

Model CPA QA-20

Owner Operation and Maintenance Manual

IMPORTANT SAFETY INSTRUCTIONS

Read and save these instructions.

Always unplug the CPA QA-20 Air Purification System when it is not in operation, while the Filters or UVC germicidal lamps are being changed, and when cleaning. After servicing this equipment both the front and top grill assemblies must be reinstalled in exactly the same manner as prior to removal. If either grill is not reinstalled properly the Catalytic Pure Air Portable Air Purification System will not turn on. This is a built in safety feature.

Before using the Catalytic Pure Air Portable Air Purification System extend the power cord and inspect for any signs of damage. Do not use the product if the power cord has been damaged.

Warning – This appliance is designed to be used on a flat level surface, and may not work properly on an uneven surface. To reduce the risk of electric shock and injury, do not place in a window. Always place the air purifier at least 12 inches (30.48 centimeters) away from heat sources such as stoves, radiators, or heaters.

Do not move the Catalytic Pure Air Portable Air Purification System while it is in operation.

Always unplug prior to moving.

Do not immerse the Portable Air Purification System in water, as permanent damage will occur. Refer to the “Performing Maintenance” section in this owner operation and maintenance manual.

CATALYTIC PURE AIR PORTABLE AIR PURIFICATION SYSTEM FEATURES

Thank you for purchasing a Catalytic Pure Air Portable Air Purification System.

The CPA QA-20 Portable Air Purification System incorporates unique air-purification technologies not found in any other air purifier. The PCO-Cell patented catalytic technology significantly reduces the presence of irritable and toxic airborne gaseous contaminants produced by common household cleaners and materials.

- A quiet, energy-efficient backward-curved impeller that moves 265 cubic feet of air per minute.
- An advanced electronic control system that monitors air quality, air flow and volume, filter and UVC germicidal lamp replacement time.
- A five-stage filtration system with gas-absorption media that absorbs toxic gas, organic hydrocarbons, exhaust fumes, formaldehyde, cleaning chemicals, low level ozone, unpleasant odors, and paint solvents.
- A hospital-grade three-stage HEPA filter removes allergens such as pollen, mold fungal spores, tobacco smoke, insecticide dust, dust mites, and particles down to 0.3 microns (0.00003 inch).
- The PCO-Cell photo-catalytic oxidation chamber reduces the spread of airborne disease in the home environment. The powerful UVC germicidal light has 150 times the ultraviolet intensity of bright sunlight which kills viruses and bacteria on contact.
- Oxygen in the air, combined with photo-catalytic technology and UVC germicidal ultraviolet light, oxidizes airborne impurities too small to be filtered-out.

The PCO-Cell photo-catalytic oxidation technology which has received six patents from the USPTO, will keep the air clean and fresh in exactly the same way sunlight and oxygen clean the air we breathe in the outdoor environment.

INSTALLING THE CATALYTIC PURE AIR PORTABLE AIR PURIFICATION SYSTEM

CAUTION

This product is for indoor use only.

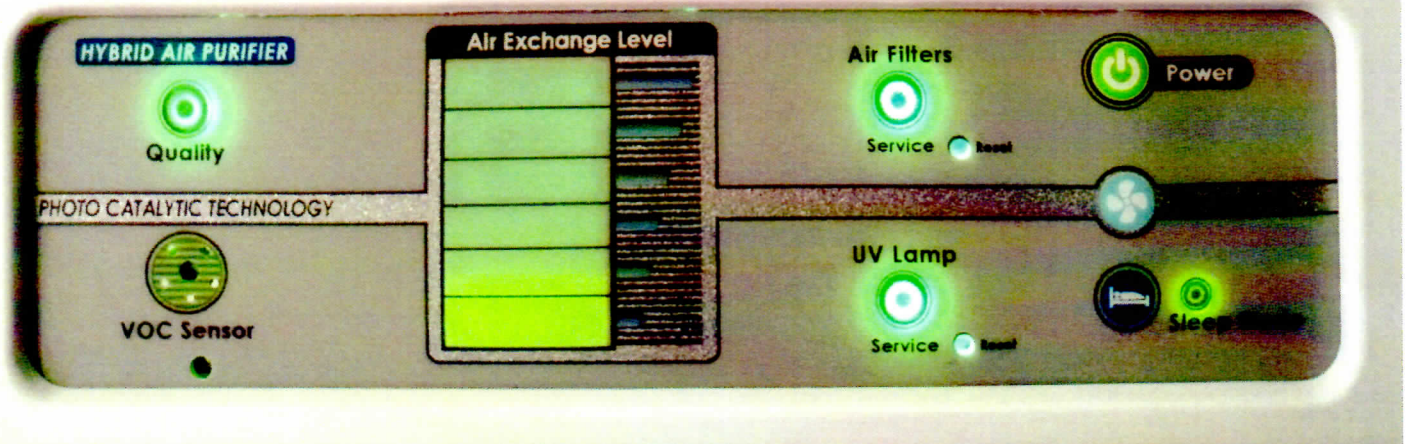
Before unpacking the product, inspect the shipping container for visible damage. If you feel that you may have received the product in a damaged condition, notify the shipper or supplier before opening the container. Remove the product from the box and inspect it for damage.

Handle it carefully. Do not drop!

Place the Purifier in a location that will not restrict air flow through either the air inlet or the air outlet, then plug-in the electrical cord at the nearest electrical wall outlet.

NOTE: The CPA QA-20 air purifier will perform a diagnostic test of indicator lights and functions when plugged in to the wall outlet. This will only happen once unless the system is unplugged from the wall and reinstalled.

FIGURE 1.



1. **Press-in Power (ON/OFF) button** to turn-on the Purifier. Lights on the control panel (**figure 1**) will turn-on and the UVC germicidal ultraviolet lamp will be on.
2. Look into the air outlet at the top of the CPA QA-20 PCO Air Purification System and confirm that the UVC germicidal ultraviolet lamp is on. You will see a faint blue glow when the lamp is on.

When the UVC germicidal ultraviolet lamp is on, the product is ready for operation.

NOTE: The "Air Quality" LED light may turn **red** on startup until the surrounding air quality improves. When the air quality LED is **red**, the air flow is automatically increased by (2) power levels. The lowest fan speed cannot be reached until the air quality light turns **orange** in color and then **green** as air quality reaches a safe level.

3. Setting the fan speed and air volume for to the correct room size.

Press the "Fan Speed Button" (figure 1) until the **green LED bar light** underneath "Air Exchange Level" reaches the desired air treatment rate. The Air Exchange level guide is conveniently listed at the right side of the **green LED bar lights** indicating the lowest room air exchange rate at the bottom bar and the highest room exchange rate at the top bar . Selecting the Fan Speed to the desired Air Exchange Rate bar light indicator will keep the air volume at an optimum level.

4. Press the "Sleep Mode Button" (figure 1) at night if you desire to reduce fan noise.

A **green** LED light will illuminate to the right side of the button. This will will maintain constant airflow through the purifier and reduce fanspeed to a minimum. Since there is no movement in the room, purification requirements are greatly reduced.

Press the Sleep Mode Button again to return to the normal air flow mode.

Monitoring Operation

You can always monitor the air quality of the room.

Air quality is sensed in real time by the chemical-detection sensor (see figure 1) which continually evaluates air quality. Air quality is expressed by one of (3) colors on the air quality LED light.

1. **Green** indicates good air quality.
2. **Orange** indicates poor air quality.
3. **Red** indicates bad air quality.

NOTE: Air volume is automatically increased by (2) fan speed levels when the air quality indicator turns **red**, and will reset to a preset fan speed when the air quality indicator turns orange and then green.

It is normal for the air quality indicator to temporarily be **red** during periods of house cleaning, painting or cooking meals.

MAINTENANCE OF CPA QA-20

You should keep an eye on the Service Panel which tells you when maintenance will soon be required.

What the Service Panel Indicator Lights Mean (“Air Filters” and “UV Lamp”)

Indicator lights on the Service Panel tell you if either the air filters or the germicidal ultraviolet lamp will soon need to be cleaned or replaced.

Air Filters Indicator Light:

The filters have a useful life of one year in a typical residential environment.

- **Green** LED light is On – The filters have been in service for less than 6 months.
- **Orange** LED light is On – The filters have been in service for more than 5 months.
- **Red** LED light is On – The pre-filter has been in service for at least 6 months. It is time to remove the front grill and vacuum off the top pre-filter to maintain maximum air flow. **The pre-filter does not need to be removed for vacuuming.**

Replace the front grill and **press only the “Air Filters” reset button** to reset timer for (6) more months. When both the “Air Filters” and “UV Lamp” LED service lights turn **red** at the same time, filters and the UV Lamp have been in service for one year and ALL need to be replaced.

Ultraviolet Lamp Indicator Light:

The UVC Germicidal Ultraviolet Lamp has a useful life of one year (9,000 hours) with a one-month grace period.

- **Green** LED light is On – The lamp has been in service for less than 12 months.
- **Orange** LED light is On – The lamp has been in service for more than 11 months. It's time to order a new UVC Germicidal Ultraviolet Lamp and replacement filter.
- **Red** LED light is On – The lamp has been in service for more than 12 months. The UVC Germicidal Ultraviolet Lamp may not be effective and must be replaced.

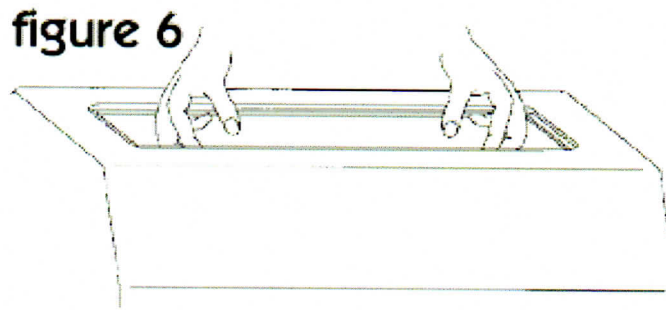
Performing Maintenance

Maintenance includes the following procedures:

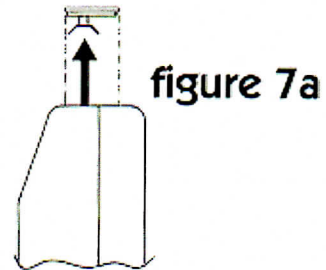
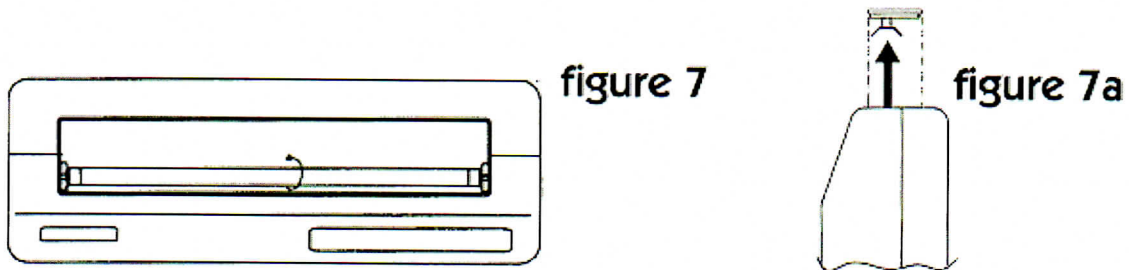
- Replacing the ultraviolet UVC Germicidal Ultraviolet Lamp
- Replacing the filters.

Replacing the Germicidal Ultraviolet Lamp

1. Unplug the Purifier's power cord from the electrical outlet.
2. Using index fingers, squeeze the locking tabs (figure 6) inwards towards the center of the grill. Lift the grill up and remove.



3. Rotate the Ultraviolet Lamp one-quarter turn, top to rear, (figure 7) and remove lamp.



4. Insert the new Ultraviolet Lamp in place and install by rotating one-quarter turn (top-to-front).

5. Replace the top grill removed in previous step 2 by pressing it into position until it locks. The aluminum reflector must be positioned over the UVC Germicidal Ultraviolet Lamp, nearest the front of the unit (figure 7a).

6. Reset Ultraviolet Lamp timer by lightly pressing the related RESET button on the Service Panel (located directly beside the "UV Lamp" LED indicator) with the end of a paper clip or similar non-sharp item. The "UV Lamp" LED service light will turn **green**, and the 12 month timer will reset. This completes UVC Germicidal Ultraviolet Lamp replacement procedures.

Replacing the Filters:

When both the “**Air Filters**” and “**UV Lamp**” LED Indicator lights turn **red**, both filters and UV lamp have been in service for one year and should be replaced within 30 days.

1. Unplug the Purifier’s power cord from the electrical outlet.
2. Rest the Purifier on its back (figure 8) to access the bottom of the unit.

figure 8

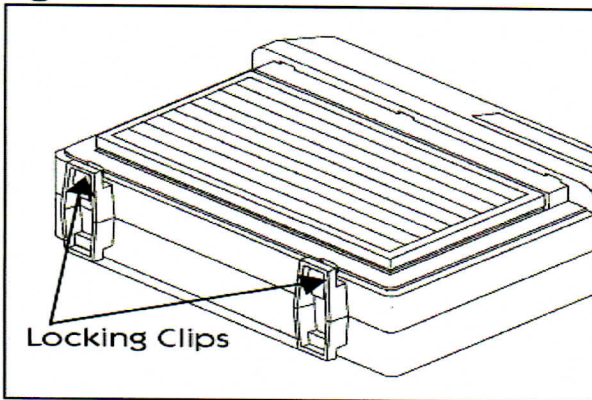
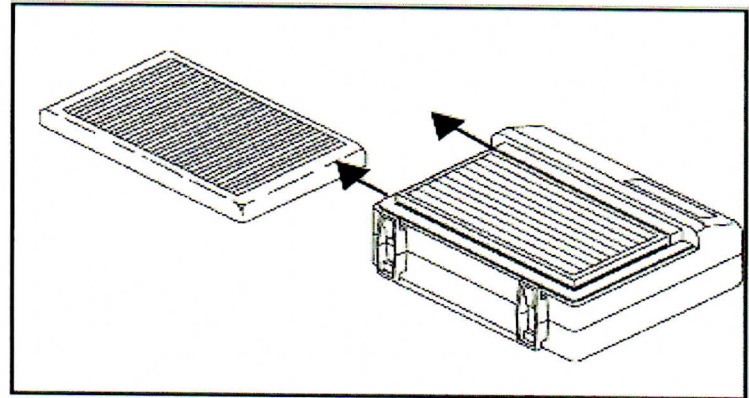
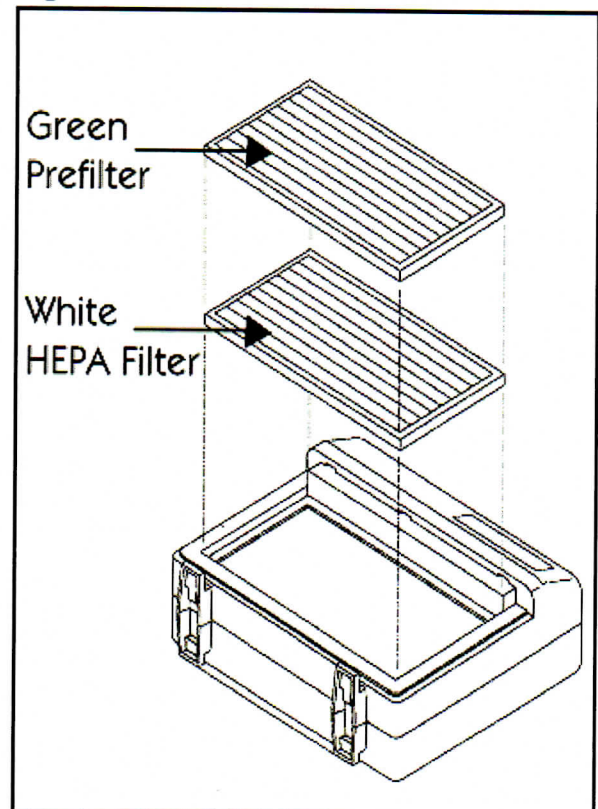


figure 9



3. Press-up on locking clips at the bottom of the front grill.
4. Lift bottom of grill upwards and slide the grill out from the top of the unit (figure 9).
5. Pull out the two filters, individually, and discard them.
6. Install new **white** HEPA filter (**labeled second stage**) in first with its **white** layer facing upwards. (figure 10)
7. Install the new pre-filter (**labeled first stage**) in the remaining slot with its **white** or **green** side facing upwards.
8. Replace grill. Slide upper end into grill slot and snap the bottom into place until it locks.

figure 10



Reset the Filter Replacement timer by lightly pressing the RESET button on the Service Panel (located directly beside the “Air Filters” LED indicator) with a pin or similar object. The “Air Filters” LED light will turn green and the timer will be reset. This completes filter replacement procedures.

Restore the Purifier to normal operation as follows:

1. Set the unit in its normal operating position.
2. Plug the power cord into the wall outlet. Press the “Power” (ON/OFF) switch to operate.

SPECIFICATIONS – CPA QA-20

Dimensions (inches)	21.5 wide x 18.0 high x 8.0 deep
Weight	23 pounds
Maximum Air Volume	265 CFM
UV Lamp	254 nanometers (germicidal)
Line Voltage	120V, 60 Hz / 230V-50Hz
Maximum Watts	110 watts
Maximum Amperes	0.95 amperes
Blower	Forward-curved motorized impeller

Limited Warranty

Catalytic Pure Air (“Company”) warrants that its products shall be free from defects in material and workmanship under normal use for the limited period indicated, from the date of installation, subject to the provisions 1-8 below. Five (5) Year Limited Warranty Model CPA QA-20.

Provisions:

1. During the limited warranty period, Company, or its authorized service representative, will repair or replace, at Company’s option, without charge, a defective Product. Product that is repaired may be repaired with new or refurbished replacement parts. Product that is replaced may be replaced with a new or refurbished product of the same or similar design. Company will return repaired or replacement Product to customer in working condition. Labor charges are not covered as part of the limited warranty.
2. With regard to UV lamps/bulbs, customer shall be required to include a “valid proof of purchase” (sales receipt) identifying the Product purchased (Product model or accurate date code information) and the date the Product(s) was purchased.
3. Product whose warranty/quality stickers, Product serial number plates or electronic serial numbers have been removed, altered or rendered illegible shall not be covered under the limited warranty.
4. Defective Product must be returned to Company, postage prepaid.
5. IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR SIMILAR DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOST PROFITS OR REVENUE, INABILITY TO USE PRODUCT, OR OTHER ASSOCIATED EQUIPMENT, THE COST OF SUBSTITUTE EQUIPMENT, AND CLAIMS BY THIRD PARTIES) RESULTING FROM THE USE OF PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
6. THIS WARRANTY AND REMEDIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, EXPRESS, STATUTORY OR IMPLIED. TO THE EXTENT PERMITTED BY LAW, COMPANY DISCLAIMS ALL IMPLIED AND STATUTORY WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
7. Company makes no warranty of any kind in regard to other manufacturer’s products distributed by Company. Company will pass on all warranties made by the manufacturer and where possible, will expedite the claim on behalf of the customer, but ultimately, responsibility for disposition of the warranty claim lies with the manufacturer.
8. Product that has been subjected to misuse, accident, shipping or other physical damage, improper installation or application, abnormal operation or handling, neglect, fire, water or other liquid intrusion are not covered by the warranty.

Manufactured in the USA