

### Replacement Parts

Item	Part Number
Sensor with Filter	5121
Filter Kit	5122
Test Vial	5123
Parts Kit ( includes sensor, filter kit, and test vial)	5124
Carrying Case	5125

### RETURN FOR REPAIR POLICY

Every effort has been made to provide reliable, superior quality products. However, in the event your instrument requires repair, forward unit to Service Center freight prepaid to the address below with return address, phone number and/or email address.

### WARRANTY POLICY

The 5120 Refrigerant Gas Leak Detector is warranted to be free of defects in materials and workmanship for a period of three years from the date of purchase including an industry first two year warranty on the sensor. This warranty applies to all repairable instruments that have not been tampered with or damaged through improper use including unauthorized opening of the unit. Please ship warranty units that require repair freight prepaid to Service Center along with proof of purchase, return address, phone number and/or email address.

## 5120 Refrigerant Gas Leak Detector

Detects all CFC, HFC, HCFC  
Refrigerants including blends

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## User Manual

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Design Certified  
to meet SAE J2791  
for R134a



## INTRODUCTION

The 5120 leak detector features a long life heated sensor technology that is designed to detect the more current and difficult HFC refrigerants such as R-134a, R-410a, R-407c, R-507, and R-404c in addition to all HCFC (R22) and CFC (R12) refrigerants including SNAP approved hydrocarbon blends.

The 5120's unique digital leak size indicator takes the guesswork out of whether or not to repair a small leak. The digital display is independent from the audio alarm and sensitivity level, allowing the precise pinpointing of the leak source.

The 5120 does not require rechargeable batteries.

## FEATURES

- Unique numeric leak size Indicator
- R134a sensitivity .05 oz/yr
- Certified to meet new SAE 2791 standard
- Visual LED leak alarm near sensor
- Low battery indicator
- Audio mute function
- SAE J1627 Certified
- Garage Tough
- 2- year warranty including 2 years for the sensor
- Long life, stable sensor
- R22 sensitivity .025 oz/yr
- Automatic calibration and reset to ambient
- 3 adjustable sensitivity levels
- True mechanical pump
- Uses 4 AA alkaline batteries
- Comfortable Sanoprene grip
- CE Certified
- Made in USA

## Product Specifications

<b>Name</b>	5120
<b>Sensitivity</b>	.05 oz/yr R134a, .025 oz/yr R22
<b>Sensor Life</b>	> 300 hours
<b>Response Time</b>	Instantaneous
<b>Power Supply</b>	4 AA Alkaline batteries
<b>Battery Life</b>	8 hours continuous
<b>Warm up time</b>	< 20 seconds
<b>Probe length</b>	17 inches
<b>Numerical Display</b>	7 segment digital display (1 to 9)
<b>Weight, lbs</b>	1.5 lbs
<b>Warranty</b>	2 years (includes sensor)

## EN14624/2005 Test Specifications

Minimum/Maximum Sensitivity Threshold (fixed)	1 gm/yr minimum, >50 gm/yr maximum
Minimum/Maximum Sensitivity Threshold (moving)	3 gm/yr minimum, > 50 gm/yr maximum
Minimum Detection Time (1gm/yr)	Approx 1 sec
Clearing Time	Approx 9 seconds after exposure to >50 gm/yr
Minimum Threshold after Maximum Exposure	1 gm/yr
Sensitivity Threshold in Polluted Atmosphere	1 gm/yr
Calibration Frequency	1/yr check with calibrated leak Standard

## Cross Sensitivity to Automotive Chemicals

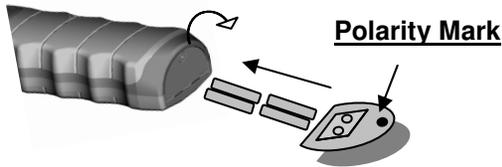
Some automotive solvents and chemicals have similar hydrocarbon properties as R134a and may elicit a positive response (<30 seconds) from the 5120. Before leak checking, clean up any chemicals in the list below that elicit a positive response.

Brand/Chemical Name	Response	Clears <30 seconds
Dextron Transmission fluid heated to 160 °F	N	N/A
Quaker State Motor Oil heated to 160 °F	N	N/A
Ford silicone lubricant	N	N/A
Rain-X Windshield Wash Fluid	Y	N/A
Ford Rust Inhibitor (when wet)	Y	Yes
Ford Gasket Adhesive (when wet)	Y	Yes
Loctite Natural Blue degreaser (undiluted)	Y	Yes
Ford Brake Parts Cleaner (when wet)	Y	Yes
Ford Silicone Rubber (when uncured)	Y	Yes
Motorcraft Antifreeze heated to 160 °F	Y	Yes
Gunk liquid wrench (when wet)	Y	Yes
Ford Spot Remover (when wet)	Y	Yes
Ford Pumice lotion (with mineral solvent)	Y	Yes
Ford Motorcraft brake fluid	Y	Yes
Ford Carburetor Cleaner (when wet)	Y	Yes

## Maintenance

### Batteries:

**Install Batteries:** Remove screw located at rear end of unit and pull down hinged battery door to open as shown. Always insert all four batteries into the battery compartment in the same direction. Note polarity mark on the inside of the battery door for proper battery orientation.

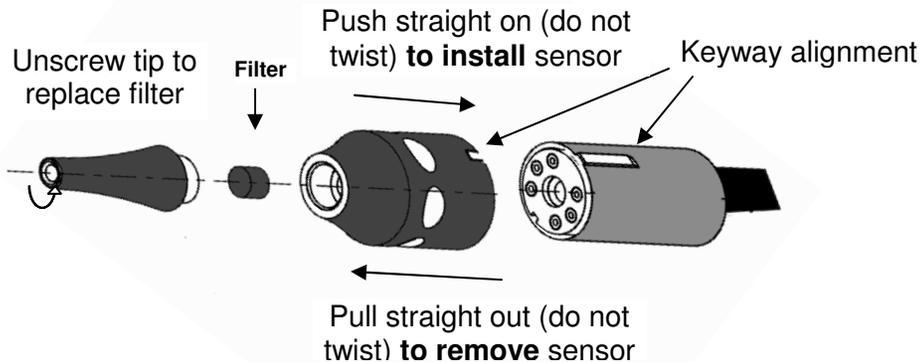


### Sensor:

**Replace Filter:** Unscrew sensor tip as shown to replace filter. Replace filter whenever it becomes visibly dirty or every 2 to 3 months depending on use.

**Replace Sensor:** Remove sensor by pulling out of socket. Install the new sensor by aligning the notch in sensor cover with the raised keyway on sensor socket holder (see figure below).

**Note:** Do not force sensor into socket. Misalignment can damage the sensor pins.



**IMPORTANT:** Make sure sensor is fully inserted for proper operation. The detector will stay in warm-up mode and the on/off switch will become inoperative if the sensor becomes loose or is not fully inserted.

## 5120 Control Panel



- ← Digital Leak Size Indicator
- ← Low Battery Indicator
- ← Sensitivity Level
- ← Audio Mute & Sensitivity Level
- ← Power On/Off

## Operating Instructions

1. **TURN ON:** Press the ON/OFF button once to turn on and again to turn off. **NOTE:** Hold button down for approximately 1 second to turn unit off.
2. **WARM UP:** The detector automatically starts heating the sensor. During the heating cycle, the digital leak size indicator will flash **0** and the detector will sound a slow “beep”. Warm up is usually less than 20 seconds.
3. **READY:** The detector is ready to begin searching for leaks when the flashing **0** stops and the green sensitivity LED turns on. The audio “beep” increases in frequency and probe LED begins to blink steadily.

## Leak Size Indicator

The digital leak size indicator remains off normally but once a leak is detected, a number from 1-9 will be displayed for all HFC and HCFC refrigerants *regardless of the sensitivity setting*.

The number will continue to increase or decrease depending on the amount of refrigerant sensed. The maximum value will be displayed once the leak source has been located. The table below can be used to approximate the size of leak:

Maximum # displayed	Leak Size (oz/yr)
1 -3	< 0.1
4-6	0.1 to 0.5
7-9	>0.5

## Low Battery Indicator

Replace the 4 AA Alkaline batteries when the red LED on the control panel is lit. Follow battery installation instructions under **Maintenance** section.

## Audio Mute Function

To silence or mute the audio beep and alarm signal, press the MUTE button. To restore the audio sound, press the MUTE button again. (Note: a few seconds is required to restore sound if the mute button is pressed in rapid succession.)

## Adjusting Sensitivity Levels

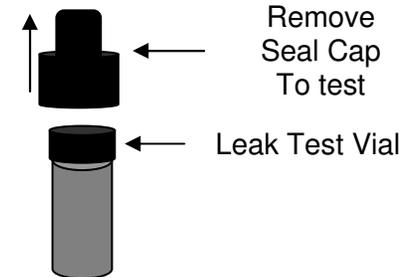
The Leak Detector will default to the NORM sensitivity level automatically once the unit comes out of the warm up cycle and the green LED will turn on.

To change sensitivity levels, press the SENS once for HI sensitivity (red LED will turn on) and again for LO sensitivity (yellow LED will turn on).

## Leak Test Vial

The leak detector comes with a Leak Test Vial that allows the user to make sure the detector is performing properly. To test:

1. Remove the plastic seal cap on top of the Leak Test Vial by pulling it off (see fig. below).
2. Turn on the detector and allow the unit to complete the warm up cycle.
3. Place the sensor close to the small hole in the top of the Leak Test Vial. The beep rate should increase and the Digital Leak Size Indicator should display a number from 4-6 indicating that the sensor and electronics are working properly.



**NOTE:** Always remember to replace plastic seal cap after leak test is completed. Replace Test Vial when the green color is no longer visible.