TIF Instruments
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Miami, Florida 33150

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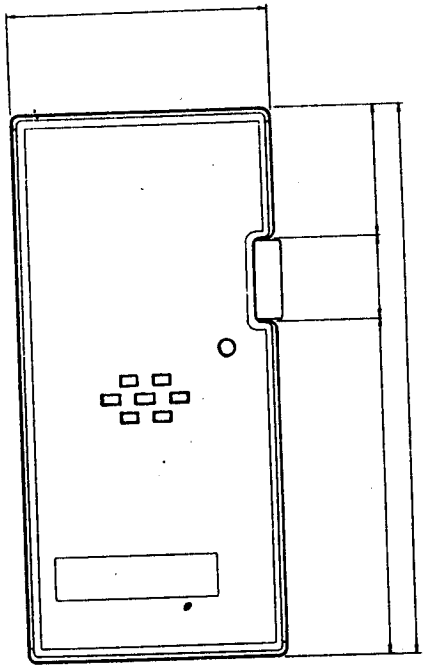
6501
Accessory Transmitter
OWNER'S MANUAL



TIF 6501
ACCESSORY TRANSMITTER

Use with the TIF 6500
Vacuum Leak Detector

The TIF 6501 is an adjustment-free ultrasonic transmitter, for use with the TIF 6500 ultrasonic leak detector, to find cracks and gaps in solid barriers. This ultrasonic transmitter/detector pair detects leakage of the ultrasonic transmission through unseen openings.

For example, wind and rain leaks in automobiles may be located using the TIF 6500/6501 in combination. The 6501 never needs adjustment. Just turn it on; it does the rest.

Features:

- Small and light. Battery operated.
- Adjustment-free. Simple to use. Never needs tuning.
- Low battery warning.
- Long range.

Applications:

- Windshield.
- Roll windows.
- Door seals.
- Trunk.
- Weather seals.

How the TIF 6501 Works

The TIF 6501 simulates the ultrasound produced by a strong vacuum leak. It thus allows the TIF 6500 Vacuum Leak Detector to detect this leak as the passage of ultrasound through cracks or gaps in any solid barrier between the transmitter and receiver (figure 1).

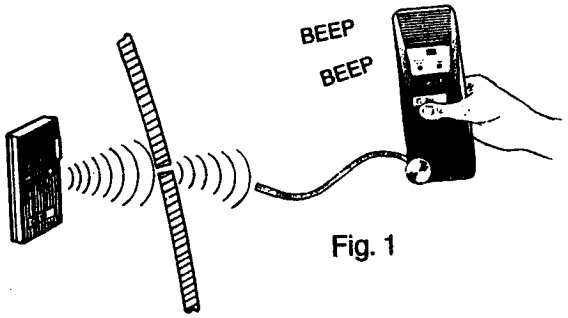


Fig. 1

Because the 6501 is a strong source of ultrasound, and this type of sound creeps through small openings easily, the 6501 can locate tiny apertures difficult to detect by human eye.

Description of the TIF 6501

The TIF 6501 is completely self-contained and portable (figure 2). It operates from a single 9 volt transistor battery. To turn it on, push the side button to the "in" position. The front-panel light will come on if the battery is good (see page 6 for battery replacement instructions). The slotted openings in the front panel pass the ultrasonic signal, and should be kept free of obstructions and dirt. To turn the transmitter off, push the side button and release it to the out position. The light will turn off. Turn the 6501 off when not in actual use, to prolong battery life.

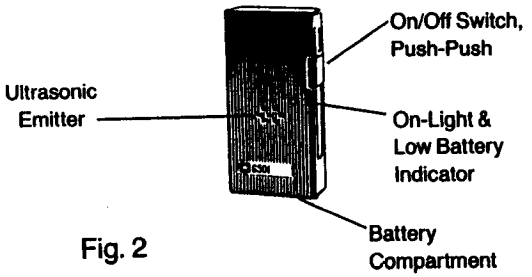


Fig. 2

How to use the TIF 6501 with the TIF 6500

Before using, test that no ambient high frequency sounds are present in the region to be probed by turning on the TIF 6500 only, and listening to the beep rate. It should be low (once every two to three seconds).

1. Verify that the transmitter/detector pair is operational by turning both instruments on (separated by several feet), and pointing them at each other to check for a high beep rate.

2. Place the 6501 transmitter inside the compartment to be checked (e.g. passenger compartment or trunk), facing toward the area to be tested (figure 3).

3. Close the compartment, and scan the suspected leak area from the outside with the 6500 detector. (Follow the 6500 instructions for adjusting detector sensitivity).

4. An increasing beep rate indicates ultrasonic leakage from the transmitter to the exterior. Move the 6500 detector until the exact location of the leak (highest beep rate) is found.

5. Seal large leaks first, then probe for smaller leaks. To test for leaks in other areas of the compartment, re-aim the transmitter inside, and repeat the above procedure.

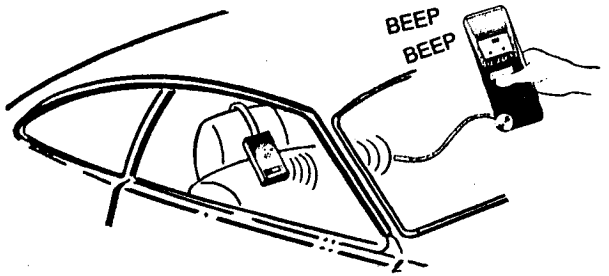


Fig. 3

Low Battery Indicator
Since the ultrasound emitted by the TIF 6501 is beyond the range of human hearing, a light is provided to remind the user that the transmitter is on. This light is also the low-battery indicator. If pushing the on-switch button does not cause the indicator light to come on, replace the battery. (If the light still will not come on, see back of manual for return and repair information).

Battery Installation:
Use only good quality 9-Volt batteries (Eveready #216 or equivalent).

Slide the battery compartment end panel open in the direction indicated by the embossed arrow.

Snap the battery clip onto the battery terminals, making sure that the connectors mate tightly. Slide battery into compartment and close panel.

Specifications

Weight: 4.5 oz.
Dimensions: 4 7/8" x 2 3/8" x 1"
Frequency: 40 kHz
Power: 9V transistor battery
(Eveready 216)