

**7pi**

**719**

**Combustible Gas Leak  
Detector Instruction Manual**



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# A. INTRODUCTION

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## 1. Congratulations!!

Thank you for purchasing TPI products. The 719 is easy to use and is built to last. It is backed by a 3 year limited warranty. Please remember to complete and return your product warranty registration card.

## 2. Product Description

The ergonomically designed 719 is a hand-held, combustible gas leak detector. It is capable of finding combustible gas leaks in pipes, fittings, regulators, etc.

The 719 comes complete with the following accessories:

**Carrying Pouch (A780)**

**Instruction Manual**

**Battery & Sensor (Installed & Calibrated)**

## B. SAFETY CONSIDERATIONS



***WARNING: Please follow manufacturers test procedures whenever possible. Do not place the sensor cage located on the end of the gooseneck on hot or in hot locations.***

### GENERAL GUIDELINES

#### **ALWAYS**

- Allow the 719 to warm up prior to use. This typically takes 30 seconds but can take as long as 10 minutes depending on ambient temperature.
- Turn your detector on in a “clean air” environment away from the test location.
- Inspect the sensor cage to ensure it is securely attached.

#### **NEVER**

- Place the detector or sensor cage in or on a hot item.

## C. TECHNICAL DATA

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### 1. Features and Benefits

<b>Auto Zero</b>	Automatically sets the sensor to zero after warm up.
<b>Mute</b>	Mutes the speaker and earphone alarm
<b>Audible Alarm</b>	Alarm sounds when a combustible gas with a methane concentration of 1000ppm or more is measured
<b>Visual Alarm</b>	Alarm LED's located on the front and in the sensor cage tip

### 2. Product Applications

Perform the following tests and/or measurements with the 719 leak detector:

- Locate combustible gas leaks in joints and fittings.

### 3. Specifications

**Leak Detection Sensitivity (methane):** 30ppm

**Gases Detected (partial listing):** Acetone, Acetylene, Alcohol, Ammonia, Benzene, Butane, Ethanol, Ethylene Oxide, Gasoline, Hexane, Hydrogen, Methane, Naphtha, Natural Gas, Paint Thinners, Propane, Solvents

**Warm Up Time:** 30 seconds typical (Extended warm up time of 5 to 10 minutes may be required depending on ambient temperature. For fastest warm up time do not store the 719 in cold temperatures)

**Audible Leak Indication:** Adjustable tic rate via side thumb wheel

**Alarm Indication:** Visual and audible

**Goose Neck:** 16" long with visual alarm indicator in sensor housing

**Operating Temperature:** 32 to 122 (0 to 50)

**Gooseneck Length:** 16 inches

**Battery Type:** "C" size Alkaline (2)

**Size:** 9.4" x 2.9" x 2.2" (240mm x 74mm x 55mm)

**Weight:** 1 lb (454g)

## D. MEASUREMENT TECHNIQUES

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### 1. Controls and Functions:

#### *Push Buttons*



Silences the alarm.

**Thumb Wheel** Controls speed of tick rate

#### *LED Indicators*

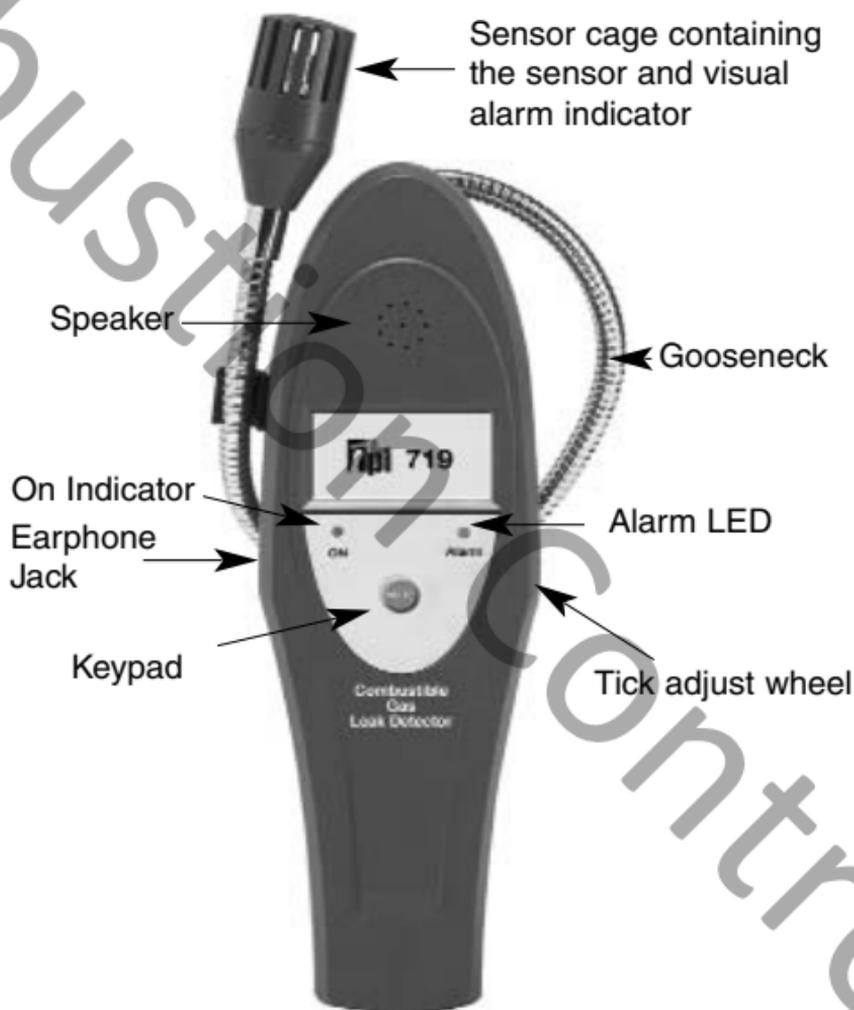
**On** Green: Indicates the 719 is on.  
Red: Indicates batteries need to be replaced.

**Alarm** Flashes with tick rate. Stays on steady when gas concentration is over the alarm point (1000ppm).

## D. MEASUREMENT TECHNIQUES

### 1. Controls and Functions (continued):

#### *Instrument Layout*



## D. MEASUREMENT TECHNIQUES

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### 2. Step by Step Procedures:

**WARNING!**

**Turn the 719 in a “clean air” environment away from the test area.**

1. Turn the 719 on by turning the thumbwheel counter clockwise. The 719 will begin sounding a maximum tick rate and the alarm will warble.

**Allow the 719 to warm up. This typically takes 30 seconds but can take as long as 10 minutes depending on the ambient temperature. As the 719 warms up, the alarm will stop and the tick rate will reduce.**

2. After the warm up period is complete, use the thumbwheel to set a consistent tick rate. The alarm LED will flash with the tick rate. Approach suspected leak areas with the sensor until the tick begins to increase. When the tick increases, do not move the sensor from the area, rotate the TICK ADJUST slightly counterclockwise to slow the ticking and continue to approach the suspected leak area with the sensor. Continue to slow the tick until the location of the leak is found. If the tick stops, the concentration level has decreased. Move back in the opposite direction to find the leak again.
3. If the leak concentration is above the alarm level the alarm will sound and LED's located in the front panel and sensor cage will flash.

## E. Trouble Shooting

### Problem

### Corrective Action

On LED has turned red  
instead of green

Replace Batteries

Tick rate inconsistent

Replace batteries / sensor

## F. Maintenance

### **Battery Replacement:**

Depress the latch on the back housing and slide the cover down.

Replace batteries (2 x "C" alkaline) and reattach the cover.

### **Sensor Replacement:**

Turn the 719 off. Turn the sensor cage counter clockwise and remove it. Unplug the old sensor and discard. Replace sensor and sensor cap.

### **Cleaning your 719:**

Use a mild detergent and slightly damp cloth to clean the surfaces of the 719.

For factory service please return your 719 to:

TPI / Attn: Service

9615 SW Allen Blvd. Suite 104

Beaverton, OR 97005

## G. Accessories

Replacement Sensor: A739

Replacement Sensor Cage: A709A

Soft Pouch: A780

Earphone: A710

Exhaustion Control

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