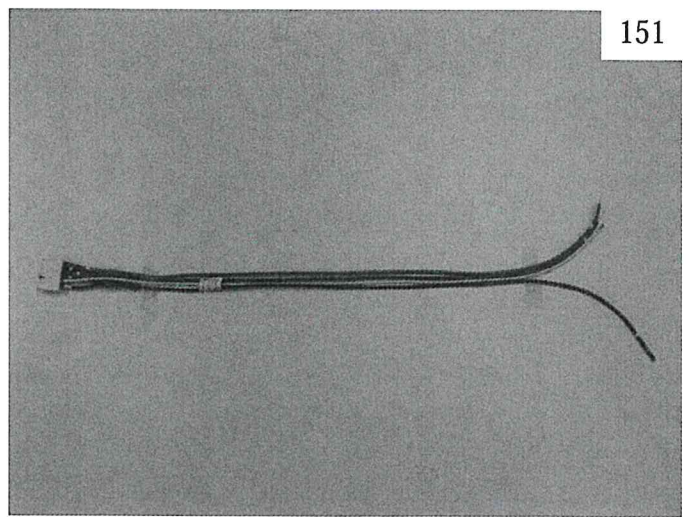
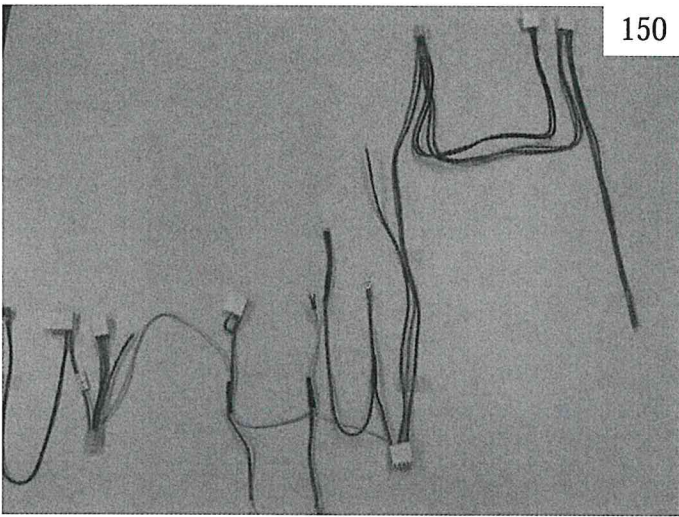
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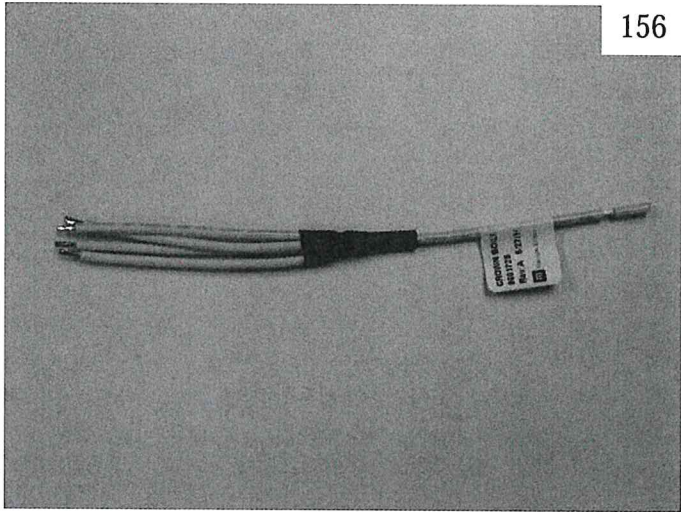




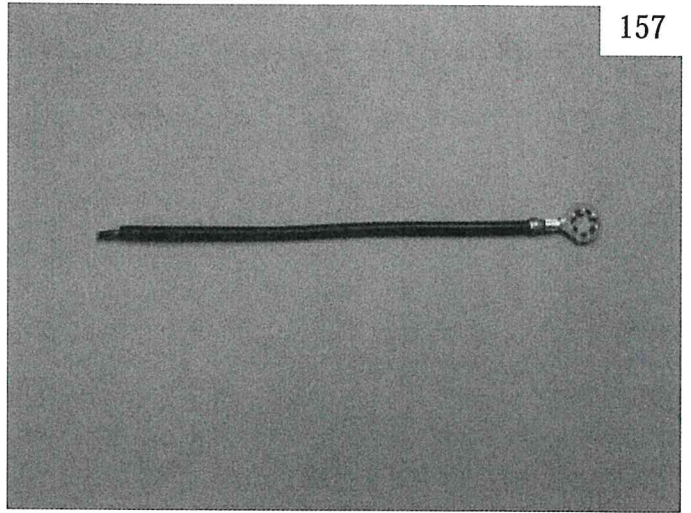




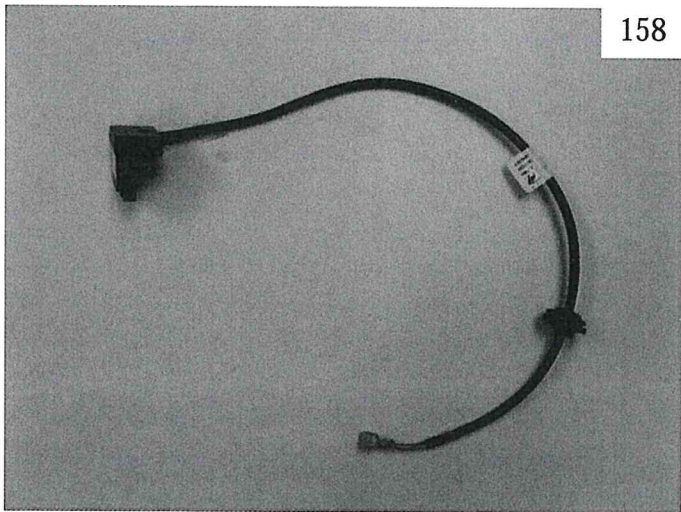




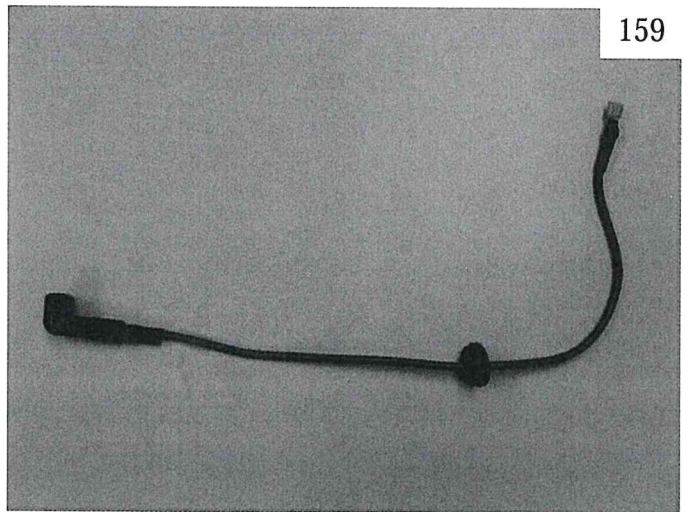
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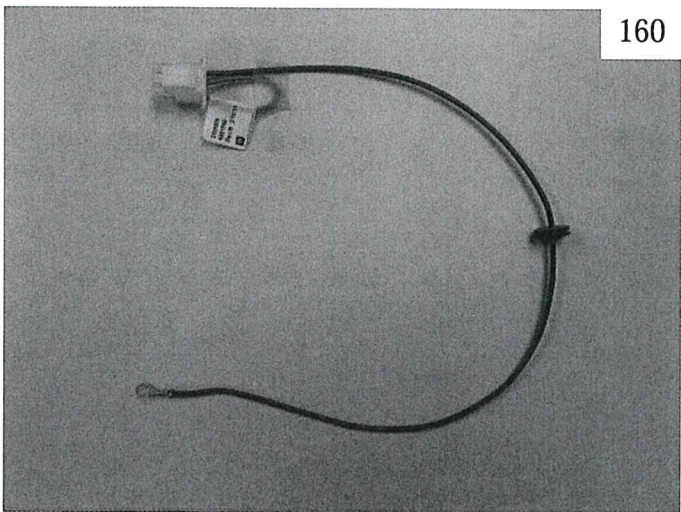
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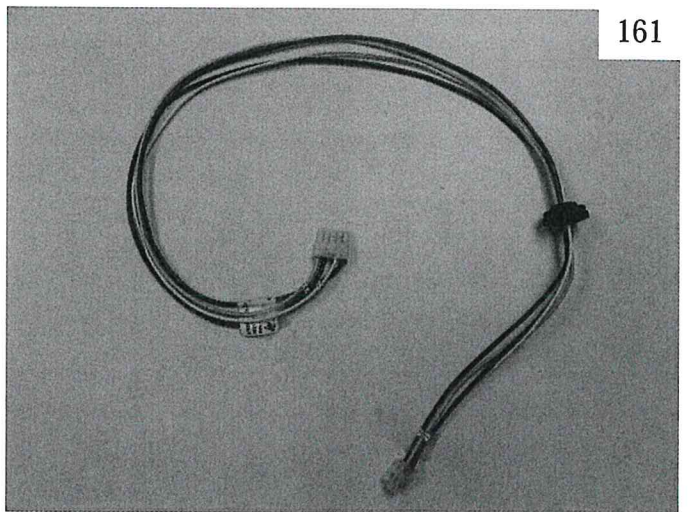
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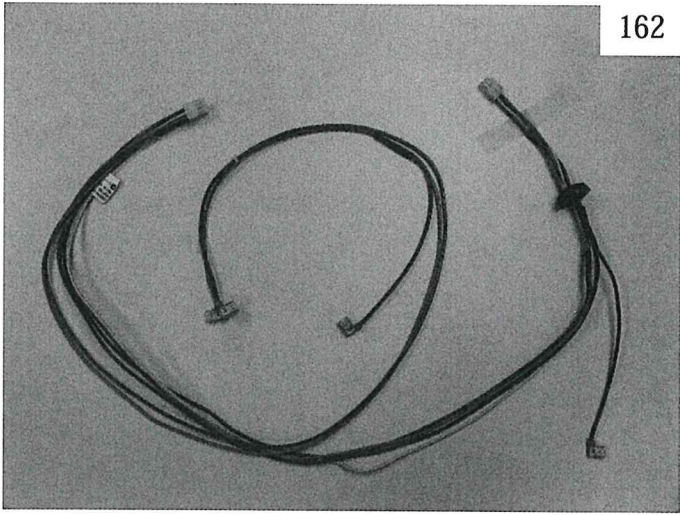
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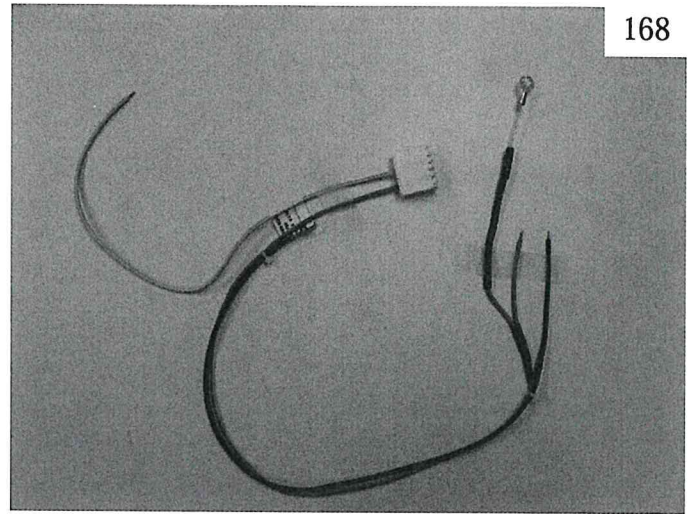
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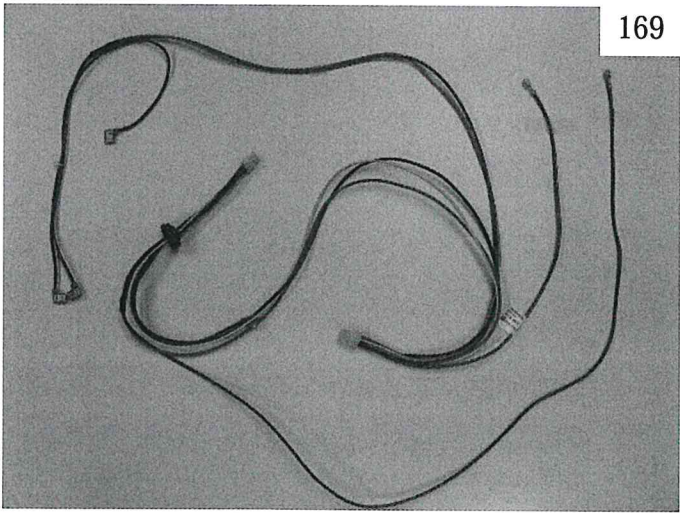
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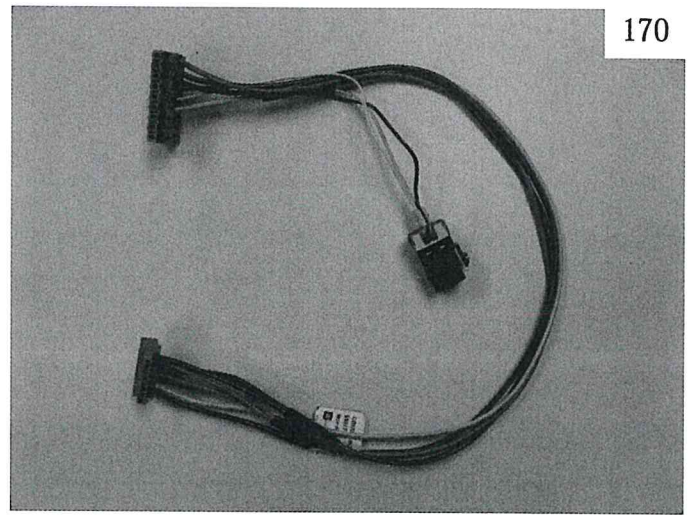
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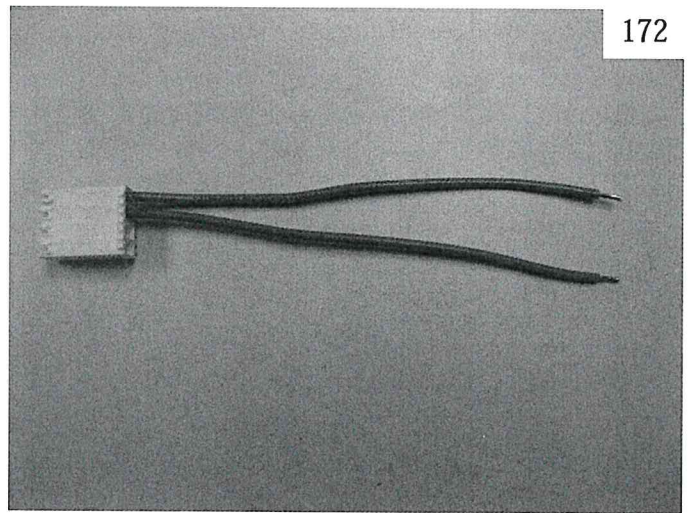
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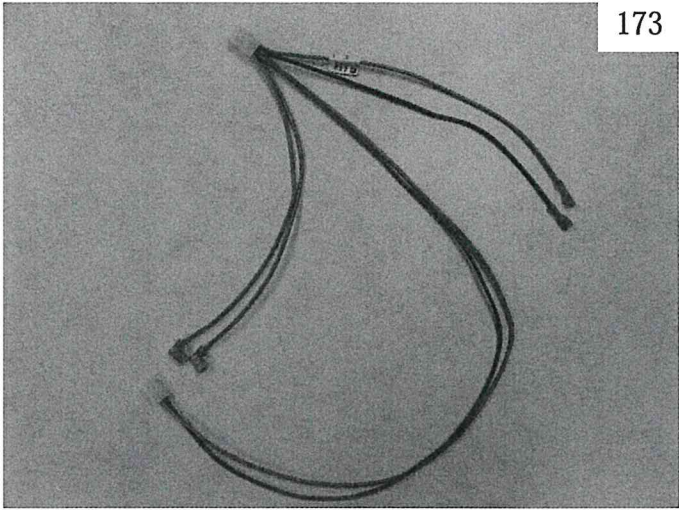
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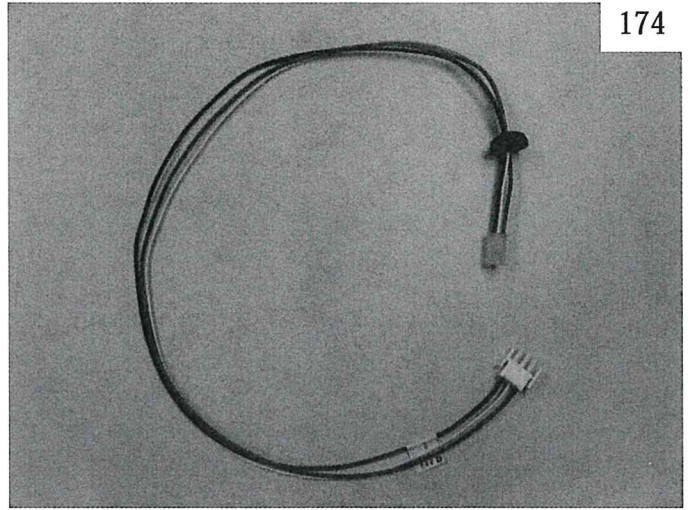
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173



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