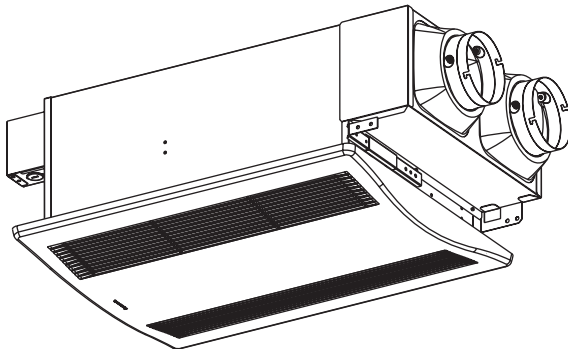


# Service Manual

Spot Energy Recovery Ventilator

Whisper Comfort™  
(North American Market)

FV-04VE1



## SPECIFICATIONS

\* Factory setting for 40CFM

Model	Air Direction	V	Hz	Duct	Speed	Gross Air Deliver at 0.1"WG(cfm)		Power Consumption(W) Fan Unit	Noise (sone)	Weight lb.(kg)
						Exhaust	Supply			
FV-04VE1	Exhaust & Supply	120	60	4"x2	High	40	30	24	0.8	20.5 (9.3)
					Low	20	20	21	<0.3	

\* Optional setting for 20CFM

Model	Air Direction	V	Hz	Duct	Speed	Gross Air Deliver at 0.1"WG(cfm)		Power Consumption(W) Fan Unit	Noise (sone)	Weight lb.(kg)
						Exhaust	Supply			
FV-04VE1	Exhaust & Supply	120	60	4"x2	High	20	20	21	<0.3	20.5 (9.3)
					Low	10	10	17	N/A	



### 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

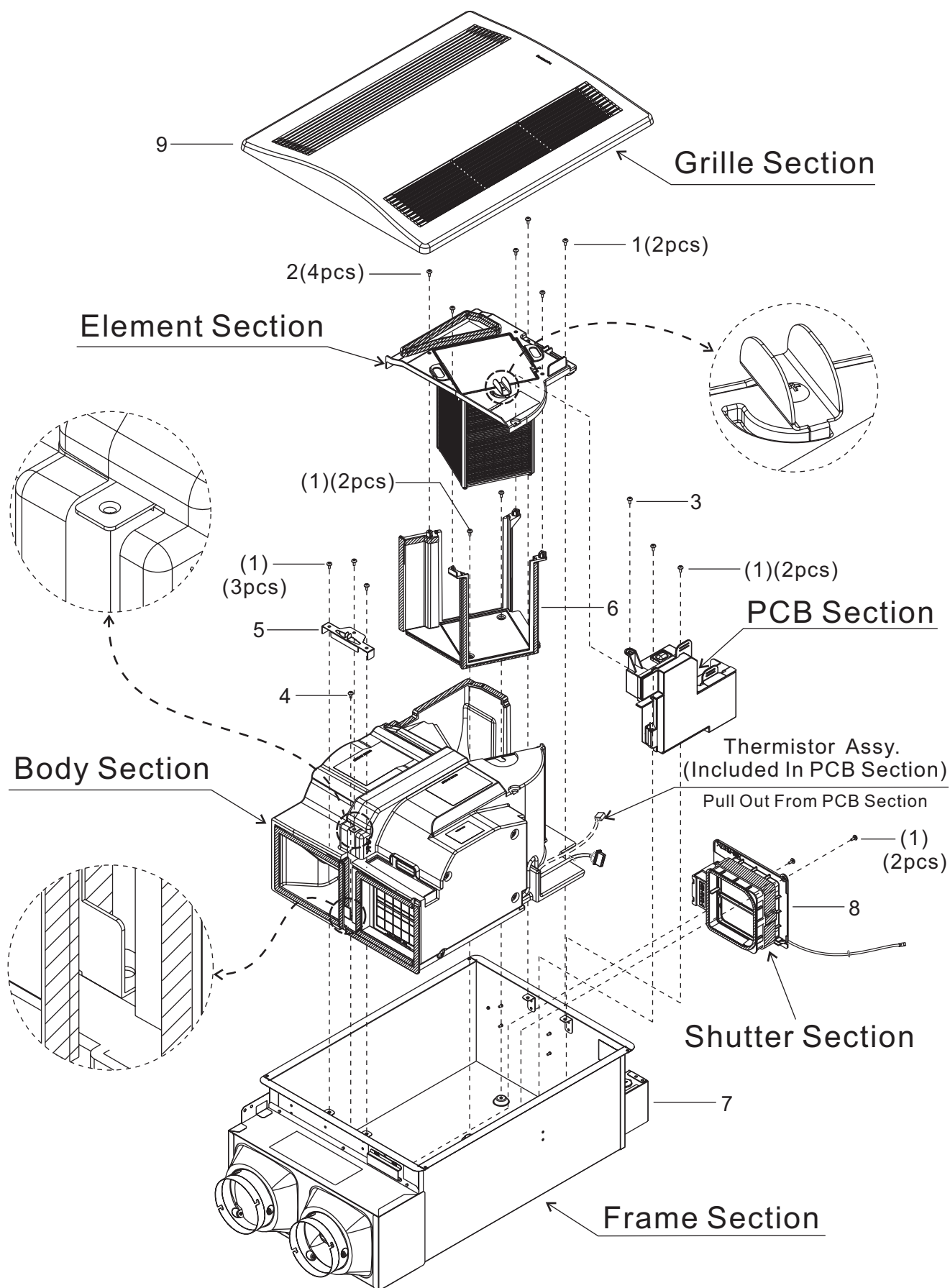
There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire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

## CONTENTS

	PAGE
1. Parts Identification .....	1~7
2. Wiring Diagram .....	8
3. Parts List .....	9~11

# 1. Parts Identification

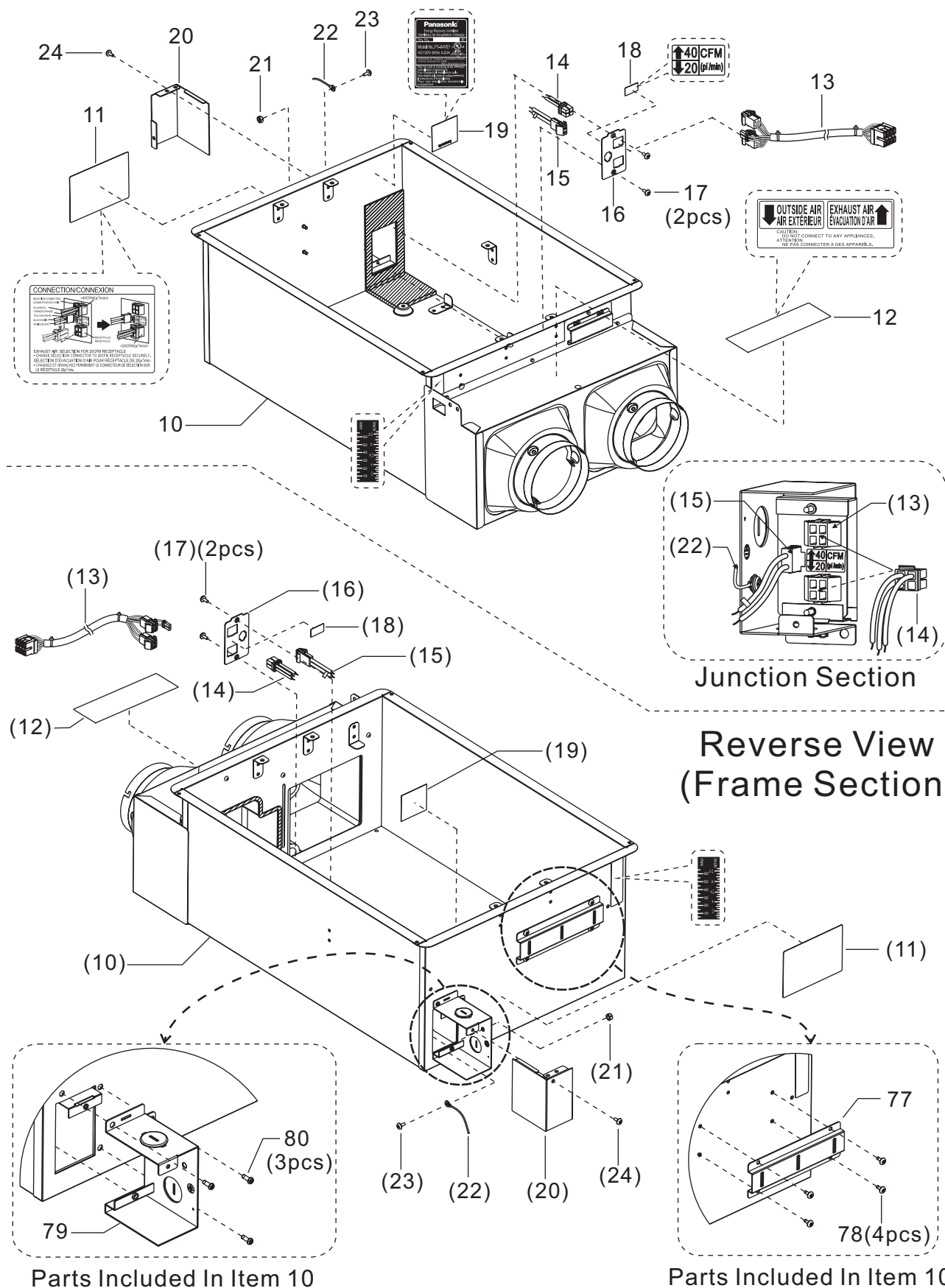
FV-04VE1



# 1. Parts Identification

FV-04VE1

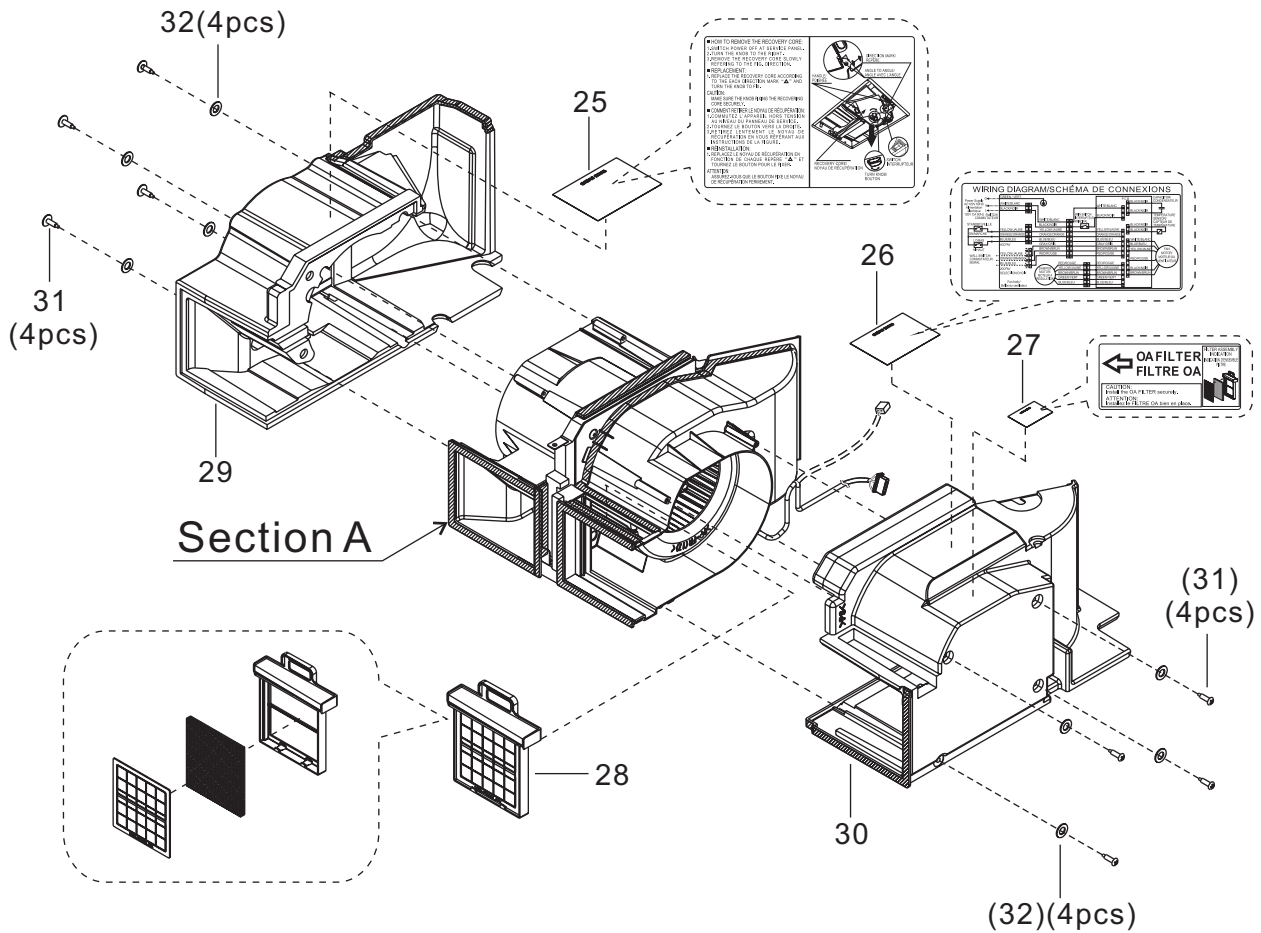
## Details of Frame Section



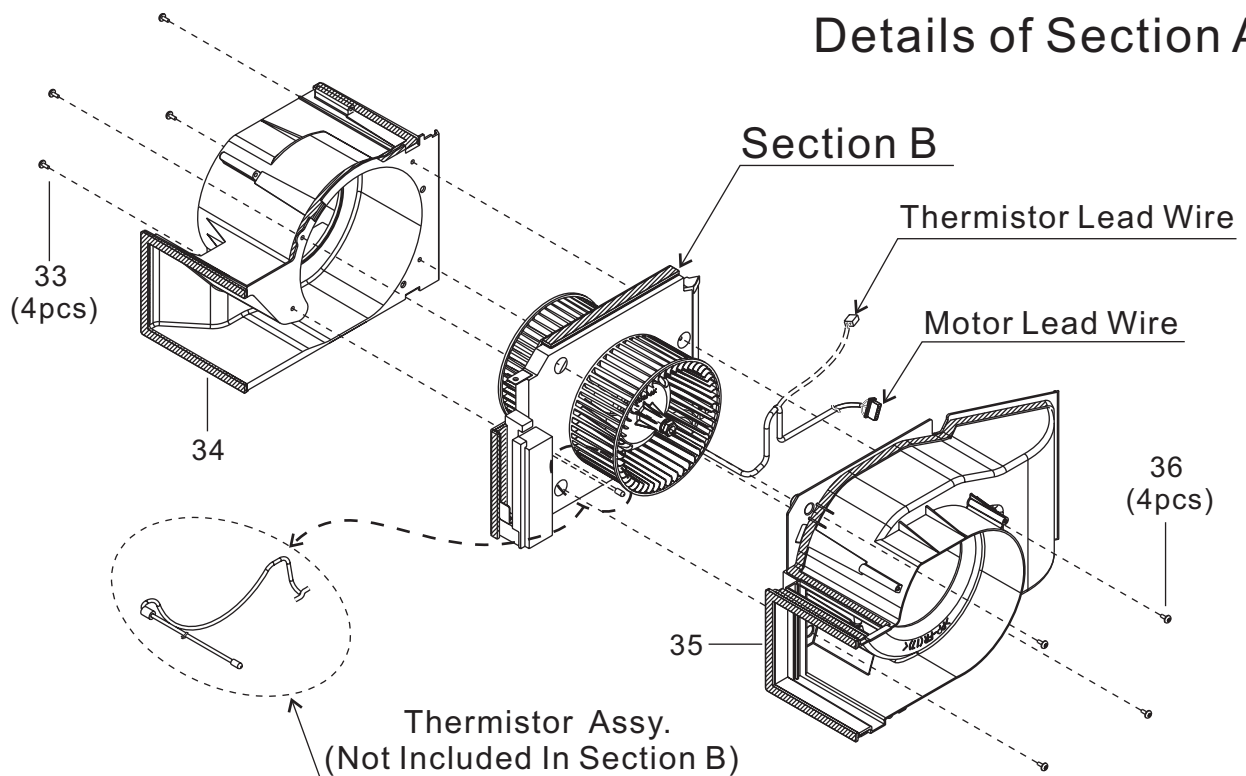
# 1. Parts Identification

FV-04VE1

## Details of Body Section



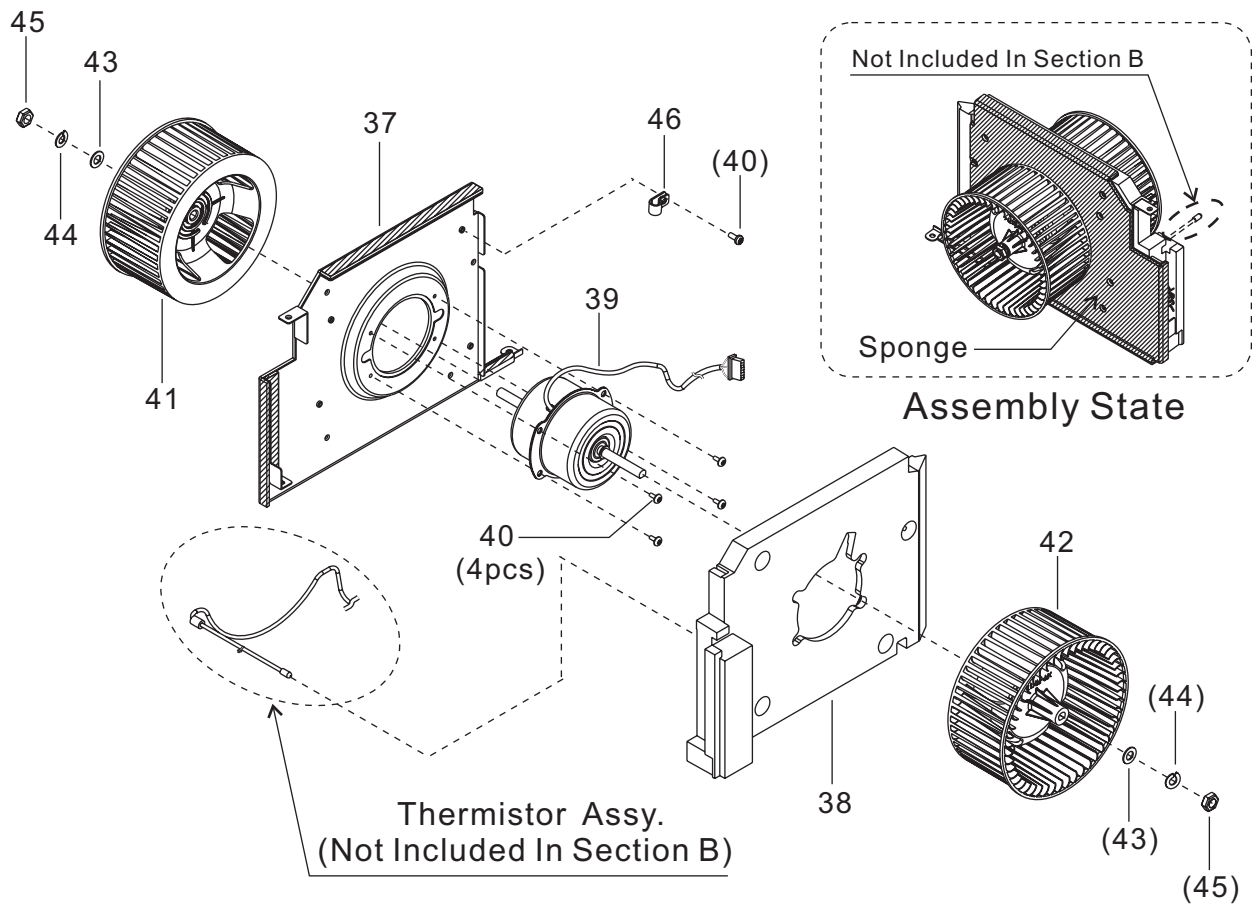
## Details of Section A



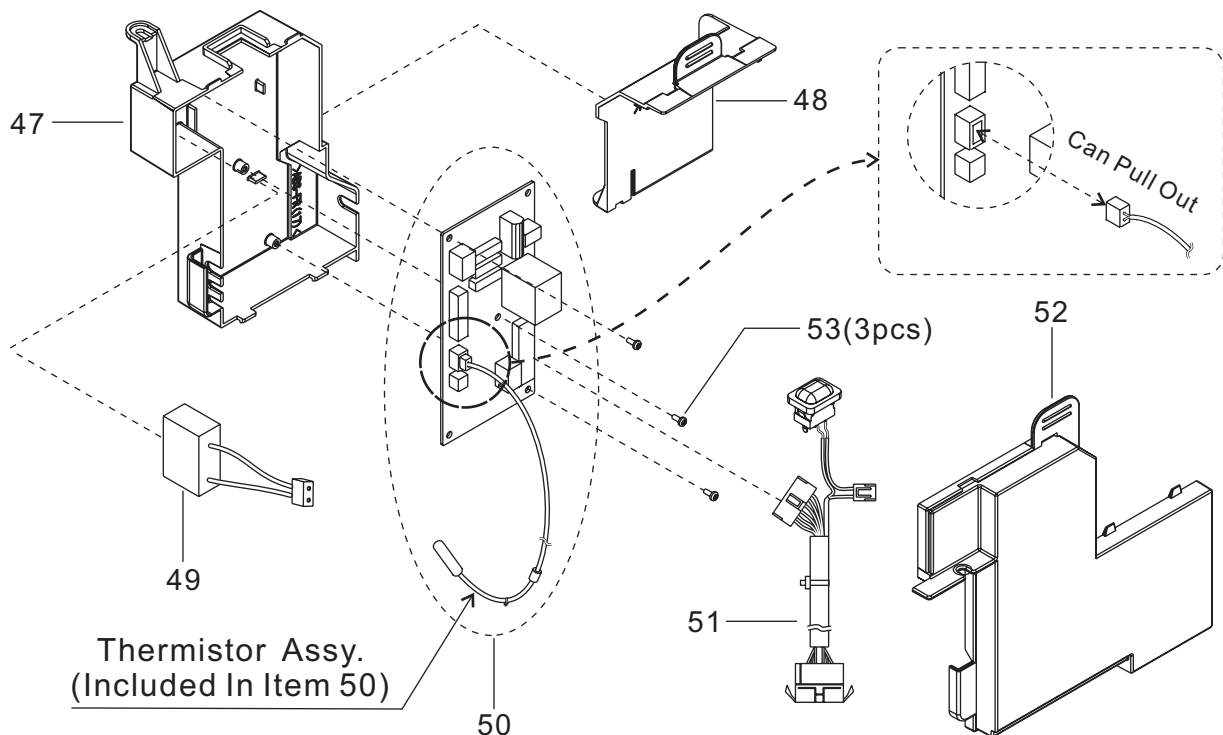
# 1. Parts Identification

FV-04VE1

## Details of Section B



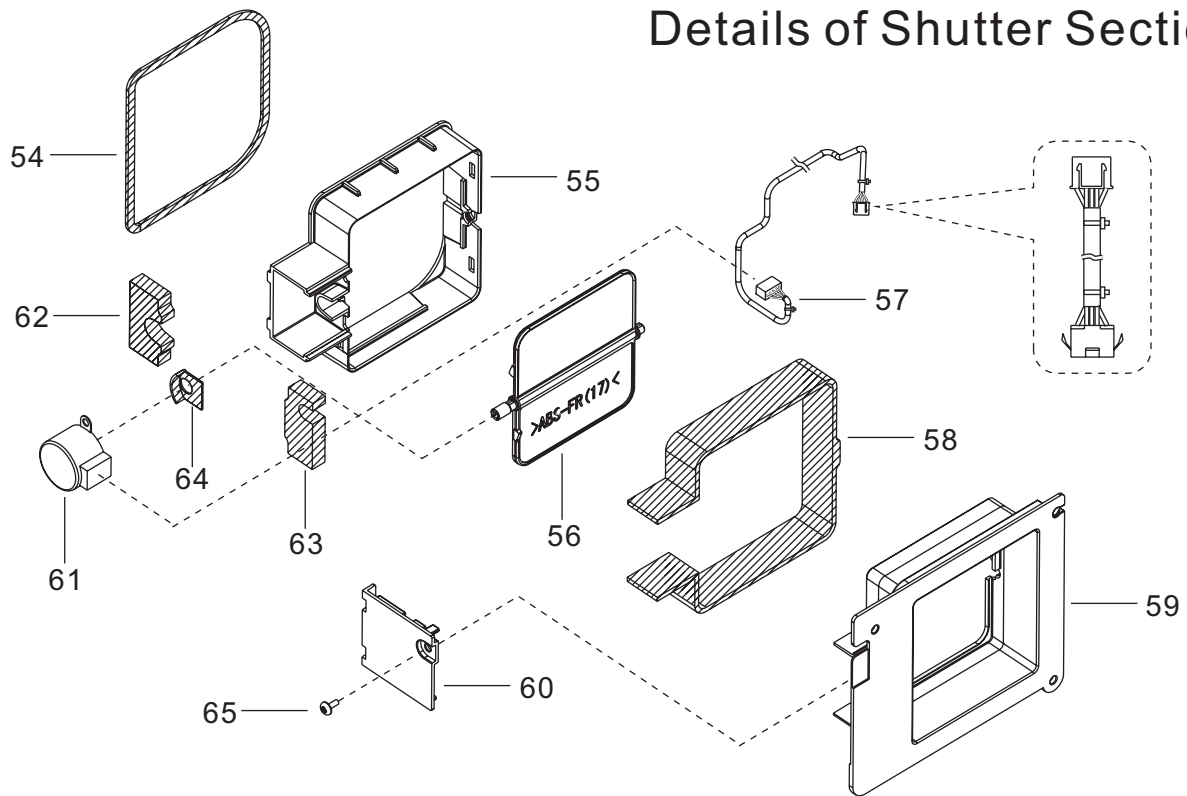
## Details of PCB Section



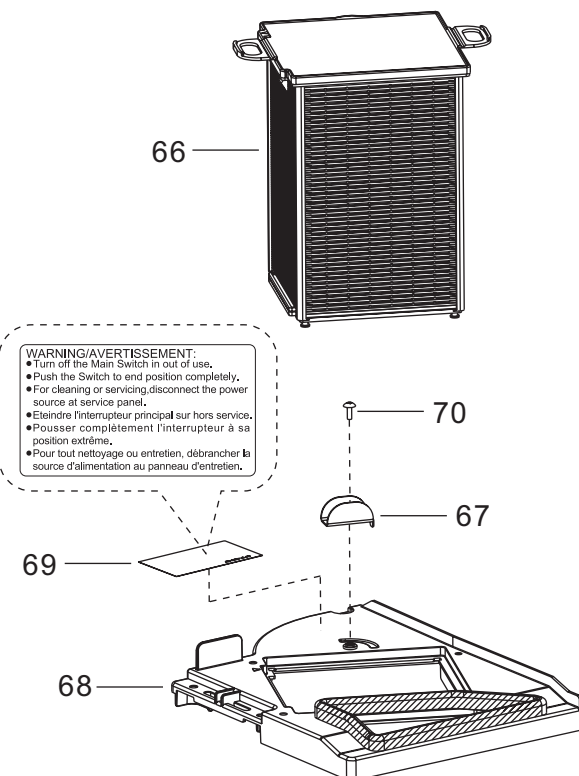
# 1. Parts Identification

FV-04VE1

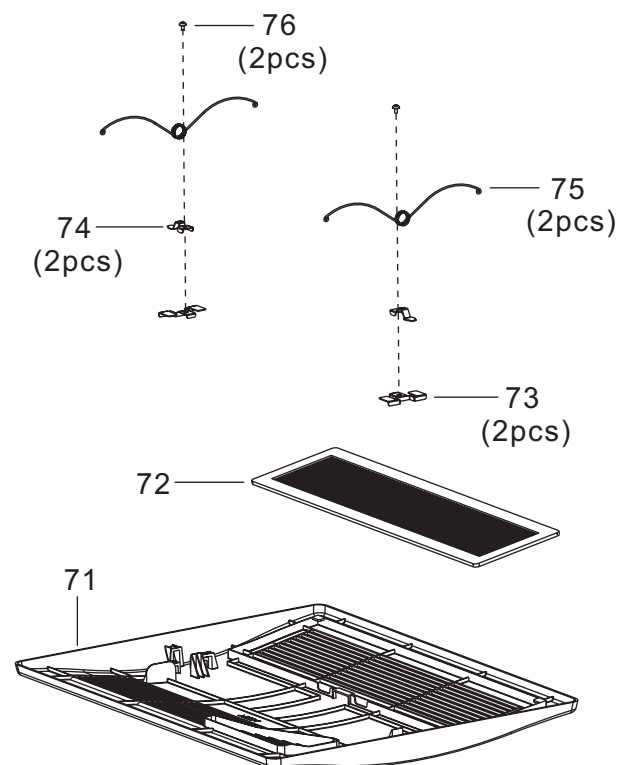
## Details of Shutter Section



## Details of Element Section



## Details of Grille Section

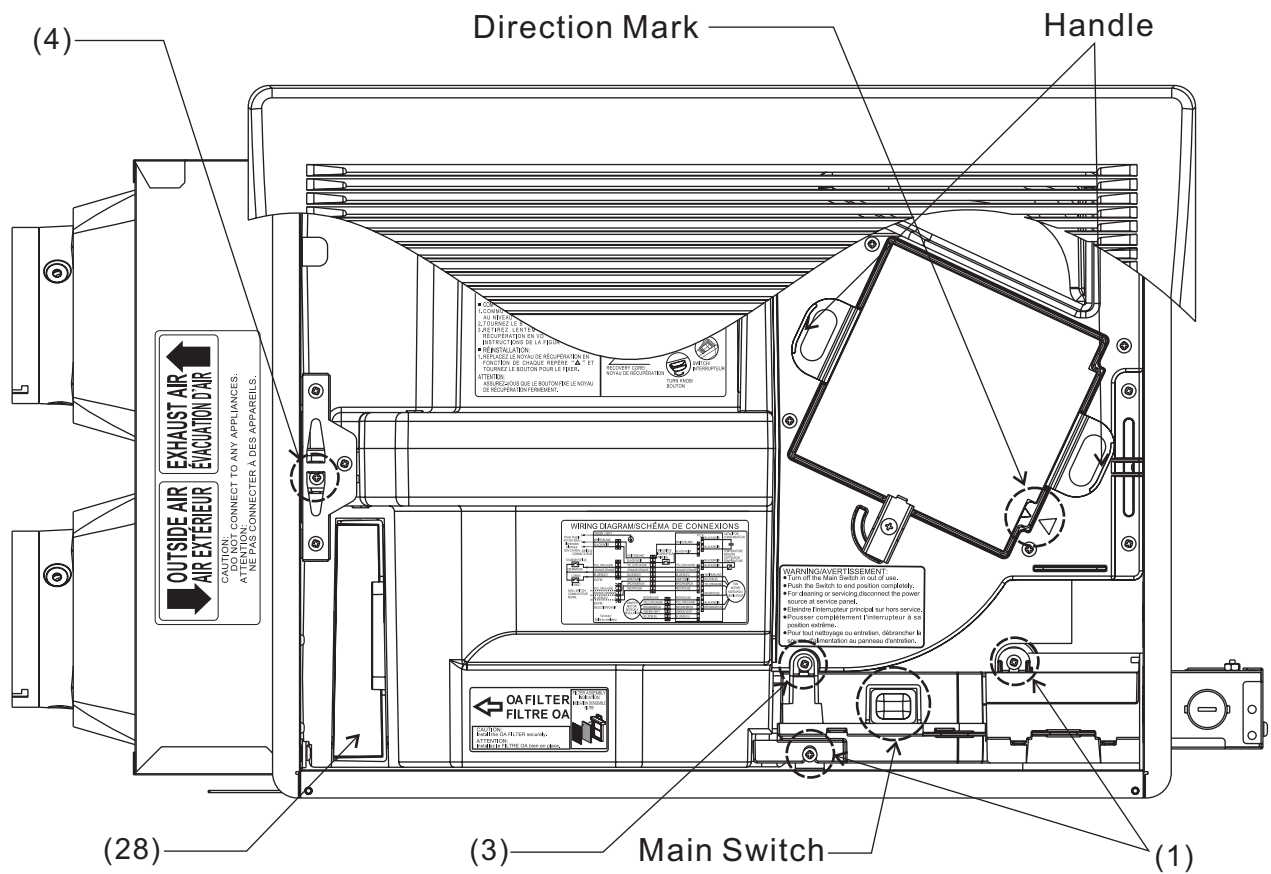




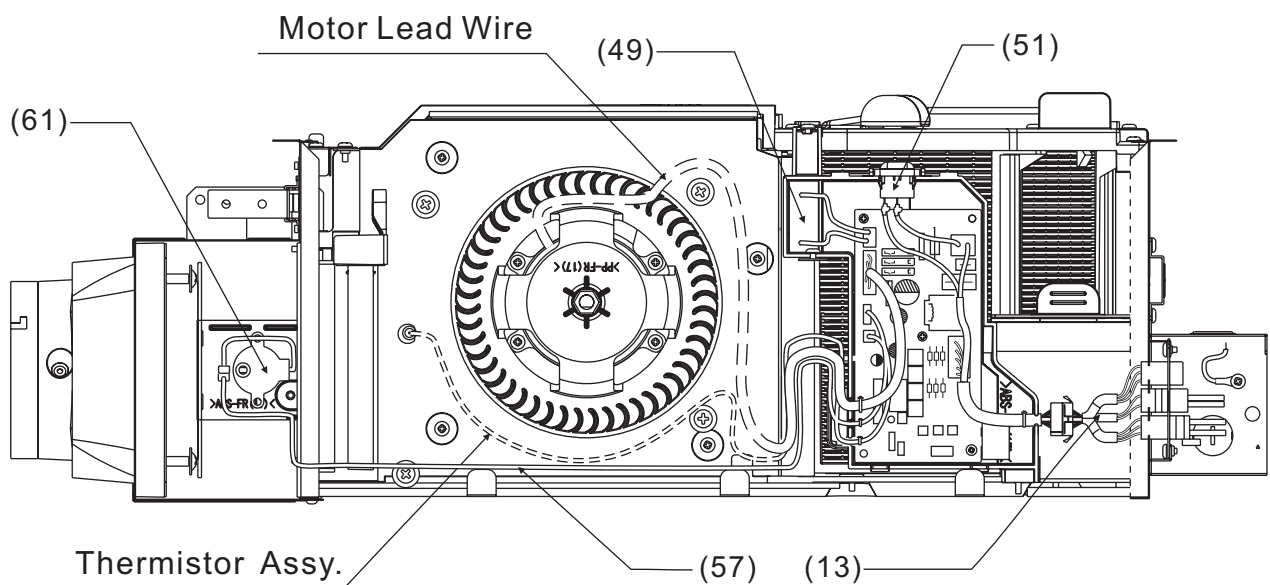
# 1. Parts Identification

FV-04VE1

## Details of Assembly State



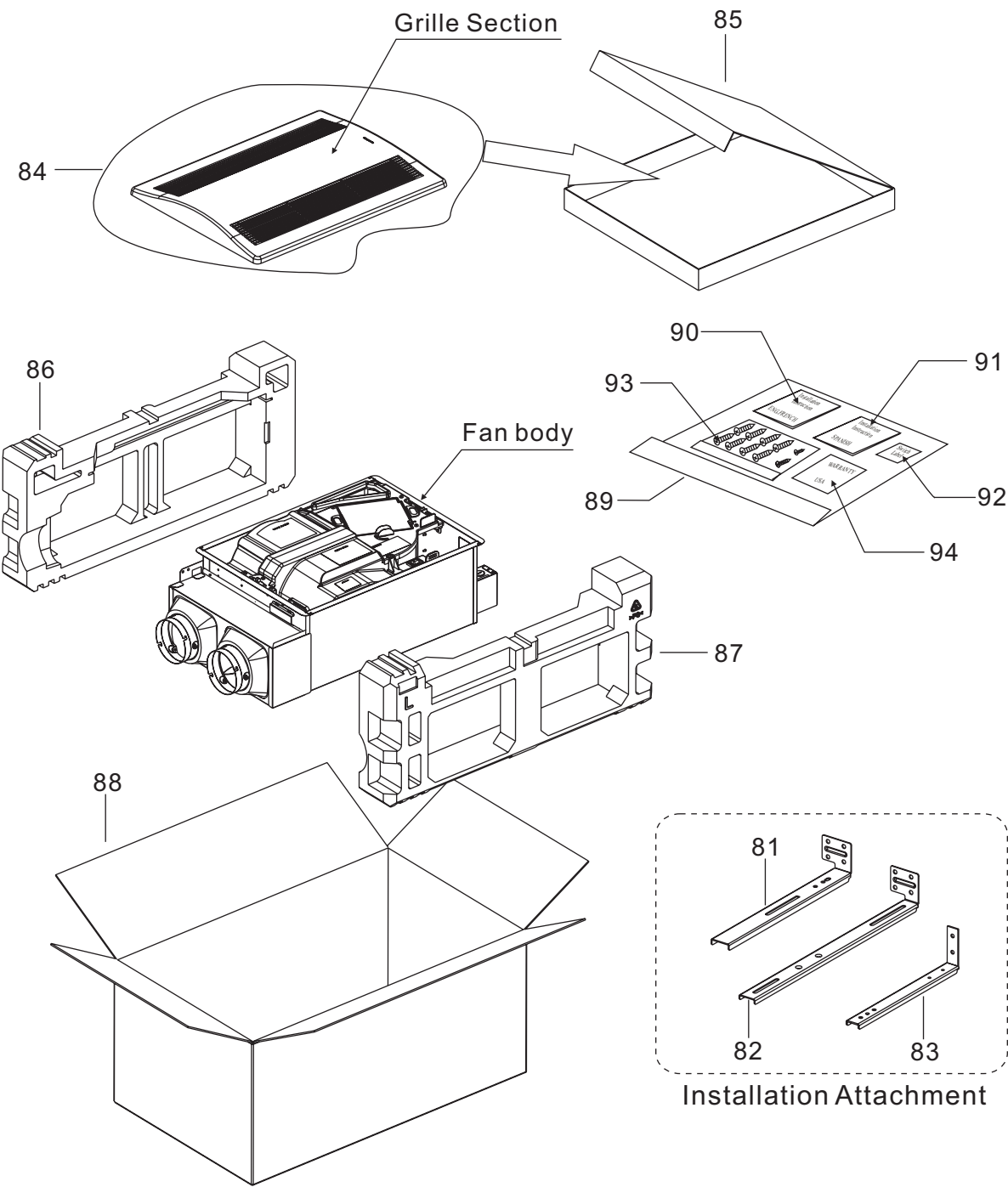
## Details of Wiring



# 1. Parts Identification

FV-04VE1

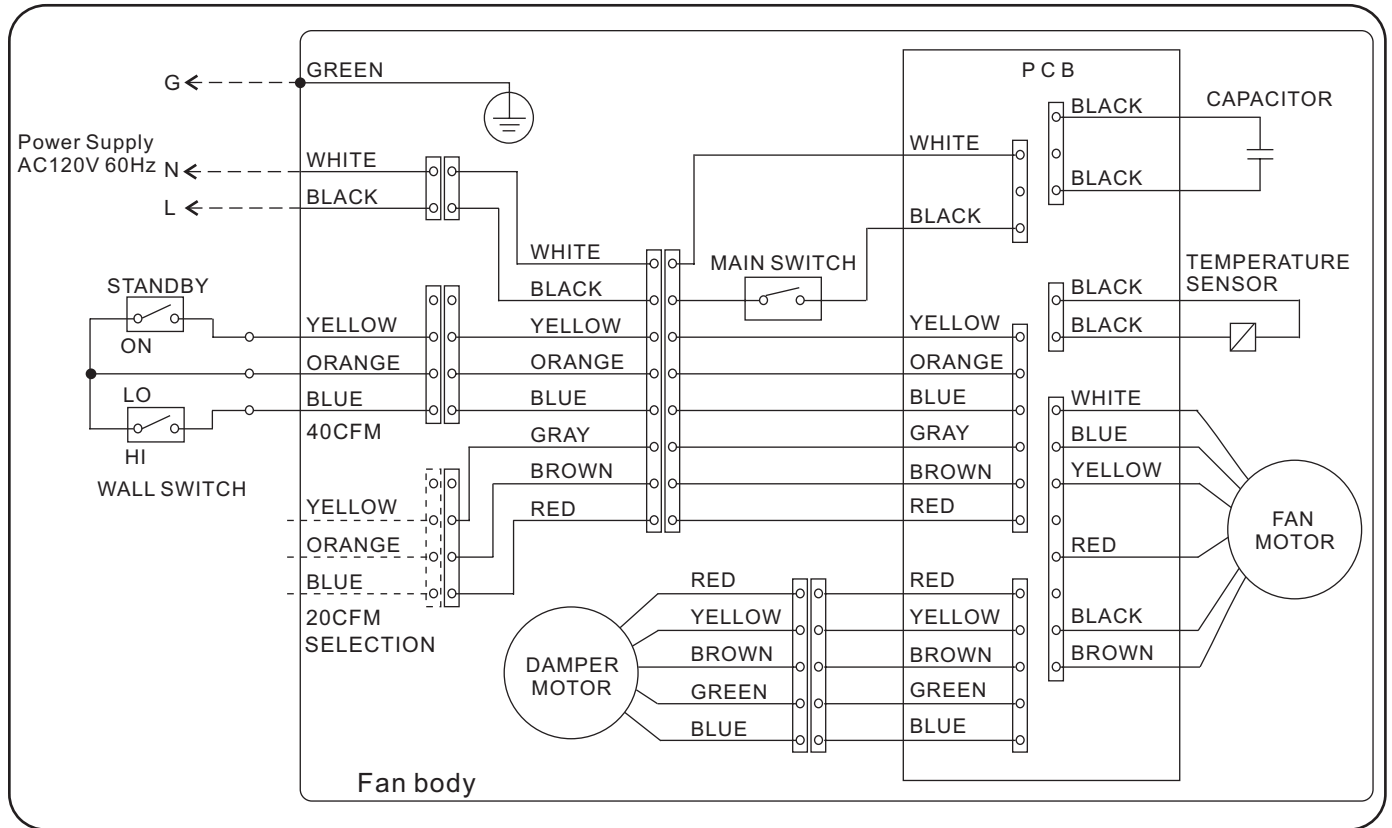
## Details of Packing Section





## 2. Wiring Diagram

FV-04VE1



\*Optional setting (20CFM):

If need to change 20CFM,replace the connector assy to 20CFM side receptacle.

### 3 Parts List

FV-04VE1

#### Primary Section

No.	Part No.	Part Name	Q'ty	Remark
1	FFV7000074S	Truss Tap Screw	11	
2	FFV7000097S	Truss Screw	4	For Fixing "Element Case Assy." to "Element Frame Assy."
3	FFV7000099S	Truss Tap Screw	1	For Fixing "PCB Section" to "Frame Section"
4	FFV7000091S	Truss Tap Screw	1	For Fixing "Body Section" to "Frame Section"
5	FFV4670004S	Grille Fixing Plate	1	
6	FFV1340001S	Element Frame Assy.	1	
7	FFV1600082S	Frame Section	1	
8	FFV5760002S	Shutter Section	1	
9	FFV3400104S	Grille Section	1	

#### Frame Section---(FFV1600082S)

No.	Part No.	Part Name	Q'ty	Remark
10	FFV1600083S	Frame Assy.	1	Included 2pcs "Scale Tape"
11	FFV2800008S	Junction Label	1	Sticked on "Frame Assy."
12	FFV0000065S	Adapter Label	1	Sticked on "Frame Assy."
13	FFV0900035S	Connector Lead Wire	1	
14	FFV6710013S	Wall SW Lead	1	
15	FFV4620051S	Power Lead	1	
16	FFV0900033S	Connector Plate	1	
17	FFV7000091S	Pan Tap Screw	2	For Fixing "Connector Plate" to "Junction Box"
18	FFV0900034S	Connector Label	1	Sticked on "Connector Plate"
19	FFV4020250S	Name Plate	1	Sticked on "Frame Assy."
20	FFV2800004S	Junction Box Cover	1	
21	FFV7020015S	Hexagon Nut	1	For Earth
22	FFV3402103S	Lead Wire	1	For Earth 
23	FFV7030008S	Pan Screw	1	For Earth 
24	FFV7000137S	Truss Screw	1	For Fixing "Junction Box Cover"

#### Body Section

No.	Part No.	Part Name	Q'ty	Remark
25	FFV1340005S	Element Caution Label	1	Sticked on "Casing D Assy."
26	FFV6730017S	Wiring Label	1	Sticked on "Casing E Assy."
27	FFV1610028S	OA Filter Label	1	Sticked on "Casing E Assy."
28	FFV1610027S	OA Filter Assy.	1	
29	FFV0790047S	Casing D Assy.	1	
30	FFV0790048S	Casing E Assy.	1	
31	FFV7030009S	PS Screw	8	4pcs for Fixing "Casing D Assy.", 4pcs for Fixing "Casing E Assy."
32	FFV7030010S	PS Washer	8	4pcs for Fixing "Casing D Assy.", 4pcs for Fixing "Casing E Assy."


#### Section A

No.	Part No.	Part Name	Q'ty	Remark
33	FFV7000089S	Truss Screw	4	For Fixing "Casing B Assy."
34	FFV0790049S	Casing B Assy.	1	
35	FFV0790050S	Casing A Assy.	1	
36	FFV7000074S	Truss Tap Screw	4	For Fixing "Casing A Assy."




### 3 Parts List

FV-04VE1



#### Section B

No.	Part No.	Part Name	Q'ty	Remark
37	FFV3730047S	Motor Support Assy.	1	
38	FFV0790051S	Casing C	1	
39	FFV3702112S	Motor Assy.	1	120V,60Hz 
40	FFV7000074S	Truss Tap Screw	5	4pcs For Fixing "Motor Assy.",1pcs For Fixing "Nylon Clamp"
41	FFV0400086S	RA Blade	1	
42	FFV0400087S	SA Blade	1	
43	FFV7010019S	Shaft Washer	2	1pcs For Fixing "RA Blade",1pcs For Fixing "SA Blade"
44	FFV7010026S	Spring Washer	2	1pcs For Fixing "RA Blade",1pcs For Fixing "SA Blade"
45	FFV7020011S	Hexagon Nut	2	1pcs For Fixing "RA Blade",1pcs For Fixing "SA Blade"
46	FFV0740014S	Nylon Clamp	1	

#### PCB Section

No.	Part No.	Part Name	Q'ty	Remark
47	FFV4700009S	PCB Box B	1	
48	FFV4700008S	PCB Box C	1	
49	FFV0750163S	Capacitor Assy.	1	350V,1.4uF 
50	FFV4700011S	PCB Assy.	1	Included "Thermistor Assy." 
51	FFV3450008S	SW Lead Wire Assy.	1	
52	FFV4700010S	PCB Box A	1	
53	FFV7000164S	Pan Tap Screw	3	For Fixing "PCB Assy." to "PCB Box B"

#### Shutter Section---(FFV5760002S)

No.	Part No.	Part Name	Q'ty	Remark
54	FFV4610031S	Sponge 1	1	Sticked on "Shutter Box B"
55	FFV5600009S	Shutter Box B	1	
56	FFV5510054S	Shutter	1	
57	FFV3450009S	S.P Motor Lead Wire	1	
58	FFV4610030S	Sponge 4	1	Sticked between "Shutter Box B" and "Shutter Box A"
59	FFV5600007S	Shutter Box A	1	
60	FFV5600008S	Shutter Box C	1	
61	FFV3702113S	S.P Motor	1	
62	FFV4610029S	Sponge 2	1	
63	FFV4610028S	Sponge 3	1	
64	FFV4610027S	Sponge	1	Use For Protecting the "S.P Motor"
65	FFV7000097S	Truss Tap Screw	1	For Fixing "Shutter Box C" to "Shutter Box A"

#### Element Section

No.	Part No.	Part Name	Q'ty	Remark
66	FFV1340002S	Element Assy.	1	
67	FFV1340004S	Element Knob	1	
68	FFV1340003S	Element Case Assy.	1	
69	FFV0810005S	SW Caution Label	1	Sticked on "Element Case Assy."
70	FFV7000099S	Truss Tap Screw	1	For Fixing "Element Knob" to "Element Case Assy."

### 3 Parts List

FV-04VE1

#### Grille Section---(FFV3400104S)

No.	Part No.	Part Name	Q'ty	Remark
71	FFV3402110S	Grille	1	
72	FFV1610029S	RA Filter	1	
73	FFV5560035S	Spring Fixing Plate A	2	
74	FFV5560034S	Spring Fixing Plate B	2	
75	FFV5560017S	Spring	2	
76	FFV7000064S	Bind Screw	2	For Fixing the "Spring Fixing Plate A & B"

#### Additional Order Parts(Included In Frame Assy.)

No.	Part No.	Part Name	Q'ty	Remark
77	FFV0420013S	Bracket Cover	1	
78	FFV7000044S	Truss Tap Screw	4	For Fixing "Bracket Cover"
79	FFV2800007S	Junction Box	1	
80	FFV7000091S	Pan Tap Screw	3	For Fixing "Junction Box"

#### Packing & Accessories Section

No.	Part No.	Part Name	Q'ty	Remark
81	FFV5710017S	Suspension Bracket I	1	
82	FFV5710018S	Suspension Bracket II	1	
83	FFV0420014S	Suspension Bracket III	1	
84	FFV4650014S	Poly Cover	1	For "Grille Section" Packing
85	FFV4710198S	Grille Pad	1	
86	FFV4710199S	Frame Pad A	1	Mark With "R"
87	FFV4710200S	Frame Pad B	1	Mark With "L"
88	FFV9000538S	Packing Case Assy.	1	
89	FFV0010149S	Accessory Set	1	For USA Market
(89)	FFV0010153S	Accessory Set	1	For CA Market
90	FFV2540061S	Installation Instruction	1	For USA/CA Market,English
(91)	FFV2540062S	Installation Instruction	1	For USA Market,Spanish
(91)	FFV2540063S	Installation Instruction	1	For CA Market,French
92	FFV5720016S	Switch Label	1	
93	FFV0010171S	Accessory A	1	Included Installation Screws
94	FFV6720003S	Warranty Sheet	1	For USA Market
(94)	FFV6720002S	Warranty Sheet	1	For CA Market