

## Carbon Monoxide Exposure

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## Don't expose yourself to Carbon Monoxide!

Review the chart below for the maximum allowable exposure limits and symptoms developed with CO inhalation.

Concentration of CO in air	Exposure times and toxic symptoms					
9ppm	The maximum allowable concentration for short term exposure in a living area according to ASHRAE					
50ppm	The Federal OSHA standard for continuous exposure in any eight hour period.					
200ppm*	Maximum concentration allowable any time according to OSHA. Slight headaches, fatigue, dizziness, nausea after 2-3 hours.					
400ppm*	Frontal headaches within 1-2 hours, life threatening after 3 hours Maximum allowable limit in flue gas according to EPA and AGA.					
800ppm*	Headache, dizziness, nausea, and convulsions with 45 minutes. Unconsciousness within 2 hours. Death within 2-3 minutes.					
1600ppm*	Headache, dizziness, and nausea within 20 minutes. Death within 1 hour.					
3200ppm*	Headache, dizziness, and nausea within 5-10 minutes. Death within 30 minutes.					
6400ppm*	Headache, dizziness, and nausea within 1-2 minutes. Death within 10-15 minutes.					
12800ppm*	Death within 1-3 minutes.					

Ask about our full line of **Combustible Gas Detectors** and Flue Gas **Analyzers.** 

\* With exposure to this concentration and higher the effects can vary depending on size, age,

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# Carbon Monoxide Analyzers, Monitors, and Adapters

National Ambient Air Quality Primary Standards in the US call for less than 9ppm carbon monoxide for an 8 hour average during any 12 month period.

Concentrations of 1 to 2 ppm may be found in homes with a normally operating gas furnace, to well over 1,000ppm in homes with a fault furnace.

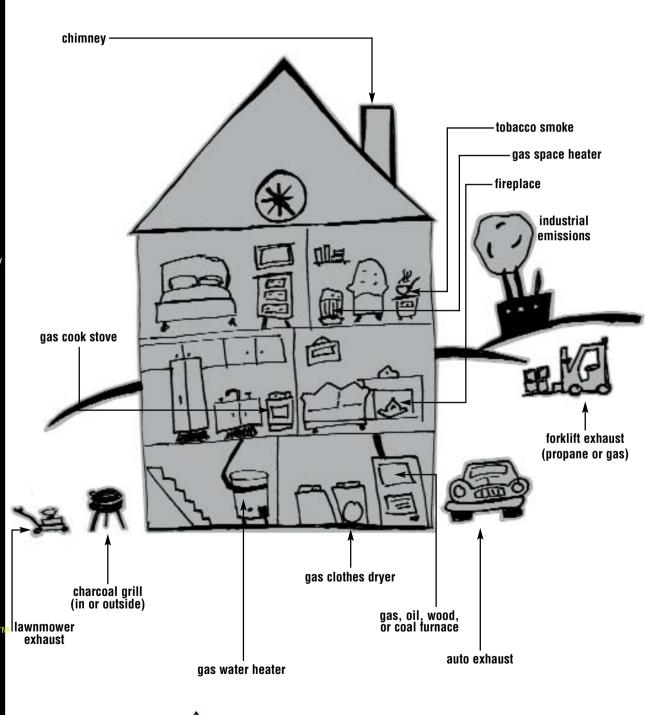
Just 200ppm CO over 2 to 3 hours can cause slight headache, fatigue dizziness, and nausea.

Carbon Monoxide testing is crucial service provided by HVAC/R technicians

## The .eader

**Turn over for** technical information and accessory part numbers.

## **Common Sources of CO**



gas appliances and heaters in cabins,

campers, pools, and spas

## Analyzers, Monitors, and Adapters

## Specifications and Features

### High Carbon Monoxide Analyzer For Forklift Emmisions 706



The 706 tests forklift exhaust gases for the presence and location of carbon monoxide leaks. This instrument fits comfortably in your hand and operates with just the push of a

- Range: 0 ~ 9,999ppm <10,000ppm: 1.000 ~ 9.999%
- 1 ppm sensitivity
- Pump driven
- Pump flow block indicator
- Auto zero
- Backlit display
- Easy field calibration, low cost CO sensor

### Carbon Monoxide Analyzer 707



The 707 tests flue gases at home or office spaces for the presence and location of carbon monoxide leaks. This instrument fits comfortably in vour hand and operates with just the push of a button.

- Pump driven
- · Pump flow block indicator
- 1 ppm sensitivity
- Measures from 0 to 9,999 ppm
- Auto zero
- Backlit display
- Easy field calibration. low cost CO sensor

## **Combination Ambient** Carbon Monoxide and Combustible Gas **Leak Detector**

The TPI 775 is a state-ofthe-art Carbon Monoxide and Combustible Gas Leak Detector. It is the first of its kind to combine both detection technologies into one easy to use hand-held and affordable instrument.

- · Easy to use
- · One hand operation
- Auto zero
- Back light
- Visible and audible alarm

#### **Sensor Specifications**

Type Resolution Leak CO

0

<50ppm 1ppm

0-50,000ppm 0-2,000ppm

Range **Accuracy** ±10% ±5ppm or 5%; whichever is greater Carbon Monoxide Monitor



The 770 is a state-of-the-art carbon monoxide instrument designed to measure CO in ambient air. This palm-sized unit displays readings in 1 ppm increments.

- Measure CO from 0 to 999 PPM
- . Displays the max. CO reading in PPM since
- Displays, in hours and minutes, time elapsed since power on
- Displays user set value of audible and
- Audible alarm can be switched on or off by pressing SEL button



### Carbon Monoxide Adapter

The A771 is a CO adapter designed to work with your DMM to measure ambient air CO. Can also be used as a personal CO

- Built-in Alarm is preset to 30ppm. Setting can be set by
- Use with any DMM with minimum 2 1/2 digit LCD, 2 or 4 Volt DC range and 10M Ohm or greater input impedance.
- Detect CO levels from 0-1999 ppm, with resolution as low as 0.1 ppm and ±5% of reading accuracy.
- · Soft pouch included.

Feature/Specification	A771	706	707	770	775	
Range (CO)	0 ~ 1,999ppm	0 ~ 10,000ppm <10,000ppm: 1.0 ~ 9.999%	0 ~ 10,000ppm	0 ~ 999ppm	<b>CO</b> : 0 ~ 2,000ppm <b>Comb.Gas</b> : 0 ~ 50,000ppm	
Accuracy	±5ppm or 5% of reading whichever is greater	±5ppm or 5% of reading whichever is greater <10,000ppm:10% +5 digits	±5ppm or 5% of reading whichever is greater	±3ppm or 5% of reading whichever is greater	CO: ±5ppm or 5% of reading whichever is greater Leak: ±10%	
Resolution	1ppm	1ppm	1ppm	1ppm	<b>CO</b> : 1ppm	
IR Printer Port	no	yes	yes	no	no	
Flue Probe	no	yes	yes	no	no	
Internal Pump	no	yes	yes	no	no	
Combustible Gas Leak Detection	no	no	no	no	<50ppm	
Backlight	yes	yes	yes	no	no	
Alarm	audible	audible	audible	audible & visual	audible & visual	
Power Supply	9V Alkaline Battery	3 "AA" Alkaline Batteries	3 "AA" Alkaline Batteries	2 "AA" Alkaline Batteries	2 "C" Alkaline Batteries	
Dimensions	6.5" x 2.1" x 1.2" (165 x 55 x 30 mm)	3.75"x 8" x 3" (95 x 303 x 76 mm)	3.75"x 8" x 3" (95 x 303 x 76 mm)	1.5"x 6" x 2.75" (38.5 x 152 x 70 mm)	9.5" x 2.9" x 2.2" (240 x 74 x 55 mm)	
Weight	7.23oz (205g)	1.1lbs (500g)	1.1lbs (500g)	6.4oz (181.5g)	1.05lbs (476g)	
Warranty	3-year limited warranty	3-year limited warranty	3-year limited warranty	3-year limited warranty	3-year limited warranty	

Accessor	→ = Standard		⇒ = Optional			
		A771	902	707	770	775
Part Description	part #					
CO Calibration Kit	A703	<b>\$</b>			<b>\$</b>	<b>\$</b>
CO Calibration Kit	A733			<b>\$</b>		
Aspirator Bulb	A735	<b>\$</b>			<b>\$</b>	<b>\$</b>
CO Sensor	A760			+		
Water Trap Filter	A762		+	<b>*</b>		
Carrying Case	A768		+	<b>*</b>		
Flue Probe	A769			<b>*</b>		
Soft Pouch	A771P	+				
Soft Pouch	A780					+
Soft Pouch	A782				+	
High CO Sensor	A781		+			
CO Sensor	A783	+			+	+

## **A740 Infrared Printer**

Optional accessory for 706, 707, and TPI Flue Gas Analyzers.



- Easy to use
- Battery operated
- Self test facility
- · Adjustable contrast
- Manual paper feed
- Maximum transmitting distance 16" (45cm)
- Compatible with most other combustion analyzers