

Owner's Manual

120V AC Powered Plug-In Carbon Monoxide (CO) Alarm

0-659B

Thank you for purchasing a Firex carbon monoxide alarm. It is an important component of your home security system.

Please read this booklet thoroughly. The more familiar you are with the information it contains, the easier you will find it to install, operate, and maintain your carbon monoxide alarm properly. This ultimately means greater security and peace of mind for you and your family.

The Maple Chase Company

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Model COQ1

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The Dangers of Carbon Monoxide

Carbon Monoxide (CO) is a toxic gas. It cannot be seen, felt, tasted, or smelled. The effects of CO poisoning can cause household members to become extremely ill or even cause death. Due to damage, poor maintenance, or defects, many appliances like furnaces, ovens, fireplaces, kerosene heaters, and grills may silently emit CO. Advanced warning of CO poisoning is only possible if you install and maintain a CO detection device.

The amount of CO in the air is measured in parts per million (ppm). Carbon monoxide occurs when fuel burns without sufficient oxygen (incomplete combustion). This type of malfunction can happen to any fuel-burning appliance at any time. Many fireplace chimneys, for example, can become filled with leaves during the fall season. If enough leaves, dirt, and soot are accumulated in the chimney, proper ventilation will be interrupted. This can cause a backdraft of CO into the home. The result can be fatal. With proper maintenance and cleaning, however, the potential for CO build up can be reduced.

Carbon monoxide poisoning is a serious issue. Many families suffer daily, and over one thousand lives are lost each year because of this deadly household gas. With proper maintenance and care, this CO alarm can give family members advanced warning to CO emissions. Please read this manual thoroughly to learn how to properly install, operate, clean, and repair your CO alarm, and for important safety tips to safeguard your family from deadly CO poisoning.

The following symbols identify the most important safety messages in this manual.

DANGER

When you see this symbol, be aware that if the message is ignored, the hazard WILL result in SEVERE bodily injury or death.

WARNING

When you see this symbol, be aware that if the message is ignored, the hazard CAN cause SEVERE bodily injury or death.

CAUTION

When you see this symbol, be aware that if the message is ignored, the hazard CAN or WILL cause MINOR bodily injury.

WARNING

BE AWARE OF COMMON SOURCES OF CARBON MONOXIDE. Common sources of carbon monoxide are furnaces heating devices, water heaters, gas stoves, kerosene heaters, fireplaces, barbecues used indoors, running motors or engines in attached garages, and gasoline powered devices, such as generators or pumps used in emergency situations. Be aware of the proper uses for each device. Have these devices serviced and cleaned regularly. Use common sense, and follow safety and hazard instructions carefully whenever using any of these devices.

WARNING

Individuals with medical problems may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm.

CO Alarm Features

- 90° rotatable plug—allows flexible horizontal and vertical outlet installation.
- Large test/reset button—easy to use.
- Three level light and sound alarm system—you always know if:
 1. Your system is operating properly.
 2. Your system requires immediate replacement.
 3. CO levels are at dangerous alarm levels.
- Electrical Rating: 120V AC, 60Hz, 0.05 amps

CO Alarm Features cont.

▲ WARNING

This CO alarm is designed to detect carbon monoxide gas from any source of combustion. It is NOT designed to detect smoke, fire, or any other type of gas. If this CO alarm sounds its alarm horn, DO NOT assume that it is a false alarm. The alarm horn requires your immediate action.

▲ WARNING

This product is intended for use in ordinary indoor locations of family living units. It is not designed to measure compliance with Occupational Safety and Health Administration (OSHA) commercial or industrial standards.

Where to Install Your CO Alarm

▲ WARNING

Carbon monoxide gas can be anywhere and everywhere. CO gas is equal to or slightly lighter than air, and disperses evenly with the air in a room. Therefore, install this CO alarm where air circulation is best. DO NOT mount the CO alarm within 1 foot of the ceiling/wall or wall/wall intersection, or other “dead air” spaces.

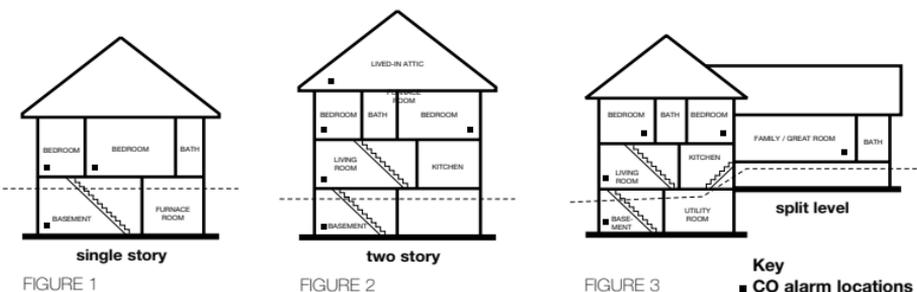
Since most CO fatalities occur while families are sleeping, we recommend that you install at least one CO alarm in the hallway outside each separate sleeping area and one inside each bedroom or sleeping area.

We also recommend that you install a CO alarm on every separate living level of the home where household members frequently spend time, as well as in the basement.

See figures 1, 2, and 3 for typical CO alarm locations within the home.

▲ CAUTION

This alarm will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas.



▲ WARNING

DO NOT Install CO alarms:

- **Near bathrooms or in shower areas.** Steam and aerosol sprays can disable the alarm.
- **In closets, crawlspaces, unused attics, or unheated areas** where surrounding air temperatures may go below 40°F (4.4°C) or above 100°F (37.8°C).
- **Within five feet of any fuel-burning appliance** (stove, kerosene heater, furnace, fireplace, etc.).
- **Within one foot of any wall, corner, or other “dead air” spaces.**
- **In rooms where chemicals or cleaning supplies are frequently used** (paint, hair spray, thinner, etc.). Allow plenty of ventilation in rooms where chemicals are used.
- **Directly above a sink, bathtub or basin.**
- **Directly above or below air exchange or heating vents.**
- **Behind drapes, furniture, or appliances that could block air flow to the CO alarm.**

⚠ WARNING

This unit cannot be used in recreational vehicle applications.

How to Install Your CO Alarm

Once you have decided the best place to install the CO alarm(s), follow these steps:

1. Locate a standard household electrical outlet that is not blocked by drapes, furniture, or other items. Be sure the outlet is not near air exchange vents.

⚠ WARNING

This CO alarm is designed to plug directly into a standard 120 VAC, 60 Hz household outlet, which can supply at least 0.05 Amp of current.

⚠ WARNING

DO NOT INSTALL IN A WALL SWITCH-CONTROLLED OUTLET.

2. IMPORTANT: Your CO alarm will mount to a horizontally or vertically oriented outlet (see figure 4). Rotate the 90° rotating plug for the correct outlet orientation before plugging into outlet (see figure 5). CO alarm must be installed and used so that it hangs vertically once in outlet.
3. Plug the CO alarm directly into the chosen electrical outlet. The "ON" light will remain lit indicating the CO alarm is receiving power and operating normally.
4. Press the test/reset button, (see figure 6). The alarm should sound a short tone. (Once the button is released, the CO alarm will go through its test cycle turning on the amber Service light and flashing the "Alarm" light. The alarm will beep four times followed by 5 seconds of silence and then repeat the cycle.
5. Your CO alarm has an Alarm Action Guide in English installed on the back of the alarm. If you prefer, the enclosed Spanish version can be installed by removing the English version and inserting the Spanish version in the slide-out panel. If your unit has Spanish labels included, simply place the labels over the English version.
6. Two self-adhesive labels have been provided with instructions indicating what to do if the alarm sounds. Add the phone numbers of your emergency services provider and a qualified technician to each label. Place one of the labels in a visible area next to the alarm, and place the other label near a source of fresh air which will be used as a gathering place if the alarm sounds.

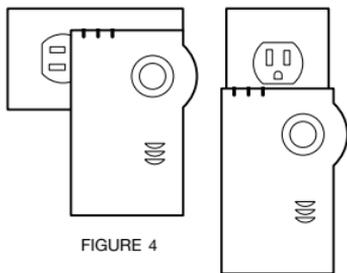
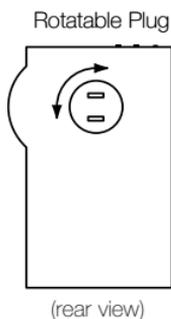


FIGURE 4

NOTE: Your CO alarm must always be aligned and used in the vertical position once in the outlet, as shown above.



(rear view)

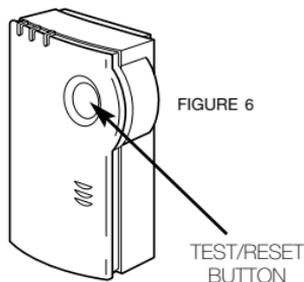


FIGURE 6

TEST/RESET
BUTTON

FIGURE 5

⚠ WARNING

UNIT WILL NOT OPERATE DURING POWER FAILURE.

⚠ WARNING

DO NOT use with extension cords, or attempt to "hardwire" this unit directly to the household electrical current. The CO alarm WILL NOT work properly and this will void your warranty.

How to Operate Your CO Alarm

This carbon monoxide alarm has been evaluated by UL and meets 2034 UL requirements.

This CO alarm has a three light and sound alarm system:



On Green indicator constantly ON indicates unit is operating normally.
(Power on/ operating)

Service Amber colored indicator and alarm horn beeping every thirty seconds indicates "Unit Fault." Press and release the Test/Reset button. If the alarm returns to displaying the service signal, the CO alarm is not operating properly. REPLACE THE CO ALARM IMMEDIATELY. SEE THE WARRANTY INFORMATION AT THE END OF THIS MANUAL.
(Problem with Alarm)

Alarm Red colored indicator flashes and alarm horn sounds four fast beeps and then is quiet for 5 seconds.
(Dangerous CO levels)

When the CO concentration builds to a level that is equal to 70 ppm or greater for the duration identified within the standard, the following will occur:

- The "Alarm" light and sound signals will activate. See the "WHAT TO DO IF YOUR ALARM SOUNDS" section of this manual for important action steps to be taken.
- If you wish to press the Test/Reset button during this time, the alarm will become quiet for approximately four minutes. The "Alarm" signals will be reenergized within 4 minutes from the time the reset button is pressed if the concentration of carbon monoxide surrounding the alarm remains at 70 ppm or greater.
- The alarm will remain silent if the CO concentration has decreased below the alarm level of the standard. See "What To Do If Your Alarm Sounds" section of this manual for important action steps to be taken.
- The alarm will continue for as long as the condition exists.

The alarm will not permanently end its "alarm" mode until the concentration of CO has been reduced to a safe level.

Test Your CO Alarm Weekly

Press the Test/Reset button and note the alarm sound. Release the Test/Reset button and note that the LED indicators flash the proper test sequence as described in "Installation." If the alarm does not beep while depressing the Test/Reset button or exhibit the correct LED test sequence, immediately return the CO alarm to Maple Chase for repair or replacement. See the warranty information at the end of this manual. Do not attempt to repair the unit yourself as this will potentially cause damage and void the warranty.

What to Do if the Alarm Sounds

WARNING

Carbon Monoxide cannot be seen, felt, tasted, or smelled – but it can be FATAL.

WARNING

IF THE RED “ALARM” LED INDICATOR IS FLASHING AND THE ALARM IS SOUNDING APPROXIMATELY EVERY FIVE SECONDS, IT INDICATES THE PRESENCE OF CO WHICH CAN BE FATAL. YOU MUST QUICKLY DO THE FOLLOWING.

1. Operate reset/silence button.
2. Call your emergency services [fire department or 911].
3. Immediately move to fresh air — outdoors or by an open door/window. Do a head count to check that all persons are accounted for. Do not reenter the premises nor move away from the open door/window until the emergency services responders have arrived, the premises have been aired out, and your alarm remains in its normal condition.
4. After following steps 1 - 3, if your alarm reactivates within a 24 hour period, repeat steps 1 - 3 and call a qualified appliance technician (_____) to investigate for sources of CO from fuel-burning equipment and appliances, and inspect for proper operation of this equipment. If problems are identified during this inspection, have the equipment serviced immediately. Note any combustion equipment not inspected by the technicians and consult the manufacturers' instructions, or contact the manufacturers directly, for more information about CO safety and this equipment. Make sure that motor vehicles are not, and have not been, operating in an attached garage or adjacent to the residence.

WARNING

If the CO alarm sounds its alarm horn again, it has sensed CO. This is not a false alarm.

NOTE: Refer to the helpful CO Warning and Alarm Action Guide conveniently located on the back of your detector.

Maintenance and Cleaning

This CO alarm does not require any maintenance, except occasional dusting or cleaning. If necessary, occasionally vacuum the case of the CO alarm. To clean the CO alarm, unplug each CO alarm from its wall outlet and use a damp cloth to clean the OUTSIDE of CO alarm case. DO NOT remove cover or attempt to clean inside the CO alarm. Dry the cover completely and plug each CO alarm back into the wall outlet. Press in, hold, and release Test/Reset button on each CO alarm to test after cleaning.

WARNING

Do not use abrasive cleansers, or spray the CO alarm with cleaning agents or waxes. Do not submerge the CO alarm in water.

Troubleshooting

Problem: The alarm is properly plugged into a working outlet, but the green LEDs do not light.

Solution: Return alarm to Maple Chase Company for service.

Problem: Amber Service light flashes every 30 seconds.

Solution: Press the Test/Reset button to allow the alarm to re-check itself internally. If the AMBER LED continues to flash, the alarm must be returned to Maple Chase Company for service.

Symptoms of Carbon Monoxide Poisoning

Carbon monoxide poisoning has many symptoms. However, some symptoms are very similar to flu-like symptoms, the effects of intoxication, or drug usage. In many CO cases, people feel ill and stay home to rest. This only compounds the CO poisoning because they stay in the home where CO is present.

As CO levels rise, the symptoms become more extreme. At low levels people will suffer headaches and mild nausea. At higher levels unconsciousness, heart failure, and even death can occur.

The following symptoms are related to CARBON MONOXIDE POISONING and should be discussed with ALL members of the household.

Mild Exposure: Slight headache, nausea, vomiting, fatigue (often described as “flu-like” symptoms).

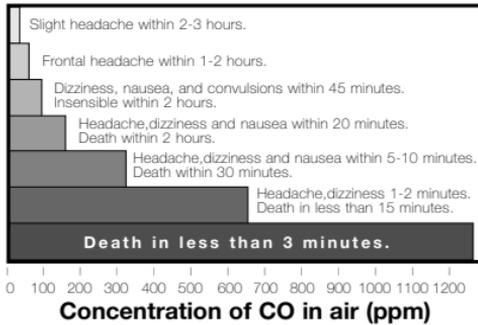
Medium Exposure: Severe throbbing headache, drowsiness, confusion, fast heart rate.

Extreme Exposure: Unconsciousness, convulsions, cardio-respiratory failure, death.

Many cases of reported CARBON MONOXIDE POISONING indicate that while victims are aware they are not well, they become so disoriented they are unable to save themselves by either exiting the building or calling for assistance. Also, young children, the elderly, and household pets may be the first affected by CO poisoning.

The important factor with any CO poisoning, however, is time. At high levels, CO can cause death in just minutes. At lower levels, it could take from hours to days of constant CO exposure to have the same life-threatening effect.

The chart below illustrates the symptoms of CO poisoning by concentration of CO and its effect over time.



Conditions That Can Cause CO Levels To Change

The following conditions can result in transient CO situations in the home:

- 1) Excessive spillage or reverse venting of fuel-burning appliances caused by outdoor ambient conditions, such as:
 - i) Wind direction and/or velocity, including high gusts of wind. Heavy air in the vent pipes (cold/humid air with extended periods between cycles).
 - ii) Negative pressure differential resulting from the use of exhaust fans.
 - iii) Simultaneous operation of several fuel-burning appliances competing for limited internal air.
 - iv) Vent pipe connections vibrating loose from clothes dryer, furnaces, or water heaters.
 - v) Obstructions in or unconventional vent pipe designs which can amplify the above situations.
- 2) Extended operation of unvented fuel-burning devices (range, oven, fireplace, etc.).
- 3) Temperature inversions which can trap exhaust gasses near the ground.
- 4) Car idling in an open or closed attached garage, or near a home.

Home Safety Tips

Many CO poisonings are caused by equipment failures due to poor maintenance, product defects, and damaged parts. The following is a list of safety tips to help prevent CO poisoning within your home:

Home Safety Tips cont.

1. Have all fuel-burning appliances inspected and cleaned yearly by a qualified service technician. The furnace, water heater, and stove are some of the leading sources of CO in homes.
2. Clean fireplace vents and chimney regularly. A blocked chimney could cause a backdraft of CO into the home. Do not cap chimney. This will cause a backdraft of CO into the home.
3. Do not cap or cover a draft hood or exhaust vent to any appliance. This will trap dangerous CO inside the house.
4. Do not "close off" or "confine" your fuel-burning appliances in a closed area. They need plenty of ventilation to operate properly.
5. Do not use liquid propane (LP) or charcoal grills indoors.
6. Do not operate any gasoline-powered equipment indoors.
7. Allow for plenty of ventilation when using a kerosene heater. Do not use in small areas.

Preventative maintenance, common sense, and a CO detection device are some of the best solutions to preventing CO poisoning. However, a dangerous situation can happen to anyone at any time.

The following list illustrates some danger signs of CO presence.

1. Soot and dirt build-up seeping out of chimney or other exhaust vents.
2. A mostly yellow, rather than clear blue, burner flame or pilot flame in gas appliances.
3. A draft of air coming from appliance, chimney, or vents.
4. If you have flu-like symptoms or suspect CO poisoning, seek medical assistance immediately.

WARRANTY INFORMATION

5-YEAR CARBON MONOXIDE ALARM WARRANTY

Maple Chase Company warrants to the original consumer purchaser each new carbon monoxide alarm to be free from defects in material and workmanship under normal use and service for a period of five (5) years from date of purchase. Maple Chase Company agrees to repair or replace, at its option, any defective carbon monoxide alarm, provided that it is returned with postage prepaid and with proof of purchase date to Maple Chase. This warranty does not cover damage resulting from accident, misuse, or abuse or lack of reasonable care of the product. This warranty is in lieu of all other express warranties, obligations, or liabilities. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO A PERIOD OF FIVE (5) YEARS FOR THE CARBON MONOXIDE ALARM FROM PURCHASE DATE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. IN NO CASE SHALL MAPLE CHASE BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WHATSOEVER, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY ITS NEGLIGENCE OR FAULT. 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. This warranty gives you specific legal rights, and you may also have other legal rights which vary from state to state.

This product meets all the requirements of U.L. Standard 2034.

WHERE TO SEND YOUR CARBON MONOXIDE ALARM FOR SERVICE

To return carbon monoxide alarms under warranty, send the CO alarm plus postage prepaid, a note describing the nature of the difficulty, and proof of date of purchase to:

Maple Chase Company

Product Service Department

2820 Thatcher Road

Downers Grove, IL 60515

United States of America

Technical Service: (800) 779-1719

M-F 7:30 - 5:30 CST

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