



OWNER'S MANUAL



LEAK FINDER 101

Les Équipements d'Érablière CDL inc.

Thank you for choosing a CDL Leak Finder 101. Our 40 years of experience working with sugarmakers ensures you that you acquired a performant and quality piece of equipment. Before using this piece of equipment, it is recommended to thouroughly read this document.

FINDING INFORMATION

Make a record for future use

Brand: _____

Purchased Date: _____

Model Number: _____

Serial Number: _____

Serial number location

The number is located on the back of the unit.



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LIST OF MATERIAL

As soon as you receive this piece of equipment, make sure all the components are there:

- 1 Leak Finder 101
- 1 pair of earphones
- 1 neck band
- 1 carrying case
- 1 battery 9V (already in the unit)

SAFETAY

Even if the use of the Leak Finder 101 is very safe, always think safety. Since it will be used in a noisy environment, as soon as you are done detecting leaks, wear the proper earing protection. Also, when you'll use the unit, stay alert. Often these areas are small and has a lot of equipment. Be carefull not to trip and hurt yourself.



INTRODUCTION

In any noisy environment, it's almost impossible to find the origin of a leak. Also, many leaks can't be heard by the human ear. Often, we suspect there is a leak, but where? The Leak Finder 101 eliminates all the ambient noise and will guide the user to the leaks in the system. Hot motors or noisy pumps will not stop the Leak Finder from finding the problems. It will lead you straight to the leaks. Simply slowly direct the sensor toward the problem areas and you'll find the leaks. It's a little bit like a scavenger hunt. When all the leak will be found, you'll know your system will be as efficient as can be.

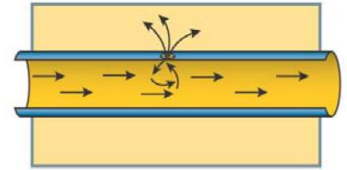
Your Leak Finder 101 is a high precision instrument, made with the highest quality materials to give you the best possible tool to detect vacuum leaks in noisy environments like mechanical rooms and pump stations. This instrument was tested against the highest standards of the industry. Each of its functions was verified and tested by a specialized technician.

It's important to be comfortable with the instrument before starting to use it and conclude that an installation is problem free. You can imagine the cost of a vacuum leak in a pumping station especially if it's there from the beginning of the season. A leak located at the beginning of a system has a huge impact because it will affect the whole installation.

The Leak Finder can be used in the woods. However, it wasn't designed for it. It will not detect some types of leaks like a leak coming from a hollow tree for instance.



TECHNICAL INFORMATION



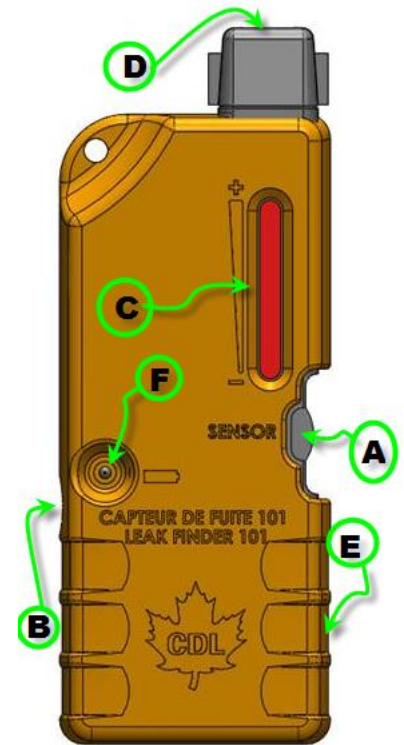
- A vacuum leak is a negative pressure that creates a sound.
- Leaks are very directionnal. It means that you have to point directly at it to find the source.
- The speed and the volume of air of a leak are linked to the air viscosity.
- This instrument finds leaks that cannot be heard by the human ear. It converts them in audible sounds you will hear in the earphones.
- It is designed to find vacuum by eliminating every other noise
- The Leak Finder 101 can detect leaks as small as 0.0050''.
- This instrument only senses pressure differentials, that's why it will find any size vacuum leak.
- The more intense the leak, the more important it is to directly point at it.
- The Leak Finder 101 will lead you directly to the source of the leak.

OPERATION

- A- Sensor adjustment (1-10)
- B- Earphone jack
- C- LED indicator (3 colors)
- D- Sensor
- E- Battery compartment
- F- Battery status

Before you start using the Leak Finder

- Create voluntary leaks in your system and try to find them with your instrument to understand how it works.
- Listen to the different types of noise for the different leaks.
- Learn how to detect each type and distance of leaks.



Find leaks

1. Make sure the 9 volt battery is well inserted in the instrument (E), at the back of it.
2. Plug the earphones (B) and put them in your ears.
3. Set the sensor (A) at 1.5. The battery status indicator (F) should be green. If it's red, replace the battery.
4. Point the sensor (D) toward your system, following pipes and any other potential leak source.
5. Carefully listen. If the sound changes in any way, go back, change direction, turn and point slowly in other directions to find the source.
6. Also watch the LED color (C) :
 - a. green = basic noise, no leak found
 - b. Orange = possible leak relatively close
 - c. Rouge = leak close by
7. Adjust the sensor sensitivity (A) at different levels to better define the leak. It might vary with your earring capacity, but for most users, the sensor level should be adjusted at 2.
8. Be very attentive to any noise variations, it's the key to success.
9. Make slow circular movement to test every surface.
10. Especially look at unions, fittings, seals, gaskets, o'rings (every assembled part).

SPECIFICATIONS

- Battery life : about 40 hours
- Operating temperatures : -10°C to 40°C (14°F to 100°F)

MAINTENANCE

The maintenance of the unit is very simple. Just keep it clean and store it in a dry environment.

TROUBLESHOOTING

The battery status indicator (F) should be green. If it's red, replace the battery. Any other problem will have to be verified by a CDL technician.



WARRANTY

Your Leak Finder 101 is covered by a 6 month limited warranty. For 6 months from your original date of purchase, Les Équipements d'Érablière CDL (CDL), will replace or replace any parts of this equipment that prove to be defective in materials or workmanship when such evaporator is installed, used and maintained in accordance with the provided instructions. If it can't be fixed and the purchase was done less than 6 months ago, CDL will give you a new unit.

Exclusions

This warranty does not cover the following:

1. Products with original serial number that have been removed, altered or cannot be readily determined.
2. Production loss due to any kind of failure of the machine.
3. Service calls which do not involve malfunction or defect in materials or workmanship, or used other than in accordance with the provided instructions.
4. Any service beyond the first 6 months.
5. Damages caused by: services performed by unauthorized service companies; use of parts other than genuine CDL parts or parts obtained from persons other than authorized service companies; or external causes such as abuse, misuse, inadequate power supply, accidents, fires, or acts of God.
6. If the product was damaged by abusive use, negligence, accident caused by the customer, modification made by the customer.
7. Damage cause by the use of products that are not meant for use with our equipment or a bad use of cleaning products.
8. Damage caused by a use of the instrument that it was not intended for.



Disclaimer of implied warranties; limitation of remedies

Customer's sole and exclusive remedy under this limited warranty shall be repair or replacement as provided herein. Claims based on implied warranties, including warranties of merchantability or fitness for a particular purpose, are limited to two years or the shortest period allowed by law, but not less than two years. CDL shall not be liable for consequential or incidental damages such as property damages and incidental expenses or loss or revenues caused by any event covered by this warranty. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, or limitations on the duration of implied warranties, so these limitations or exclusions may not apply to you. This written warranty gives you specific legal rights. You may also have other rights that vary from states to states.

If you need service

Keep your receipt, delivery slip or some other appropriate payment record to establish the warranty period should service be required. If service is performed, it is in your best interest to obtain and keep all receipts. Service under this warranty must be obtained by contacting CDL at the addresses or phone numbers below. Obligations for service and parts under this warranty will be performed by CDL in Canada. Products features or specifications as described or illustrated are subject to change without notice. You can also bring your equipment to the nearest service center. Visit www.cdlinc.ca to find the address of the CDL service centers.

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