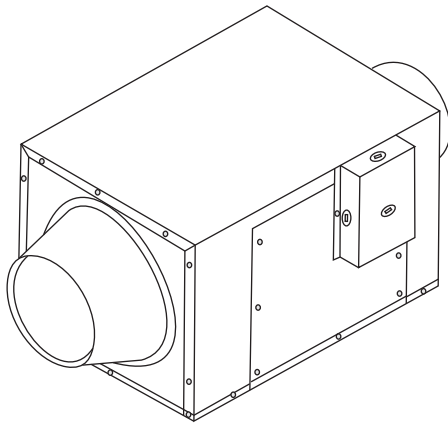


Service Manual

Super Quiet IN-LINE Fan
WhisperLine™
(North American Market)



FV-10NLF1
FV-20NLF1
FV-30NLF1
FV-40NLF1

SPECIFICATIONS

Model	Air direction	V	Hz	Power consumption (W)	Speed (rpm)	Air delivery (cfm)	Weight kg(lb.)
FV-10NLF1	Exhaust	120	60	36	1590	120	6.3(13.9)
FV-20NLF1				57	1260	240	7.5(16.5)
FV-30NLF1				98	1340	340	10.9(24.1)
FV-40NLF1				132	1150	440	11.9(26.3)

*Power consumption, speed and air delivery values have been measured at 5mm WG (0.2" WG).

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

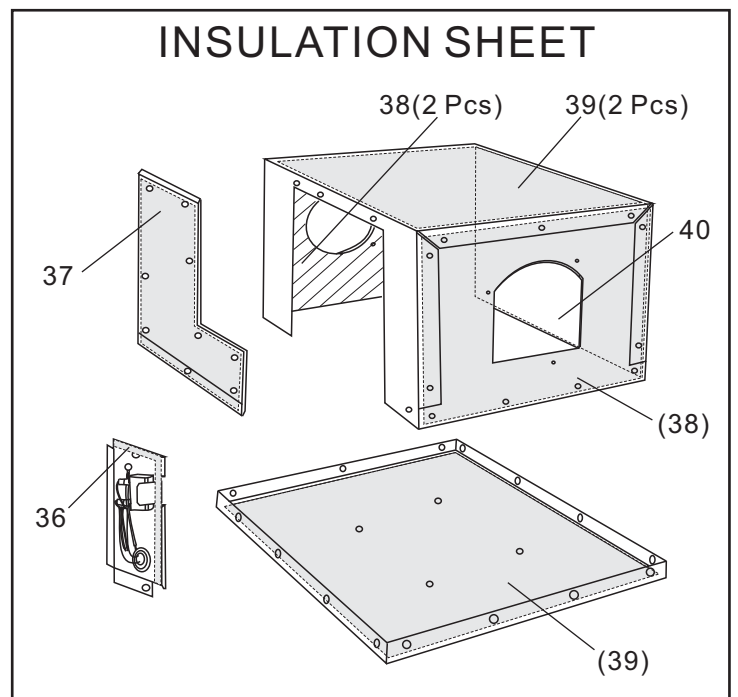
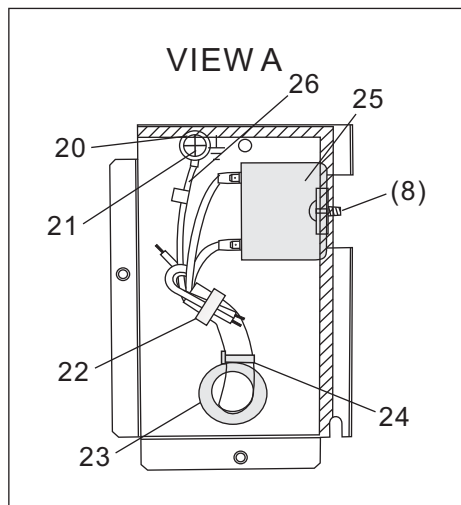
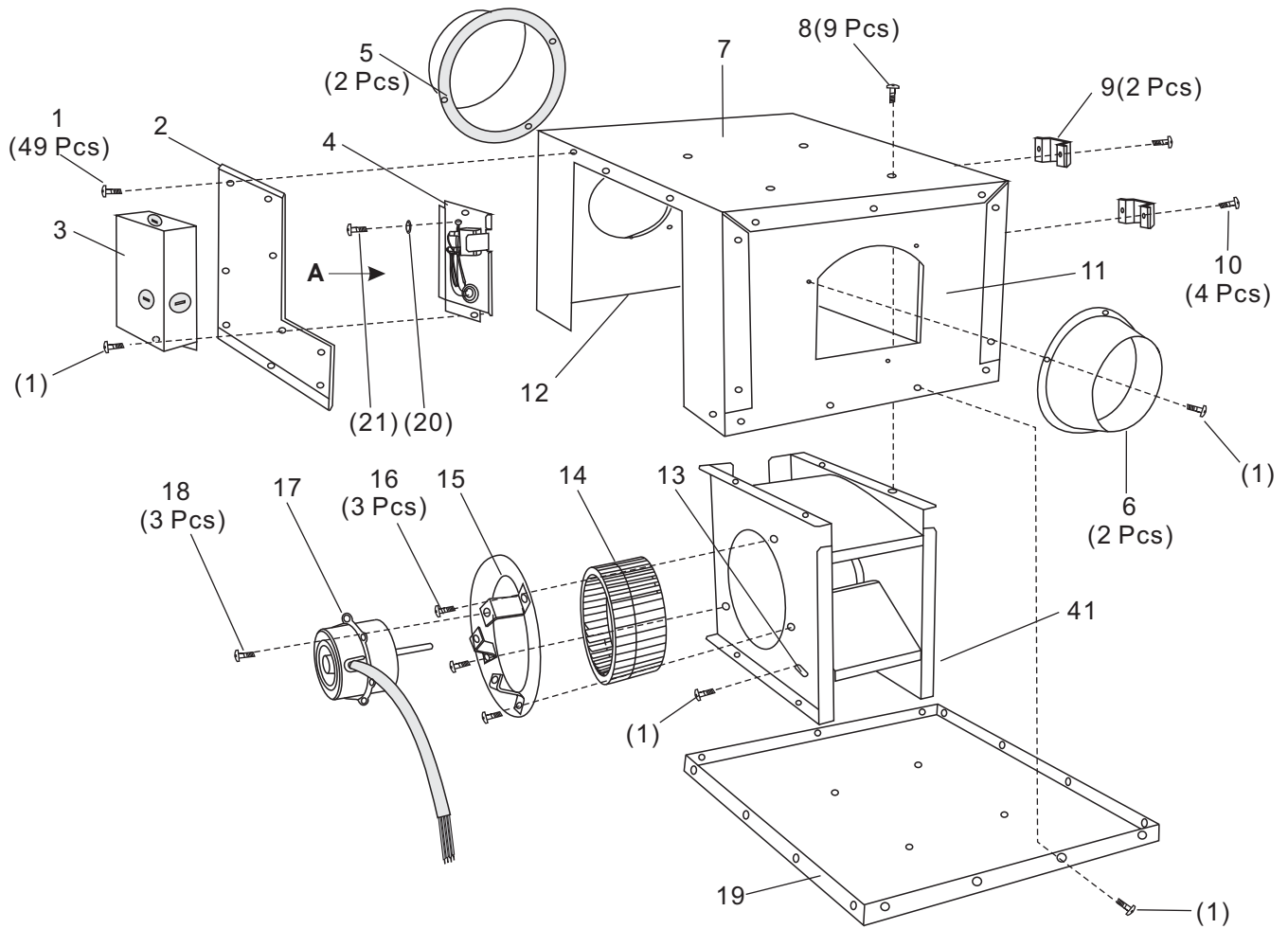
There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacture.

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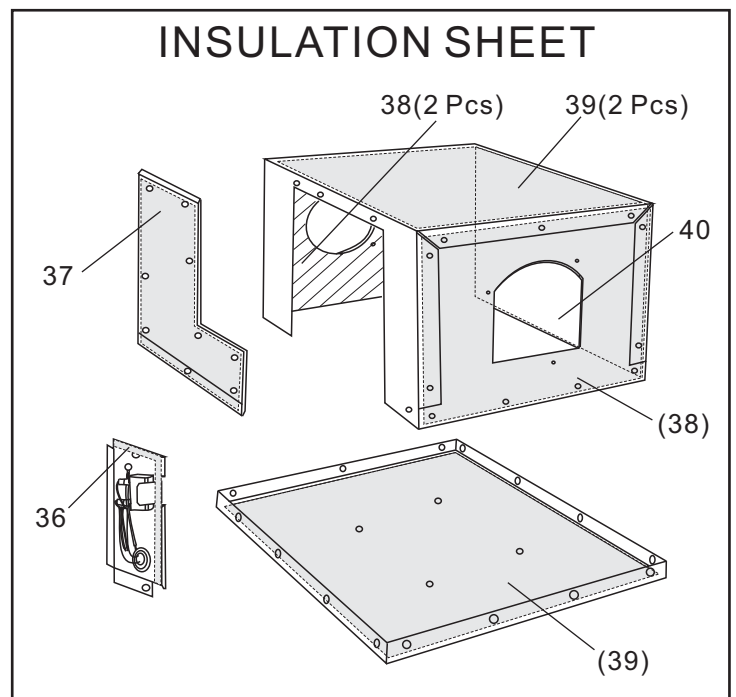
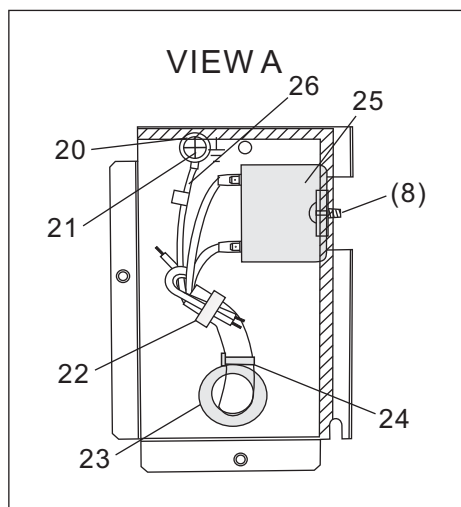
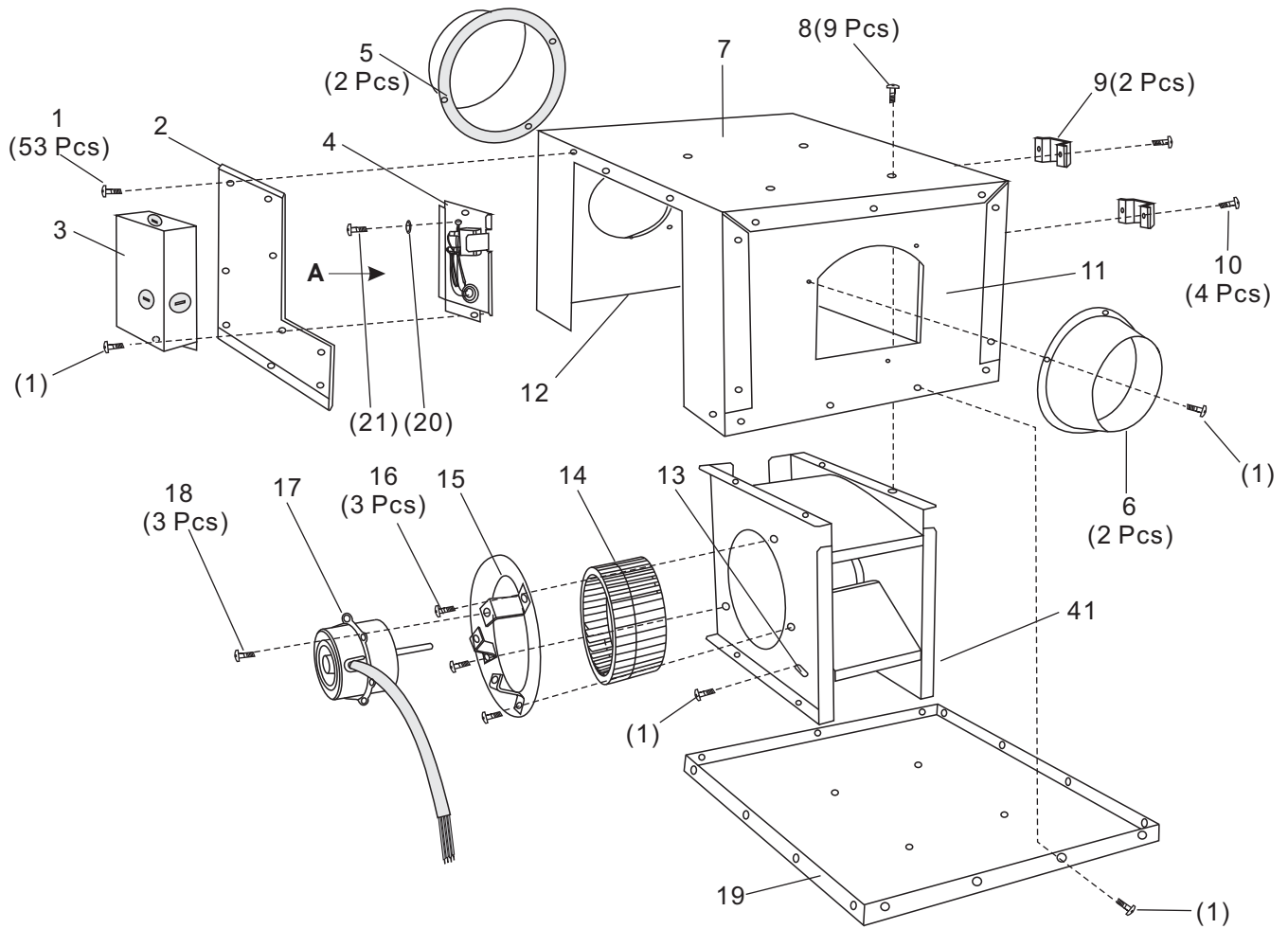
1. Parts Identification

FV-10NLF1



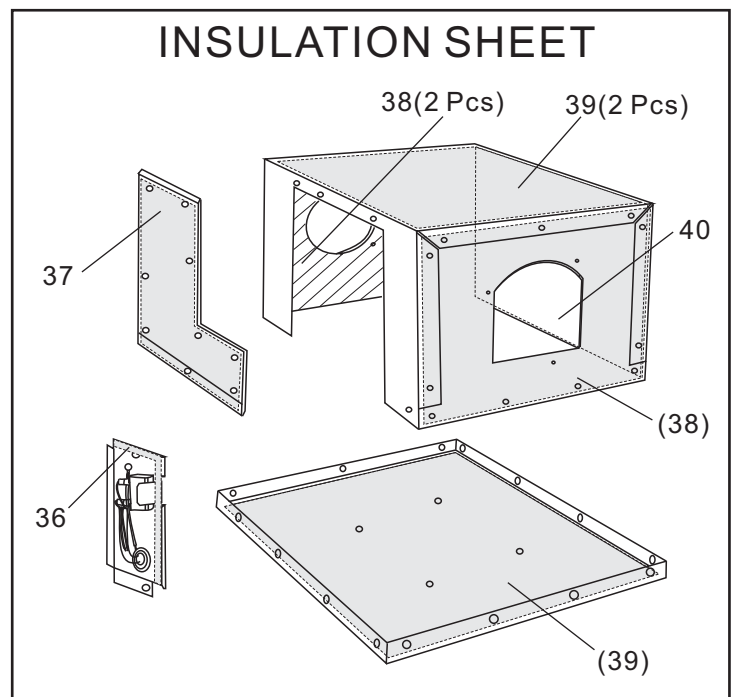
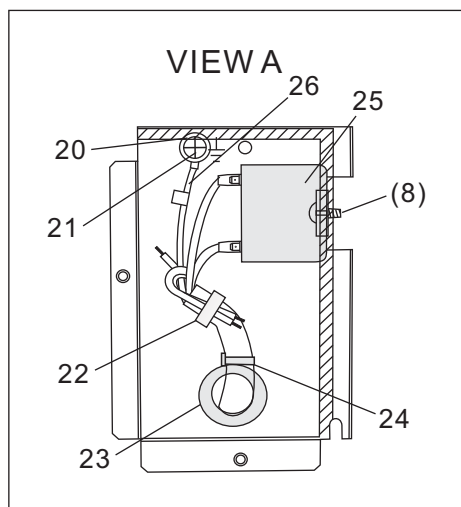
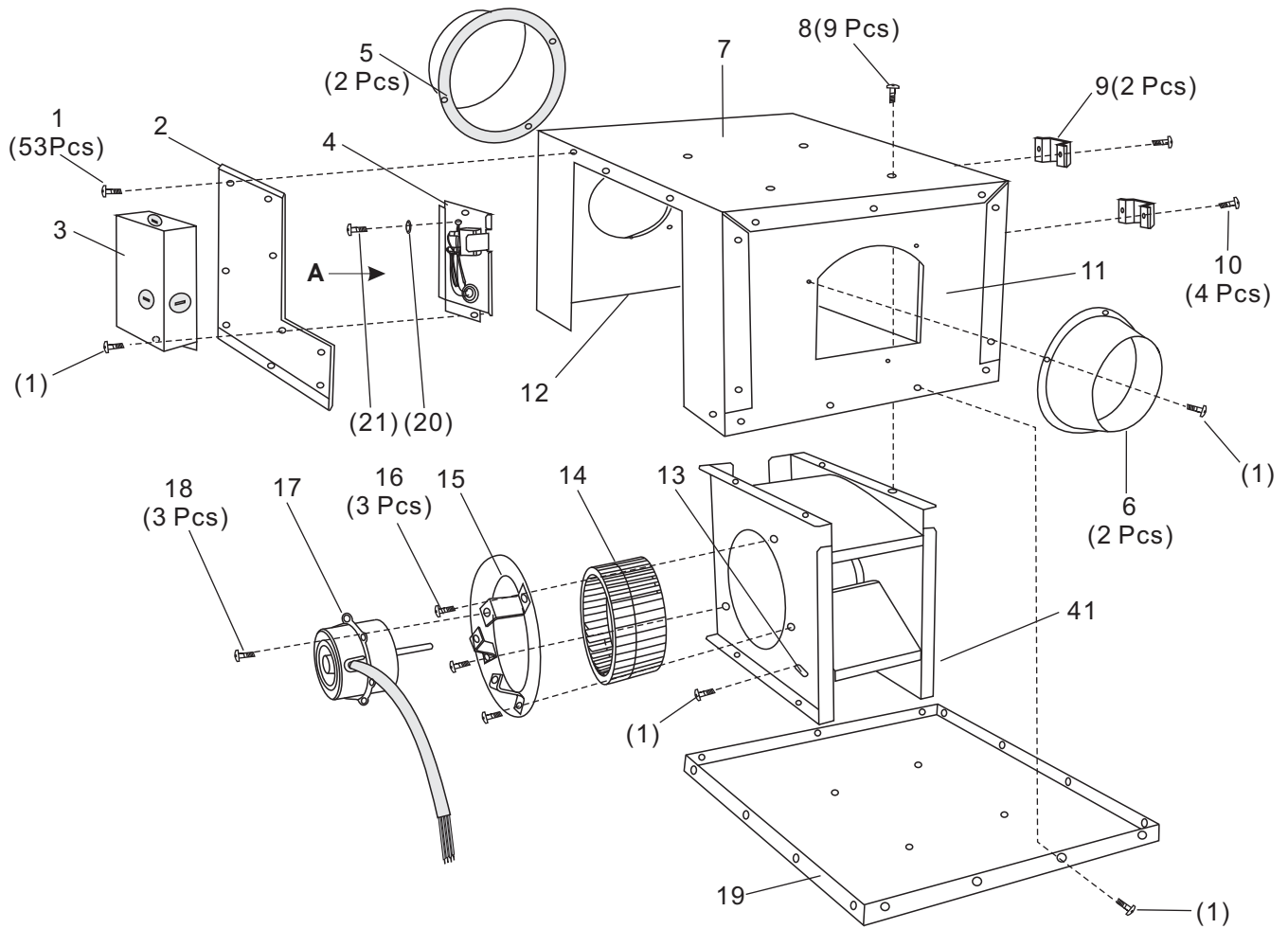
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FV-20NLF1



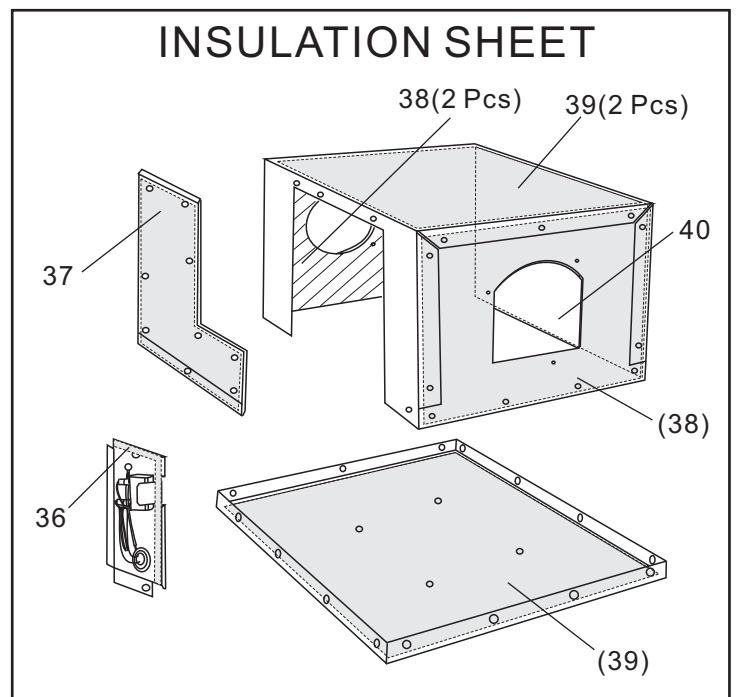
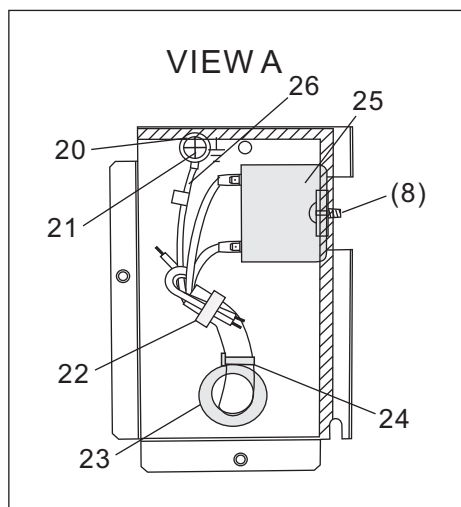
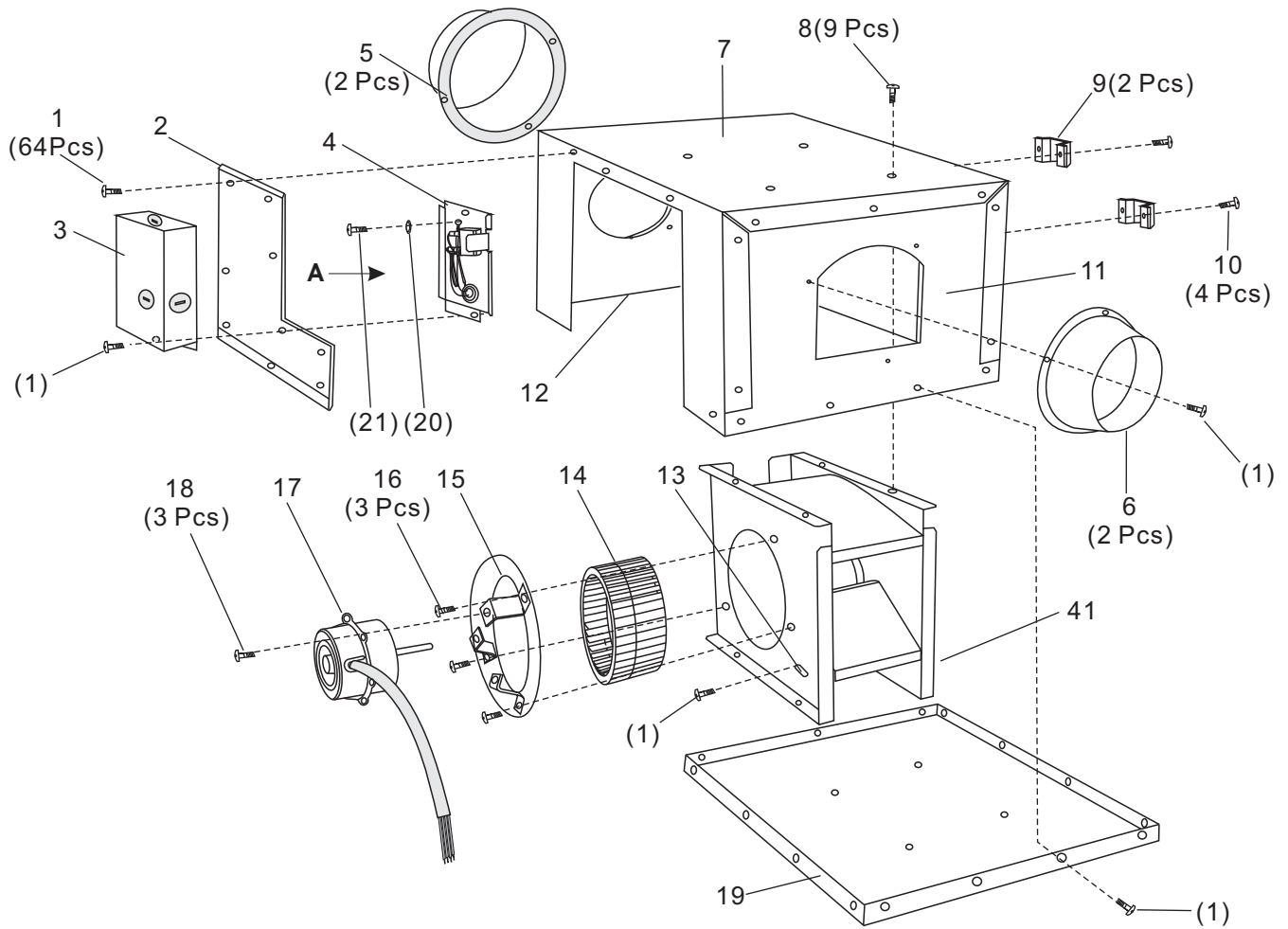
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FV-30NLF1



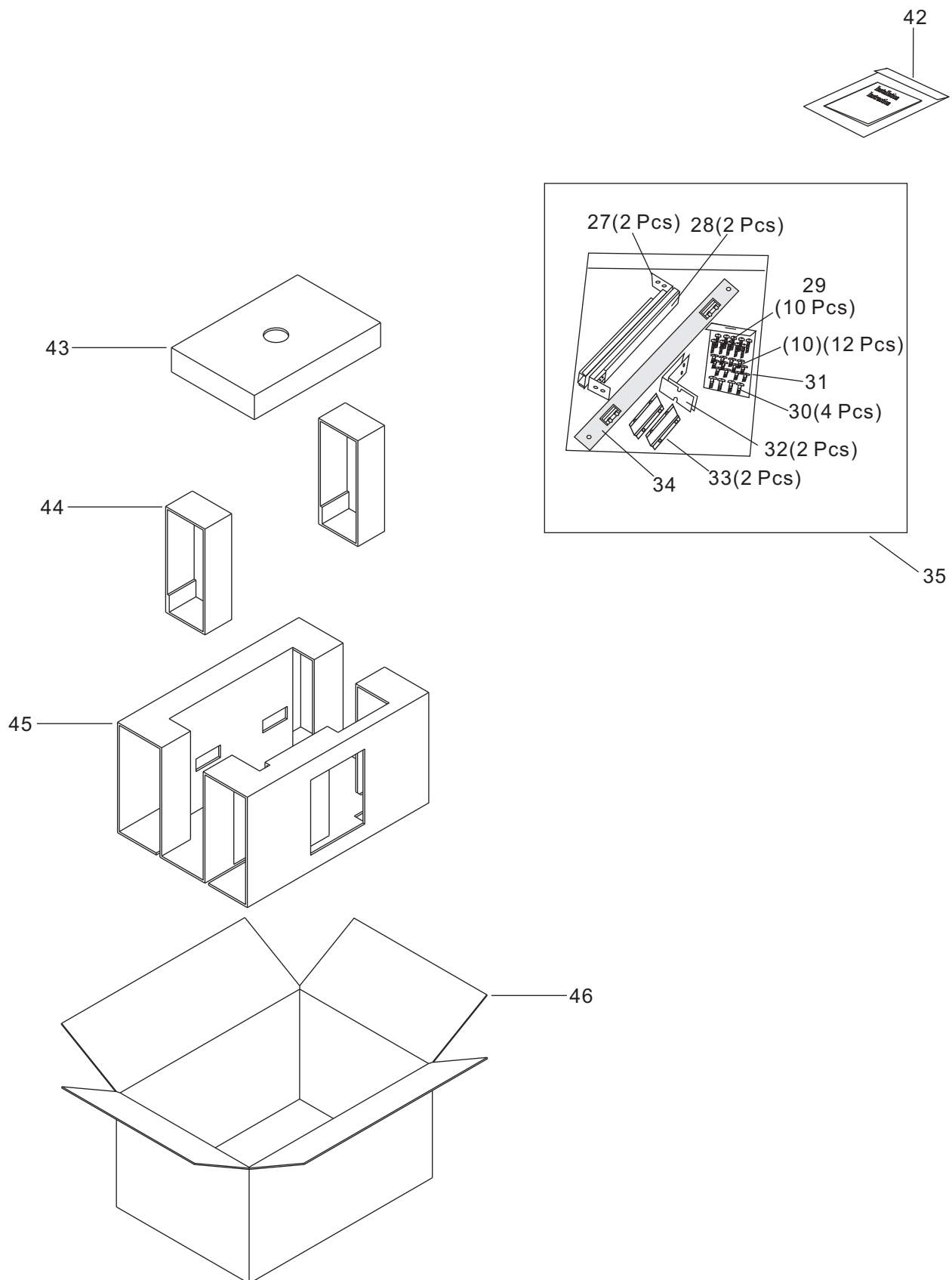
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FV-40NLF1



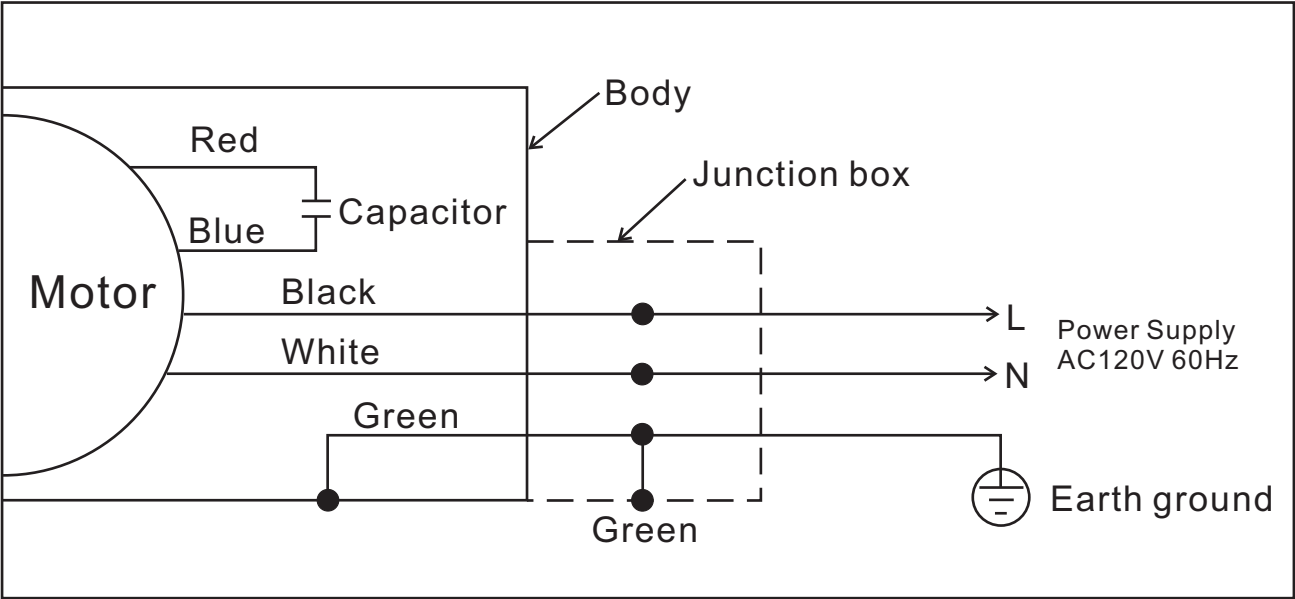
1. Parts Identification

FV-10/20/30/40NLF1



2. Wiring Diagram

FV-10/20/30/40NLF1







3 Parts List

FV-10NLF1

No.	Part No.	Part Name	Q'ty	Remark
1	FFV7000074S	TRUSS TAP SCREW	49	FOR MAIN BODY FIXING
2	FFV4660001S	INSPECTION PANEL	1	
3	FFV0760023S	CONDENSER COVER	1	
4	FFV5830002S	TERMINAL BASE	1	
5	FFV4610003S	SPONGE	2	STICKED ON ADAPTER
6	FFV0000007S	ADAPTER	2	
7	FFV4660003S	KONOJI PANEL	1	
8	FFV7000089S	TRUSS TAP SCREW	9	8 PCS FOR CASING ASSY., 1 PCS FOR CONDENSER
9	FFV2230002S	HOLDER	2	
10	FFV4000001S	TRUSS SCREW	16	12 PCS IN ACCESSORY SET A
11	FFV4660004S	OUTLET PANEL	1	
12	FFV4660002S	INLET PANEL	1	
13	FFV0740020S	CORD CLIP	1	FOR FIXING MOTOR LEAD TO CASING ASSY.
14	FFV0400050S	BLADE ASSY.	1	INCLUDED BLADE FIX SCREW
15	FFV3730001S	MOTOR SUPPORT ASSY.	1	
16	FFV7000141S	TRUSS TAP SCREW	3	FOR FIXING MOTOR SUPPORT ASSY.
17	FFV3700103S	MOTOR ASSY.	1	120V, 60Hz ⚠
18	FFV7000123S	PAN SCREW	3	FOR FIXING MOTOR ASSY.
19	FFV4660005S	BOTTOM PANEL	1	
20	FFV7010041S	WASHER	1	FOR EARTH
21	FFV7000165S	PAN SCREW	1	FOR EARTH ⚠
22	FFV0740022S	CORD CLIP	1	FOR FIXING MOTOR LEAD TO TERMINAL BASE
23	FFV0740008S	CORD BUSHING	1	
24	FFV2530003S	TIE 1	1	FOR FASTENING MOTOR LEAD
25	FFV0750042S	CONDENSER	1	250V, 3.5uF ⚠
26	FFV1300021S	EARTH LEAD WIRE	1	⚠
27	FFV0420009S	BRACKET	2	
28	FFV0420010S	SUSPENSION BRACKET 2	2	
29	FFV7000166S	TRUSS TAPPING SCREW	10	
30	FFV7000018S	TRUSS TAPPING SCREW	4	
31	FFV0010029S	ACCESSORY SET A	1	
32	FFV0020002S	ATTACHMENT	2	
33	FFV0420008S	BRACKET COVER	2	
34	FFV2230001S	HANGER	1	
35	FFV0010028S	ACCESSORY SET	1	
36	FFV2520005S	INSULATION E	1	STICKED ON TERMINAL BASE
37	FFV2520001S	INSULATION A	1	STICKED ON INSPECTION PANEL
38	FFV2520004S	INSULATION D	2	STICKED ON INLET/OUTLET PANEL
39	FFV2520002S	INSULATION B	2	STICKED ON KONOJI/BOTTOM PANEL
40	FFV2520003S	INSULATION C	1	STICKED ON KONOJI PANEL
41	FFV0790006S	CASING ASSY.	1	
42	FFV2540050S	INSTALLATION SET	1	FOR USA MARKET
(42)	FFV2540051S	INSTALLATION SET	1	FOR CA MARKET
43	FFV4710311S	PAD	1	
44	FFV4710312S	ADAPTER PAD	1	ONE SET INCLUDE TWO PIECES
45	FFV4710313S	FRAME PAD	1	
46	FFV9000137S	PACKING CASE	1	





3 Parts List

FV-20NLF1

No.	Part No.	Part Name	Q'ty	Remark
1	FFV7000074S	TRUSS TAP SCREW	53	FOR MAIN BODY FIXING
2	FFV4660006S	INSPECTION PANEL	1	
3	FFV0760023S	CONDENSER COVER	1	
4	FFV5830002S	TERMINAL BASE	1	
5	FFV4610003S	SPONGE	2	STICKED ON ADAPTER
6	FFV0000008S	ADAPTER	2	
7	FFV4660008S	KONOJI PANEL	1	
8	FFV7000089S	TRUSS TAP SCREW	9	8 PCS FOR CASING ASSY., 1 PCS FOR CONDENSER
9	FFV2230002S	HOLDER	2	
10	FFV4000001S	TRUSS SCREW	16	12 PCS IN ACCESSORY SET A
11	FFV4660009S	OUTLET PANEL	1	
12	FFV4660007S	INLET PANEL	1	
13	FFV0740020S	CORD CLIP	1	FOR FIXING MOTOR LEAD TO CASING ASSY.
14	FFV0400051S	BLADE ASSY.	1	INCLUDED BLADE FIX SCREW
15	FFV3730002S	MOTOR SUPPORT ASSY.	1	
16	FFV7000141S	TRUSS TAP SCREW	3	FOR FIXING MOTOR SUPPORT ASSY.
17	FFV3700104S	MOTOR ASSY.	1	120V, 60Hz 
18	FFV7000123S	PAN SCREW	3	FOR FIXING MOTOR ASSY.
19	FFV4660010S	BOTTOM PANEL	1	
20	FFV7010041S	WASHER	1	FOR EARTH
21	FFV7000165S	PAN SCREW	1	FOR EARTH 
22	FFV0740022S	CORD CLIP	1	FOR FIXING MOTOR LEAD TO TERMINAL BASE
23	FFV0740008S	CORD BUSHING	1	
24	FFV2530003S	TIE 1	1	FOR FASTENING MOTOR LEAD
25	FFV0750043S	CONDENSER	1	250V, 5.0uF 
26	FFV1300021S	EARTH LEAD WIRE	1	
27	FFV0420009S	BRACKET	2	
28	FFV0420010S	SUSPENSION BRACKET 2	2	
29	FFV7000166S	TRUSS TAPPING SCREW	10	
30	FFV7000018S	TRUSS TAPPING SCREW	4	
31	FFV0010029S	ACCESSORY SET A	1	
32	FFV0020002S	ATTACHMENT	2	
33	FFV0420008S	BRACKET COVER	2	
34	FFV2230001S	HANGER	1	
35	FFV0010028S	ACCESSORY SET	1	
36	FFV2520005S	INSULATION E	1	STICKED ON TERMINAL BASE
37	FFV2520006S	INSULATION A	1	STICKED ON INSPECTION PANEL
38	FFV2520009S	INSULATION D	2	STICKED ON INLET/OUTLET PANEL
39	FFV2520002S	INSULATION B	2	STICKED ON KONOJI/BOTTOM PANEL
40	FFV2520008S	INSULATION C	1	STICKED ON KONOJI PANEL
41	FFV0790007S	CASING ASSY.	1	
42	FFV2540050S	INSTALLATION SET	1	FOR USA MARKET
(42)	FFV2540051S	INSTALLATION SET	1	FOR CA MARKET
43	FFV4710311S	PAD	1	
44	FFV4710314S	ADAPTER PAD	1	ONE SET INCLUDE TWO PIECES
45	FFV4710315S	FRAME PAD	1	
46	FFV9000928S	PACKING CASE	1	

3 Parts List

FV-30NLF1

No.	Part No.	Part Name	Q'ty	Remark
1	FFV7000074S	TRUSS TAP SCREW	53	FOR MAIN BODY FIXING
2	FFV4660011S	INSPECTION PANEL	1	
3	FFV0760023S	CONDENSER COVER	1	
4	FFV5830002S	TERMINAL BASE	1	
5	FFV4610003S	SPONGE	2	STICKED ON ADAPTER
6	FFV0000008S	ADAPTER	2	
7	FFV4660013S	KONOJI PANEL	1	
8	FFV7000089S	TRUSS TAP SCREW	9	8 PCS FOR CASING ASSY., 1 PCS FOR CONDENSER
9	FFV2230002S	HOLDER	2	
10	FFV4000001S	TRUSS SCREW	16	12 PCS IN ACCESSORY SET A
11	FFV4660014S	OUTLET PANEL	1	
12	FFV4660012S	INLET PANEL	1	
13	FFV0740020S	CORD CLIP	1	FOR FIXING MOTOR LEAD TO CASING ASSY.
14	FFV0400052S	BLADE ASSY.	1	INCLUDED BLADE FIX SCREW
15	FFV3730003S	MOTOR SUPPORT ASSY.	1	
16	FFV7000141S	TRUSS TAP SCREW	3	FOR FIXING MOTOR SUPPORT ASSY.
17	FFV3700105S	MOTOR ASSY.	1	120V, 60Hz 
18	FFV7000123S	PAN SCREW	3	FOR FIXING MOTOR ASSY.
19	FFV4660015S	BOTTOM PANEL	1	
20	FFV7010041S	WASHER	1	FOR EARTH
21	FFV7000165S	PAN SCREW	1	FOR EARTH 
22	FFV0740022S	CORD CLIP	1	FOR FIXING MOTOR LEAD TO TERMINAL BASE
23	FFV0740008S	CORD BUSHING	1	
24	FFV2530003S	TIE 1	1	FOR FASTENING MOTOR LEAD
25	FFV0750044S	CONDENSER	1	250V, 6.0uF 
26	FFV1300021S	EARTH LEAD WIRE	1	
27	FFV0420009S	BRACKET	2	
28	FFV0420010S	SUSPENSION BRACKET 2	2	
29	FFV7000166S	TRUSS TAPPING SCREW	10	
30	FFV7000018S	TRUSS TAPPING SCREW	4	
31	FFV0010029S	ACCESSORY SET A	1	
32	FFV0020002S	ATTACHMENT	2	
33	FFV0420008S	BRACKET COVER	2	
34	FFV2230001S	HANGER	1	
35	FFV0010028S	ACCESSORY SET	1	
36	FFV2520005S	INSULATION E	1	STICKED ON TERMINAL BASE
37	FFV2520010S	INSULATION A	1	STICKED ON INSPECTION PANEL
38	FFV2520013S	INSULATION D	2	STICKED ON INLET/OUTLET PANEL
39	FFV2520011S	INSULATION B	2	STICKED ON KONOJI/BOTTOM PANEL
40	FFV2520012S	INSULATION C	1	STICKED ON KONOJI PANEL
41	FFV0790008S	CASING ASSY.	1	
42	FFV2540050S	INSTALLATION SET	1	FOR USA MARKET
(42)	FFV2540051S	INSTALLATION SET	1	FOR CA MARKET
43	FFV4710311S	PAD	1	
44	FFV4710316S	ADAPTER PAD	1	ONE SET INCLUDE TWO PIECES
45	FFV4710317S	FRAME PAD	1	
46	FFV9000929S	PACKING CASE	1	

3 Parts List

FV-40NLF1

No.	Part No.	Part Name	Q'ty	Remark
1	FFV7000074S	TRUSS TAP SCREW	64	FOR MAIN BODY FIXING
2	FFV4660011S	INSPECTION PANEL	1	
3	FFV0760023S	CONDENSER COVER	1	
4	FFV5830002S	TERMINAL BASE	1	
5	FFV4610003S	SPONGE	2	STICKED ON ADAPTER
6	FFV0000009S	ADAPTER	2	
7	FFV4660017S	KONOJI PANEL	1	
8	FFV7000089S	TRUSS TAP SCREW	9	8 PCS FOR CASING ASSY., 1 PCS FOR CONDENSER
9	FFV2230002S	HOLDER	2	
10	FFV4000001S	TRUSS SCREW	16	12 PCS IN ACCESSORY SET A
11	FFV4660018S	OUTLET PANEL	1	
12	FFV4660016S	INLET PANEL	1	
13	FFV0740020S	CORD CLIP	1	FOR FIXING MOTOR LEAD TO CASING ASSY.
14	FFV0400052S	BLADE ASSY.	1	INCLUDED BLADE FIX SCREW
15	FFV3730003S	MOTOR SUPPORT ASSY.	1	
16	FFV7000141S	TRUSS TAP SCREW	3	FOR FIXING MOTOR SUPPORT ASSY.
17	FFV3700106S	MOTOR ASSY.	1	120V, 60Hz ⚠
18	FFV7000123S	PAN SCREW	3	FOR FIXING MOTOR ASSY.
19	FFV4660019S	BOTTOM PANEL	1	
20	FFV7010041S	WASHER	1	FOR EARTH
21	FFV7000165S	PAN SCREW	1	FOR EARTH ⚠
22	FFV0740022S	CORD CLIP	1	FOR FIXING MOTOR LEAD TO TERMINAL BASE
23	FFV0740008S	CORD BUSHING	1	
24	FFV2530003S	TIE 1	1	FOR FASTENING MOTOR LEAD
25	FFV0750045S	CONDENSER	1	250V, 7.0uF ⚠
26	FFV1300021S	EARTH LEAD WIRE	1	⚠
27	FFV0420009S	BRACKET	2	
28	FFV0420010S	SUSPENSION BRACKET 2	2	
29	FFV7000166S	TRUSS TAPPING SCREW	10	
30	FFV7000018S	TRUSS TAPPING SCREW	4	
31	FFV0010029S	ACCESSORY SET A	1	
32	FFV0020002S	ATTACHMENT	2	
33	FFV0420008S	BRACKET COVER	2	
34	FFV2230001S	HANGER	1	
35	FFV0010028S	ACCESSORY SET	1	
36	FFV2520005S	INSULATION E	1	STICKED ON TERMINAL BASE
37	FFV2520010S	INSULATION A	1	STICKED ON INSPECTION PANEL
38	FFV2520016S	INSULATION D	2	STICKED ON INLET/OUTLET PANEL
39	FFV2520014S	INSULATION B	2	STICKED ON KONOJI/BOTTOM PANEL
40	FFV2520015S	INSULATION C	1	STICKED ON KONOJI PANEL
41	FFV0790008S	CASING ASSY.	1	
42	FFV2540050S	INSTALLATION SET	1	FOR USA MARKET
(42)	FFV2540051S	INSTALLATION SET	1	FOR CA MARKET
43	FFV4710311S	PAD	1	
44	FFV4710318S	ADAPTER PAD	1	ONE SET INCLUDE TWO PIECES
45	FFV4710319S	FRAME PAD	1	
46	FFV9000930S	PACKING CASE	1	