

Volume

1

HealthWay

Maintenance, Service, and Parts Manual

20600-3

MAINTENANCE, SERVICE, AND PARTS MANUAL

20600-3

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Preventative Maintenance

Preventative Maintenance is the best way to ensure that you new HealthWay 20600-3 will continue to perform at optimum performance.

Preventative Maintenance 20600-3 Deluxe

Preventative Maintenance (PM) Schedule

Warning Unplug the purifier from electrical source before performing any Maintenance or Service on your 20600-3 Deluxe!

Every 3 Weeks

1. Vacuum intake Grills.
2. Remove Pre Filter.
 - 2.1. Remove Back Door.
 - 2.2. Remove Pre Filter.
3. Vacuum Pre Filter.
 - 3.1. Both Sides.
4. Reinstall Pre Filter.
 - 4.1. Slide Pre Filter into slot.
 - 4.2. Reinstall Rear Door.

Every 6 Months

1. In addition to the Normal 3 Week Maintenance, Perform the following actions.
2. Inspect the Pre Filter for any deterioration.
3. Plug in the power cord and turn the purifier on. Press and hold the Pre Filter Service Button until the purifier "beeps" and the Pre Filter Service Light is Green.

Every 12 Months

1. Replace the Pre Filter.
 - 1.1. Vacuum the intake grills.
 - 1.2. Remove the Rear Door.
 - 1.3. Remove the Pre Filter and Discard.
 - 1.4. Vacuum the Pre Filter slot to remove any dust or dirt.
 - 1.5. Install the new Pre Filter ensuring that you have removed the plastic wrap from the filter.
 - 1.6. Reinstall the Rear Door onto the unit.

2. Replace the Main Filter and Clean the High Energy Grid and Lower Control Grid.
 - 2.1. Remove the Top Lid.
 - 2.2. Remove the Main Filter, by turning the Cam Handles to unlock the filter, discard the old Main Filter.
 - 2.3. With a dry lint free cloth carefully wipe the wire on the High Energy Grid to remove any dust or oxidation.
 - 2.4. Remove the three (3) screws securing the High Energy Grid to the unit.
 - 2.5. Lift the High energy Grid upwards enough to allow access to the Lower Control Grid.
 - 2.6. Vacuum the Lower Control Grid carefully removing all the dust and dirt from the Lower Control Grid.
 - 2.7. Reinstall the High Energy Grid and secure with the three (3) screws.
 - 2.8. Install the new Main Filter and secure with the cam handles.
 - 2.9. Reinstall the Top Lid ensuring that the plunger is towards the front of the unit and is engaging the Interlock Switch.
 - 2.10. Plug in the power cord and turn the purifier on. Press and hold the Pre Filter Service Button until the purifier "beeps" and the Pre Filter Service Light is Green.
 - 2.11. Press and hold the Main Filter Service Button until the purifier "beeps" and the Main Filter Service Light is Green.

Trouble Shooting

20600-3 Deluxe Trouble Shooting Chart			
Problem	Test	Solution	Check
No Power to Unit	1. Check top cover for proper installation	Turn Top Lid so the Plunger activates the Interlock Switch.	Unit turns on
	2. Check to see that Pre Filter is installed.	Pre Filter installed completely and rear door is on.	Unit turns on
	3. Check to see if main fuse is blown.	If blown replace Fuse.	Unit turns on.
	4. 1 - 3 are good and unit still has no power.	Call Customer Service.	
Main Filter Service Light is RED	1. Unit has been in service for 11.5 to 12 months.	Perform 12 Month Service as detailed in the Preventative Maintenance section of this manual page 2	Main Filter Service Light Turns Green.
	2. Main Filter Service Light is still Red	Press and Hold the Main Filter Service Button for 20 seconds or until the unit beeps. If it will not beep or the light is still RED. Replace the Control Board as detailed in the Service Section Chapter 3 of this manual on page 8	After Replacing the Control Board Main Filter Service Light is Green.
	3. Main Filter Service Light is still Red	Call Customer Service.	
Pre Filter Service Light is RED	1. Unit has been in service for 5.5 to 6 Months.	Perform 6 Month Service as detailed in the Preventative Maintenance section of this manual page 1	Pre Filter Service Light Turns Green.
	2. Pre Filter Service Light is still Red	Press and Hold the Pre Filter Service Button for 20 seconds or until the unit beeps. If it will not beep or the light is still RED. Replace the Control Board as detailed in the Service Section Chapter 3 of this manual on page 8	After Replacing the Control Board the Pre Filter Service Light is Green.

	3. Pre Filter Service Light is still Red	Call Customer Service.	After Replacing the Control Board the Pre Filter Service Light is Green.
Crackling or Snapping Noise coming from Unit.	1. The High Energy Wire and Lower Control Grid are dirty.	Clean the High Energy Grid Wire and Lower Control Grid as detailed in Preventative Maintenance section of this manual page 2	No Crackling or Snapping Noise when the unit is running.
	2. Ground Contact to the Main Filter is loose.	Check the connection of the ground (Copper Strip) on the Main Filter to the Ground Pin on the Bezel. Remove the Main Filter and place it on a flat surface. Flex the tip of the copper strip downward until it touches the Filter plastic housing and reinstall the main filter. Ensuring that the copper strip is contact with the ground pin.	No Crackling or Snapping Noise when the unit is running.
	3. Ground Connection to bottom of Bezel is loose.	Remove Left Side Panel as detailed in Repair Section of this Manual page #. After Removing Side Panel remove the blue push on terminal and gently squeeze the terminal with a pair of pliers. Reconnect the terminal to the ground pin. Reinstall the panel, main filter, and top lid. Turn unit on and listen for noise.	No Crackling or Snapping Noise when the unit is running.
	4. Still hear noise.	Call Customer Service.	
Bio Monitor Light is Out.	1. Is the Main Filter Service Light also RED?	Perform steps for correction of Main Filter Service Light is RED. After Completion is the Bio Monitor Light now On?	Bio Monitor Light is ON.
	2. High Energy Grid is Dirty	Clean the High Energy Grid Wire and Lower Control Grid as detailed in Preventative Maintenance section of this manual page 2	Bio Monitor Light Comes ON.
	3. Test Power Supply and Voltage Multiplier	See Testing Section of this manual page # for detailed instructions for testing the function of the Voltage Multiplier and Power Supply.	Replace faulty components and the Bio Monitor Light Comes ON.
	4. Bio Light still out after performing testing and replacement.	Call Customer Service.	

All Lights Illuminated but No Fan/Blower.	1. Depress On/Off Button.	If Lights go out replace the Circuit Board Cartridge as detailed in the Service Section of this Manual page 9.	After Replacing the Relay Board the fan functions.
		If Lights stay on replace the Circuit Board Cartridge as detailed in the Repair Section of this Manual page 9.	After Replacing the Control Board the fan functions.
	Lights Illuminated but still no fan/blower.	Call Customer Service.	
Fan/Blower is operating but no air is coming from the unit.	1. Plastic Wrap still on Pre Filter.	Remove Rear Door and Pre Filter and check to ensure that the plastic wrapping has been removed from the Pre Filter.	Air is coming from the unit.
	2. Pre Filter is Dirty / Loaded	Remove Pre Filter and Vacuum both sides of the filter. Reinstall Pre Filter.	Air is coming from the unit.
	3. Main Filter is dirty / Loaded	Remove and inspect Main Filter. If loaded or plugged replace Main Filter	Air is coming from the unit.
	4. Fan/Blower is operating but no air is coming from the unit.	Call Customer Service.	
Purifier is producing an odor.	1. Bio Light Illuminated.	DFS is then functioning. The DFS Filtration System is designed to operate 24 hours a day 7 days a week, if the system has been shut down for a period of time it may take 20 to 30 minutes for total oxidation of the main filter to occur. Allow the unit to run for at least 30 minutes in an unoccupied space on high speed.	Unit is no longer producing any odor.
	1a. After 30 minutes of running the unit is still producing an odor.	Pre Filter has reached the limit of it odor absorbing capacity. Replace Pre Filter.	Unit is no longer producing any odor.
	1b. After Replacing Pre Filter unit is still producing an odor.	Call Customer Service.	
	2. Bio Light is NOT Illuminated.	See Trouble Shooting Section of this Manual page 4 Bio Light Is Out.	

Service Manual

This section of the Manual covers the steps to follow to Service components of your air purifier.

Warning Unplug the air purifier from electrical source before performing any Maintenance or Service on your 20600-3 Deluxe!

Installation instructions for any of the components are opposite of the removal instructions.

Removal of the Fuse:

1. Carefully lay the purifier on the side.
2. Locate the Fuse Holder in the bottom of the purifier.
3. Push in and turn the end of the Fuse Holder $\frac{1}{4}$ turn.
4. Pull out the end of the Fuse Holder with the Fuse.

Removal of the Top Lid:

1. Gently pull the handles of the lid away from the unit.
2. Lift the lid upwards and remove from the unit.

Removal of the Main Filter:

1. Remove the Top Lid.
2. Turn the Cam Handles $\frac{1}{4}$ turn to unlock the main filter.
3. Carefully lift the main filter out of the purifier.

Removal of the High Energy (HE) Grid:

1. Remove the Top Lid.
2. Remove the Main Filter.
3. Carefully remove the three (3) nylon screws securing the HE Grid to the purifier.
4. Lift the HE Grid slightly upwards to allow access to the High Voltage connection.
5. Unscrew the grey High Voltage connection from the HE Grid.
 - a. Take note of the rubber O-Ring on the end of the High Voltage Connection and ensure that it does not fall off the connector.
6. Remove the HE Grid from the Purifier.

Removal of the Lower Control Grid (Ground Grid):

1. Remove the Top Lid.
2. Remove the Main Filter.
3. Remove the HE Grid.
4. Remove the nine (9) securing the Lower Control Grid to the purifier.
 - a. **Note** one of the screws is a machine screw that will go into the brass (ground) standoff it is fine threaded. The other eight (8) are plastite® thread and **will not thread** into the brass stand off.
5. Carefully remove the Lower Control Grid from the air purifier.

Removal of the Voltage Multiplier:

1. Remove the Top Lid.
2. Remove the Main Filter.
3. Remove the (High Energy) HE Grid.
4. Remove Both Side Panels.
5. Remove the Front Panel.
6. Remove the sixteen screws (16) securing the Right side Vacuum Panel to the Steel Frame.
7. Remove the Vacuum Panel.
8. Remove the Circuit Board Cartridge.
9. Disconnect the two (2) Wires one (1) Red and one (1) Black from the Circuit Board Cartridge that go to the Voltage Multiplier.
10. Remove one (1) of the two (2) screws that secure the Voltage Multiplier (VM) to the purifier.
11. Loosen the other screw securing the VM to the purifier.
12. Remove the VM and carefully slide the High Voltage wire connection that goes to the HE grid through the hole in the Lower Control grid and plastic housing.

Removal of the Bezel:

1. Remove the Top Lid.
2. Remove the Main Filter.
3. Remove the Four (4) screws securing the Bezel to the purifier.
4. Lift the Bezel up being careful around the High energy (HE) Grid.
5. Disconnect the ground (Blue) connector.

Removal the Cam Handles:

1. Remove the Top Lid.
2. Remove the Main Filter.
3. Remove the Bezel.
4. Turn the Bezel over and carefully remove the e-clip from the shaft for the Cam Handle.
5. Pull the Cam Handle out of the bezel.
6. Repeat step 4 and 5 for the other Cam Handle.

Removal the Side Panels (Left and Right):

1. Remove the Top Lid.
2. Remove the Main Filter.
3. Remove the two (2) screws in the upper corners of the Side Panel that you are removing.
4. Tip the top of the side panel out away from the purifier.
5. Lift the Side Panel up and away from the purifier.
6. Repeat steps 3 – 5 for the other Side Panel if you need to remove both sides.

Removal the Front Panel:

1. Remove the Top Lid.
2. Remove the Main Filter.
3. Remove the Side Panels both Left and Right.
4. Remove the two (2) screws that secure the Front Panel to the purifier.
5. Tip the top of the Front Panel away from the purifier so to be able to access the electrical connections.
6. Disconnect the Ribbon Cable from the connector on the Circuit Board Cartridge.
7. Disconnect the Interlock Plug from the connector on the Circuit Board Cartridge.
8. Lift the Front Panel up and away from the purifier.

Removal the Control Board:

1. Remove the Top Lid.
2. Remove the Top Lid.
3. Remove the Main Filter.
4. Remove the Side Panels both Left and Right.
5. Remove the Front Panel.
6. Remove the two (2) screws securing the Control Board Cover to the Front Panel.
7. Remove the Control Board Cover.
8. Remove the five (5) screws securing the Control Board to the Front Panel.
9. Remove the Control Board.

Removal the Upper Interlock Switch:

1. Remove the Top Lid.
2. Remove the Top Lid.
3. Remove the Main Filter.
4. Remove the Side Panels both Left and Right.
5. Remove the Front Panel.
6. Remove the two (2) screws securing the Control Board Cover to the Front Panel.
7. Remove the Control Board Cover.
8. Disconnect the two (2) wires connected to the Interlock Switch.
9. Remove the two (2) screws securing the Upper Interlock Switch to the Front Panel.
10. Remove the Upper Interlock Switch.

Removal of the Circuit Board Cartridge:

1. Remove the Top Lid.
2. Remove the Top Lid.
3. Remove the Main Filter.
4. Remove the Side Panels both Left and Right.
5. Remove the Front Panel.
6. Remove the four (4) Screws securing the bottom of the Circuit Board Cartridge to the purifier. These screws go through the top of the Front Vacuum Panel.
7. Remove the two (2) securing the sides of the Circuit Board Cartridge to the steel frame of the purifier.
8. Remove the Circuit Board Cartridge from the purifier.

Removal of the Lower Base:

1. Carefully lay the unit on its side.
2. Ensure that the purifier is unplugged for electrical source.
3. Remove the four (4) screws securing the Lower Base to the purifier.
4. Pull the Lower Base away from the unit slightly.
5. Remove the one (1) screw securing the cable clamp to the base to allow better access to the Terminal Block.
6. If replacing the lower base do the following, if you are just removing the Lower Base to access the Upper Base continue to step 7.
 - 6.1. Disconnect the wires from the power cord at the terminal block.
 - 6.2. Disconnect the two (2) wires to the Fuse Holder at the Terminal Block.
 - 6.3. Remove the jam nut holding the Fuse Holder into the Lower Base.
 - 6.4. Remove the Fuse Holder from the Lower Base.
 - 6.5. Remove the two (2) screws securing the terminal block to the Lower Base.
 - 6.6. Pinch the Cord Grip and pull the power cord from the purifier.
 - 6.7. Remove the Lower Base.
7. Disconnect the three wires from the purifier at the Terminal Block.
8. Remove the Lower Base.

Removal of the Power Cord:

1. Remove the Lower Base
2. Pinch the cord grip where the power cord goes through the Lower Base.
3. Pull the power cord and cord grip out of the Lower Base.

Removal of the Upper Base:

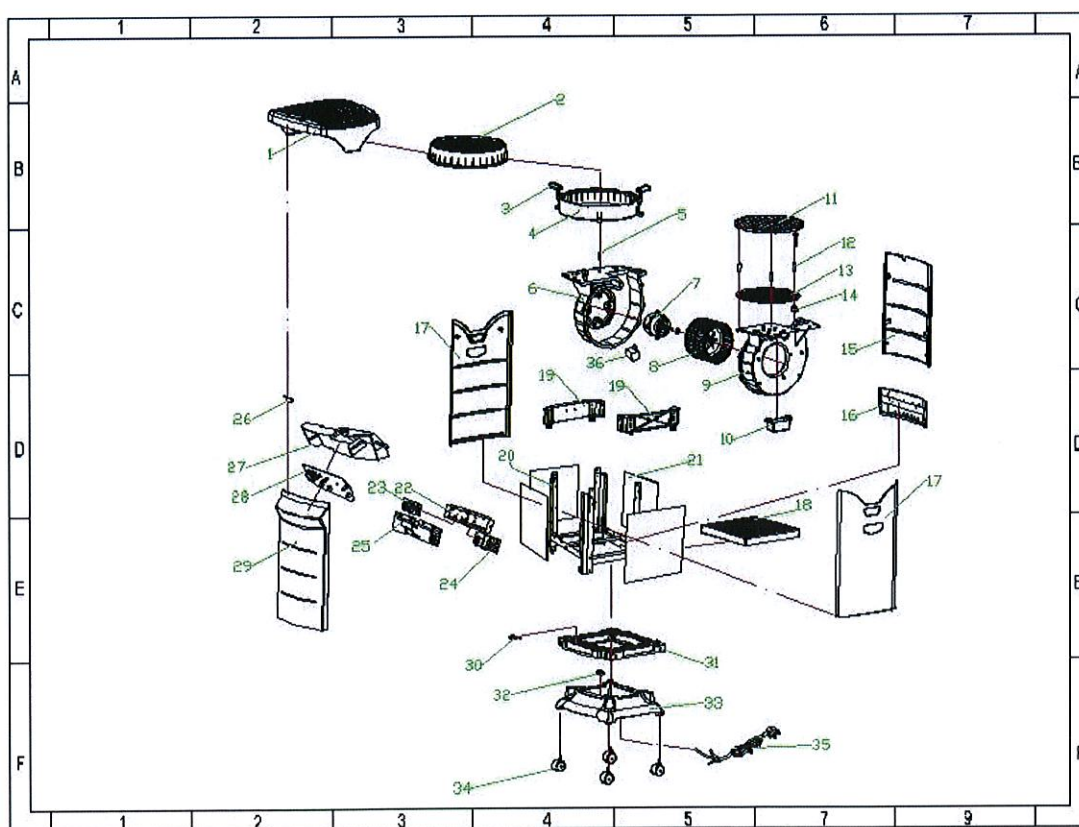
1. Remove the Top Lid.
2. Remove the Main Filter.
3. Remove the Side Panels both Left and Right.
4. Remove the Lower Base.
5. Remove the eight screws (8) that secure the upper base to the steel frame, two (2) at each corner.
6. Pull the Upper Base slightly away from the purifier and disconnect the two (2) wires from the Lower Limit Switch.
7. Remove the Upper Base.
8. If Replacing the Upper Base go to Removal of the Lower Limit Switch step 6 and continue from there.

Removal of the Lower Limit Switch:

1. Remove the Top Lid.
2. Remove the Main Filter.
3. Remove the Side Panels both Left and Right.
4. Removal of the Lower Base.
5. Remove the Upper Base.
6. Remove the two (2) screws that secure the Lower Limit Switch to the Upper Base.
7. Remove the Lower Limit Switch from the Upper Base.

Parts Manual

Exploded View



20600-3 Parts List

Exploded View ID Number	Part Description	HealthWay Part Number	Quantity per Unit	Notes
1	Lid, Top	HWTOP3B	1	
2	Filter, Main	60500	1	
3	Handle, Cam	HWCAMH-3B	2	
4	Bezel, High Energy Grid	20-100	1	
5	Stud, Copper, Ground	20-128	1	
6	Scroll, Blower, Left		1	
7	Motor, 220V		1	
8	Wheel, Blower		1	
9	Scroll, Blower, Right		1	
10	Voltage Multiplier	VM-1	1	
11	Grid, High Energy	20-144	1	
12	Stand off, Ceramic	20-102	3	
13	Grid, Lower Control	20-101	1	
14	Bushing, Ceramic		1	
15	Panel, Back	HWBP3B	1	
16	Door, Back	HWBD3B	1	
17	Panel, Side	HWSP3B	2	
18	Filter, Pre	50400	1	
19	Frame, Plastic	20-115	2	
20	Frame, Steel		1	
21	Panel, Vacuum, Seal, Side	20-110	2	
21A	Panel, Vacuum, Seal, Front	20-111	1	
21B	Panel, Vacuum, Seal, Rear	20-112	1	
22	Cartridge, Circuit Board	20-123	1	Consists of Items 23, 24, and 25A and B
23	Board, Relay	20-125	1	
24	Board, Power Supply	20-124	1	
25A	Cover, Circuit Board, Cartridge, Front	20-126	1	
25B	Cover, Circuit Board, Cartridge, Rear	20-127	1	
26	Switch, Interlock, Upper	20-108	1	
27	Cover, Control Board	20-105	1	
28	Board, Control	20-106	1	
29	Panel, Front	HWFP3B	1	
30	Switch, Interlock, Lower	20-108	1	
31	Base, Upper	See Note 1	1	
32	Block, Terminal		1	
33	Base, Lower	20-114	1	
34	Caster	20-135	4	
35	Cord, Power, 220V	20-159	1	
36	Capacitor, Motor	20-118	1	

Notes

1. Upper and Lower Base (24 and 26) sold as a set PN 20-114
2. Item 22 contains Items 23, 24, and 25.
3. Any Item without a Part Number is not customer replaceable. Please call customer service

Wiring Schematic

