



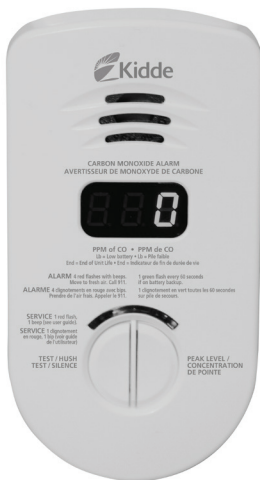
CSA 6.19-01

SINGLE STATION CARBON
MONOXIDE ALARM

Carbon Monoxide Alarm

User Guide

Model: KN-COP-DP-10YLCA (900-0280CA)



AC Plug-in Operated with Sealed Lithium Battery Backup

ATTENTION: Please take a few minutes to thoroughly read this user guide which should be saved for future reference and passed on to any subsequent owner.

What to do When the Alarm Sounds!

Carbon Monoxide Alarm Procedure



WARNING: Activation of the CO Alarm indicates the presence of Carbon Monoxide (CO) which can kill you.

If alarm sounds 4 quick beeps, 5 seconds off:

- 1) 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 re-enter 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.
- 2) Call your emergency services (Fire Department or 911);

PHONE NUMBER:

Never restart the source of a CO problem until it has been corrected. Never ignore the sound of the alarm!

If the alarm is sounding, pressing the Test/Hush button will terminate the alarm. If the CO condition that caused the alert in the first place continues, the alarm will reactivate. If the unit alarms again within six minutes, it is sensing high levels of CO which can quickly become a dangerous situation.

Welcome

Note: Many times throughout this User Guide, we will refer to Carbon Monoxide as "CO".

This Kidde carbon monoxide (CO) alarm is an important part of your family's home safety plan. This alarm has been designed and tested to detect CO buildup in a residential environment. Your alarm is for use specifically in the home, but not for use in a boat or recreational vehicle. As an owner of a CO alarm, there are some basic facts you should know about for your protection.

Many people think that CO alarms operate like smoke alarms. Like smoke alarms, CO alarms monitor the air in your home and sound a loud alarm to warn you of trouble. The way you respond to a CO alarm is quite different than a smoke alarm. That's because a house fire and a CO problem are two distinctly different situations. If your smoke alarm were to alarm, you would quickly be able to judge the level of danger you were in with your senses. You can see and smell the smoke, feel the heat, see, and possibly hear the fire burning. You can also readily see if your smoke alarm is alarming in a non-emergency situation. Because your sense of sight, smell, hearing and touch give you information, you can almost instantly judge what action to take if you hear your smoke alarm.

CO is an invisible, odorless, tasteless and non-irritating gas – completely undetectable to your senses. That's why it is important to your safety that you have a CO alarm.

Important Warning Statements

IMPORTANT: This carbon monoxide alarm is designed to detect carbon monoxide from ANY source of combustion. It is NOT designed to detect smoke, fire, or any other gas.

⚠ WARNING: Carbon monoxide alarms are not smoke alarms. This carbon monoxide alarm is not a substitute for installing and maintaining an appropriate number of smoke alarms in your home.

This carbon monoxide alarm will not sense smoke, fire, or any poisonous gas other than carbon monoxide even though carbon monoxide can be generated by fire. For this reason you must install smoke alarms to provide early warning of fire and to protect you and your family from fire and its related hazards.

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

Important Warning Statements

⚠ WARNING: This product is intended for use in ordinary indoor locations of family living units, not for use in boats or recreational vehicles. It is not designed to measure compliance with commercial or industrial standards. It is not suitable for installation in hazardous locations as defined in your local building code.

The installation of this device should not be used as a substitute for proper installation, use and maintenance of fuel burning appliances, including appropriate ventilation and exhaust systems. It does not prevent CO from occurring, nor can it solve an existing CO problem.

⚠ WARNING: This device is designed to protect individuals from acute effects of carbon monoxide exposure. It may not fully safeguard individuals with specific medical conditions. If in doubt, consult a medical practitioner.

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

This carbon monoxide alarm requires a continuous supply of electrical power – it will not work without power. Models without battery backup will not operate during power failure.

This alarm has not been investigated for carbon monoxide detection below 70 PPM.

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1. Information About Carbon Monoxide
2. Product Features and Specifications
3. Installation Locations
4. Installation Instructions
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1. Information About Carbon Monoxide

General Carbon Monoxide Information

Carbon monoxide is a colorless, odorless and tasteless poison gas that can be fatal when inhaled. CO inhibits the blood's capacity to carry oxygen.

Periodically review this alarm user guide and discuss your CO alarm emergency procedure with all the members of your family. Never ignore a CO alarm. A true alarm is an indication of potentially dangerous levels of CO. CO alarms are designed to alert you to the presence of CO before an emergency – before most people would experience symptoms of CO poisoning, giving you time to resolve the problem calmly.

Determine if anyone in the household is experiencing symptoms of CO poisoning. Many cases of reported CO 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 and household pets may be the first affected. You should take extra precautions to protect high-risk persons from CO exposure because they may experience ill effects from CO at levels that would not ordinarily affect a healthy adult.

Symptoms of CO Poisoning

The following common symptoms are related to CO 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.

If you experience even mild symptoms of CO poisoning, consult your doctor immediately!

1. Information About Carbon Monoxide

Carbon Monoxide PPM Levels

Model KN-COP-DP-10YLCA is equipped with a digital display that shows levels of CO (displayed in PPM – parts per million). Learn the difference between dangerous, high, mid and low levels.

Dangerous Levels:

When someone is experiencing symptoms of CO poisoning and CO readings are generally above 100 PPM. Anytime someone is experiencing the symptoms of CO poisoning this should be treated as an emergency. See “What to do When the Alarm Sounds” (inside front cover).

High Levels:

Generally above 100 PPM, with no one experiencing symptoms. This should be treated as an urgent situation. See “What to do When the Alarm Sounds” (inside front cover).

Mid Levels:

Generally between 50 PPM to 100 PPM. This should be cause for concern and should not be ignored or dismissed. See “What to do When the Alarm Sounds” (inside front cover).

Low Levels:

Generally below 50 PPM. Kidde recommends you take action to eliminate the source of CO. See “What to do When the Alarm Sounds” (inside front cover).

Possible Sources of Carbon Monoxide

Inside your home, appliances used for heating and cooking are the most likely sources of CO. Vehicles running in attached garages can also produce dangerous levels of CO.

CO can be produced when burning any fossil fuel, such as gasoline, propane, natural gas, oil and wood. It can be produced by any fuel-burning appliance that is malfunctioning, improperly installed, or not ventilated correctly, such as:

- Automobiles, furnaces, gas ranges/stoves, gas clothes dryers, water heaters, portable fuel burning space heaters and generators, fireplaces, wood-burning stoves and certain swimming pool heaters.
- Blocked chimneys or flues, back drafts and changes in air pressure, corroded or disconnected vent pipes, loose or cracked furnace exchangers.
- Vehicles and other combustion engines running in an open or closed garage, attached or near a home.
- Burning charcoal or fuel in grills and hibachis in an enclosed area.

1. Information About Carbon Monoxide

Conditions That Can Produce Carbon Monoxide

The following conditions can result in transient CO situations:

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

To be safe, know the possible sources of CO in your home. Keep fuel-burning appliances and their chimneys and vents in good working condition. Learn the early symptoms of exposure, and if you suspect CO poisoning, move outside to fresh air and get emergency help. Your first line of defense is an annual inspection and regular maintenance of your appliances. Contact a licensed contractor or call your local utility company for assistance.

Information About Carbon Monoxide Alarms – What They Can and Cannot Do:

CO alarms provide early warning of the presence of CO, usually before a healthy adult would experience symptoms. This early warning is possible, however, only if your CO alarm is located, installed and maintained as described in this guide.

Because carbon monoxide is a cumulative poison, long-term exposures to low levels may cause symptoms, as well as short-term exposures to high levels. This Kidde unit has a time-weighted alarm – the higher the level of CO present, the sooner the alarm will be triggered.

1. Information About Carbon Monoxide

This CO alarm can only warn you of the presence of CO. It does not prevent CO from occurring, nor can it solve an existing CO problem. If your unit has alarmed and you've provided ventilation by leaving your windows and doors open, the CO buildup may have dissipated by the time help responds. Although your problem may appear to be temporarily solved, it's crucial that the source of the CO is determined and that the appropriate repairs are made.

This CO alarm is designed to act as a monitor; it is not designed for use as a short-term testing device to perform a quick check for the presence of CO.

CO alarms have limitations. Like any other electronic device, CO alarms are not fool-proof. CO alarms have a limited operational life. You must test your CO alarm weekly, because it could fail to operate at any time.

If your CO alarm fails to test properly, or if its self-diagnostic test reveals a malfunction, immediately have the unit replaced. This alarm will not monitor CO levels while in an error condition.

CO alarms can only sense CO that reaches the unit's sensor. It's possible that CO may be present in other areas without reaching the alarm. The rate and ability that which CO reaches the alarm may be affected by:

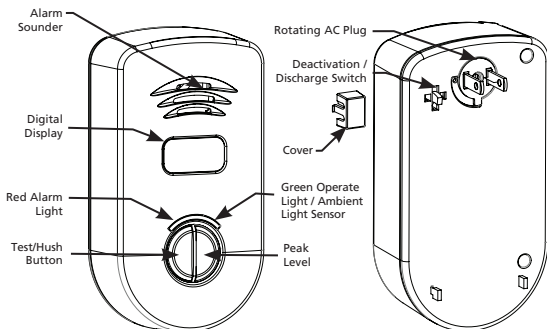
- Doors or other obstructions.
- Fresh air from a vent, an open window or other source.
- CO being present on one level of the home and not reach a CO alarm installed on a different level. (For example, CO in the basement may not reach an alarm on the second level, near the bedrooms).

For these reasons, we recommend you provide complete coverage by placing a CO alarm on every level of the home. Please carefully read all information on properly installing this CO alarm.

CO alarms should not be used to detect the presence of natural gas (methane), propane, butane, or other combustible fuels.

2. Product Features and Specifications

Model KN-COP-DP-10YLCA



Low Battery Warning

If the battery power is low, the unit will chirp every 60 seconds, and the display will show "Lb" to indicate the alarm must be replaced. **THE ALARM MUST BE REPLACED IMMEDIATELY!**

Low Battery HUSH® CONTROL

When the unit produces a low battery warning, the Low Battery HUSH® feature allows you to press the Test/Hush button on the alarm and disable the "chirp" for a period of approximately 10 hours. This gives you a chance to replace the alarm at a more convenient time without sacrificing your safety by disconnecting the alarm from power. During this Low Battery HUSH® period, your alarm is monitoring for CO.

If the alarm does not go into Low Battery Hush, the battery power is below the Low Battery Hush threshold. **REPLACE THE ALARM IMMEDIATELY!**

Ambient Light Sensor

This alarm includes a feature to determine dark or light conditions. This feature will:

1. Help prevent low battery chirping at night, (when ambient conditions are dark).
2. Dim the display in low light conditions, (night time and darker rooms), and brighten the display in bright light conditions.

2. Product Features and Specifications

End of Unit Life Warning

IMPORTANT: Ten (10) years after the initial power up, this alarm will “beep” two times every 30 seconds to indicate that it is time to replace the alarm. Display will show “End”.

To help identify the date to replace the alarm, a label has been affixed to the side of the alarm. Write the “replace by” date (ten years from power up) in a permanent marker on this label.

End of Unit Life Hush Control

The End of unit Life Hush feature allows you to silence End of Unit life chirping, for a period of 3 days, by pressing the Test/Hush button. This feature can be used 10 times within 30 days, allowing you to replace the alarm at a more convenient time. After 30 days, the alarm will no longer detect CO. RELACE ALARM IMMEDIATELY!

Temperature:

Operating Range: 4.4°C (40°F) to 37.8°C (100°F)

Humidity:

Operating range: 10-95% relative humidity (RH), non-condensing

Audible Alarm:

85+ dB at 10' @ 3.4±0.5 KHz pulsing alarm

Sensor:

Electrochemical

Power:

120 volts AC, 60 Hz, 90 mA max, 3 volt sealed lithium battery backup

Alarm Response Times:

70 PPM = 60-240 min., 150 PPM = 10-50 min., 400 PPM = 4-15 min.

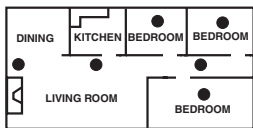
3. Installation Locations

Recommended Installation Locations

CO alarms should be mounted in or near bedrooms and living areas. It is recommended that you install a Kidde CO alarm on each level of your home.

When choosing your installation locations, make sure you can hear the alarm from all sleeping areas. If you install only one CO alarm in your home, install it near bedrooms, not in the basement or furnace room.

- The CO alarm plugs into a wall socket. Children must be taught not to handle the CO alarm.



Recommended Locations

Locations To Avoid

IMPORTANT: Improper location can affect the sensitive electronic components in this alarm. To avoid causing damage to the unit, to provide optimum performance, and to prevent unnecessary nuisance alarms:

- Do not install in kitchens, garages or furnace rooms that may expose the sensor to substances that could damage or contaminate it.
- Do not install in areas where the temperature is colder than 4.4°C (40°F) or hotter than 37.8°C (100°F) such as crawl spaces, attics, porches and garages.
- Do not install within 5 ft. of heating or cooking appliances. (Kidde recommends 15 ft. to prevent nuisance alarms).
- Do not install near vents, flues, chimneys or any forced/unforced air ventilation openings.
- Do not install near ceiling fans, doors, windows or areas directly exposed to the weather.
- Do not install in dead air spaces, such as peaks of vaulted ceilings or gabled roofs, where CO may not reach the sensor in time to provide early warning.
- Do not install this unit near deep-cell large batteries. Large batteries have emissions that can cause the alarm to perform at less than optimum performance.
- Do not obstruct the vents located on the alarm. Do not place the alarm where drapes, furniture or other objects block the flow of air to the vents.

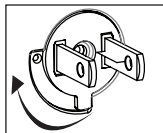
4. Installation Instructions

How to Install Your Alarm

Direct Plug Alarm

To install:

1. Remove the switch cover.
2. Choose a standard 120V unswitched outlet to plug the alarm into.
3. If outlet is mounted sideways (horizontally), rotate the plug and plug the alarm in.



90° ROTATING
DIRECT PLUG

Note: This model is equipped with a feature that automatically activates the battery backup when the alarm is plugged into an AC outlet for the first time.

⚠ CAUTION: Do not rotate the alarm while it is plugged into an outlet, as damage to plug may result.

5. Alarm Characteristics

Carbon Monoxide Alarm Indicator

When the alarm senses a dangerous level of CO, the unit will emit a loud alarm pattern. The alarm pattern is 4 quick beeps followed by 5 seconds of silence. This cycle repeats as long as a dangerous CO conditions exist. The red Alarm LED will flash the same pattern and the PPM will be displayed on the digital display.

The digital display will be brightly lit if the unit is in alarm.

⚠ WARNING: If at any time you test the alarm and it does not perform as described, have it replaced immediately.

6. Operating Characteristics

When you first power up the alarm: The red Alarm LED will light and the alarm will chirp once.

CO alarm power indicators:

AC - Digital display constantly on.

DC Only - Green LED flashes briefly once every 60 seconds.

Within a few minutes, your carbon monoxide alarm will start monitoring for CO and will continue to do so as long as it receives power.

Whenever the KN-COP-DP-10YLCA is operating, the digital display will display "0" (with AC applied) to indicate the unit is monitoring for CO.

6. Operating Characteristics











If the alarm senses dangerous levels of CO, the digital display will alternate between "CO" and the measured CO concentration in parts per million (PPM), and the alarm will emit an audible alarm pattern. This alarm will display a "0" if CO concentrations between 0 and 30 PPM have been detected within the last 15 seconds.

When the unit is first powered up, the digital display will show three "eights" – indicating the alarm is in the start-up mode. The three "eights" will remain for approximately 5 seconds. After 5 seconds, the alarm should display "0" and begin monitoring the air for CO and will continue to do so as long as it receives power.

The digital display will be brightly lit if the unit is in alarm, or in high light, and then will become dim in the standby condition during low light conditions.

The following table illustrates the possible digital displays, describes the audible alarm patterns, and the recommended actions to take.

Operating and Alarm Characteristics

LED Display Shows	Alarm Sound	Unit Status	Recommendation	
	An alternating display of "CO" and the CO concentration from 30-999.	4 quick beeps, 5 seconds silence, repeating	Alarm condition. Dangerous concentrations of CO detected	Refer to "What to do When the Alarm Sounds" (inside front cover)
	"---" then "888"	4 quick beeps, 5 seconds silence, repeated once	Self checking (Test button was pressed)	None – CO has not been detected.
	Steady "0" displayed.	None	Normal AC operation (sensing no CO) and with a good battery.	None
 	Display alternates between "Lb" and current CO level, (0-999).	One quick beep every 60 seconds	AC powered and in Low Battery condition	Replace alarm.
	Steady "Err" displayed	One quick beep every 30 seconds	Unit malfunction	If "Err" continues, unit has malfunctioned and must be replaced immediately. Unit will not respond to CO. Press the Peak Level button while unit is in "Err" mode to obtain error code and call Product Support line.
 	An alternating display of "PCO" and the CO concentration (PPM)	None	Unit has detected 100ppm or more CO	Push test/reset button, check appliances
	No display. Green LED flashes briefly once every 60 seconds.	None	Battery backup operation. Unit monitoring for CO.	Verify AC power is restored as soon as possible to conserve battery.
	"End" displayed. Red LED flashes two times every 30 seconds	2 quick beeps every 30 seconds.	End of unit life	Replace unit immediately. Refer to Section 2 for End of Unit Life Warning and Discharge section on the next page.

6. Operating Characteristics

Peak Level Event Alert

A Peak Level Event occurs whenever CO concentrations are greater than 100 PPM. The display will alternate between "PCO" and the currently measured CO concentration, (0-999), even if that concentration has returned to 0 PPM, (see Peak Level Memory section below to display peak level CO from the event). The display will alternate continuously on AC power, and will briefly display once every minute on DC only. This will continue until:

1. The unit goes into alarm or,
2. CO concentration level drops below 100 PPM **AND** the user clears the Peak CO Memory, (see **Peak Level Memory Reset** section below)

If the CO concentration is greater than 30 PPM and less than 100 PPM, the display will indicate the measured CO concentration only.

Peak Level Memory

When the Peak Level button is pressed and held, the display shows the highest CO reading taken by the CO alarm since its last reset or power up. The Peak Level display feature will display levels between 30-999 PPM. The Peak Level feature is helpful in identifying if you have had a CO reading since resetting the alarm.

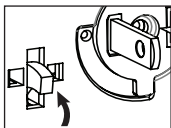
Concentrations of CO between 1 and 30 PPM can often occur in normal, everyday conditions. Concentrations of CO below 30 PPM may be an indication of a transient condition that may appear today and never reappear. Some CO conditions may start out as low level leaks but could develop into CO concentrations that may become harmful.

Peak Level Memory Reset

Press and hold the Peak Level button, then press and hold the Test/Hush button. When the number on the display reads "0", release both buttons. The memory will be cleared and the alarm will begin monitoring for CO.

Discharge

At end of unit life, locate the deactivation / discharge switch and push the switch in the direction shown until switch clicks into place. This will silence the end of unit life or low battery chirping, drain the battery, and render the unit safe for disposal.



7. Maintenance

NOTE: This unit is sealed. The cover is not removable.

Due to the loudness of the alarm, we suggest that you place your fingers over the sounder opening while testing your alarm.

⚠ Caution: Continuous exposure to the high sound level of this alarm over an extended period of time may cause hearing loss.

Testing

To test the alarm, press the Test/Hush button. If the unit is operating properly, you will hear 4 quick beeps – followed by 5 seconds of silence – followed by 4 quick beeps. The display will show in sequence “---” then “888”. Within several seconds the unit will return to monitor for CO.

Note: You do not need to press the Test button to take a CO reading.

Maintenance Tips

To keep your alarm in good working order, you must follow these steps:

- Test the alarm once a week by pressing the Test/Hush button.
- Vacuum the alarm cover once a month to remove accumulated dust.
- Never use detergents or solvents to clean the alarm. Chemicals can permanently damage or temporarily contaminate the sensor.
- Avoid spraying air fresheners, hair spray, paint or other aerosols near the alarm.
- Do not paint the unit. Paint will seal the vents and interfere with proper sensor operation.

Move the CO Alarm to a remote location, to prevent possible damage or contamination of the sensor, prior to performing any of the following:

- Staining or stripping floors or furniture, painting or wall-papering
- Using aerosols or adhesives

⚠ WARNING: Reinstall the CO Alarm as soon as possible to assure continuous protection.

The following is a list of substances that at high levels can damage the sensor or cause temporary readings that are not CO readings:

- Ethylene, ethanol, alcohol, iso-propanol, benzene, toluene, ethyl acetate, hydrogen, hydrogen sulfide and sulfur dioxide.
- Also most aerosol sprays, alcohol based products, paint, thinner, solvent, adhesive, hair spray, after shave, perfume, auto exhaust (cold start) and some cleaning agents.

8. Limited Warranty

Ten Year Limited Warranty

If after reviewing this user guide you feel that your alarm is defective in any way, do not tamper with the unit. In many cases, the quickest way to exchange your alarm is to return it to the original place of purchase. Alternatively, you may return it for servicing to Kidde. If you have questions, call Kidde Customer Service at 1-800-880-6788.

Kidde warrants that the enclosed alarm will be free from defects in material and workmanship or design under normal use and service for a period of ten years from the date of purchase. The obligation of Kidde under this warranty is limited to repairing or replacing the alarm or any part which we find to be defective in material, workmanship or design, free of charge, upon sending the alarm with proof of date of purchase, postage and return postage prepaid, to: Kidde Canada Inc., P.O. Box 40, Apsley, ON K0L 1A0.

This warranty shall not apply to the alarm if it has been damaged, modified, abused or altered after the date of purchase or if it fails to operate due to improper maintenance or inadequate A.C. power. Any implied warranties arising out of this sale, including but not limited to the implied warranties of description, merchantability and fitness for a particular purpose, are limited in duration to the above warranty period. In no event shall the Manufacturer be liable for loss of use of this product or for any indirect, special, incidental or consequential damages, or costs, or expenses incurred by the consumer or any other user of this product, whether due to a breach of contract, negligence, strict liability in tort or otherwise. The Manufacturer shall have no liability for any personal injury, property damage or any special, incidental, contingent or consequential damage of any kind resulting from gas leakage, fire or explosion.

Since some provinces do not allow limitations of the duration of an implied warranty or do not allow the exclusion or limitation of incidental or consequential damages, the above limitations or exclusions may not apply to you. While this warranty gives you specific legal rights, you may also have other rights which vary from province to province. The above warranty may not be altered except in writing signed by both parties hereto.

IMPORTANT: Do not remove unit back cover. Back cover removal will void warranty. Your Kidde Carbon Monoxide Alarm is not a substitute for property, disability, life or other insurance of any kind. Appropriate insurance coverage is your responsibility. Consult your insurance agent.



Kidde Canada Inc., P.O. Box 40, Apsley, ON K0L1A0

QUESTIONS OR FOR MORE INFORMATION

Call our Consumer Hotline at **1-800-880-6788** or contact us at our website at **www.kiddecanada.com**