

## 6. Trouble Shooting

- a. If you do not hear a buzzing sound when the button is pressed, the batteries may be installed incorrectly or may need replacing.
- b. If the buzzing sound slows to a stop while the button is pressed, the batteries need replacing.
- c. If the needle on the dial rises above 60", the tubing may be blocked. Remove the source of blockage before using the Gauge.
- d. If there is liquid in the tank and needle does not rise when the button is pressed, the tubing may be cut or disconnected.

## 7. Help Line

If you have technical questions, please call service at in Canada and USA (800)-667-3825.

## 8. Warranty

The DipSTIK Gauge is warranted against defects in materials and workmanship for a period of one year from the date of purchase. Before returning a Gauge for repair, phone (800)-667-3825 to receive authorization. When returning a faulty Gauge, return only the Gauge, not the tubing or the bubble plate. You pay the postage charges one way. Be sure to include your address, the date you purchased the Gauge and a telephone number where you can be reached. We will repair or replace the Gauge and return it to you at no cost. If the Gauge was damaged by misuse we will phone to advise you of your options.



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# The DipSTIK Gauge User's Manual

## 1. Introduction

The DipSTIK Gauge is designed to measure the level of liquid in water and sewage holding tanks. It may be used in tanks with up to 60" of liquid. It cannot measure depths greater than that.

## 2. Disclaimer

The manufacturer accepts no liability for damages resulting from malfunction or improper use of this product. The manufacturer's liability shall be limited to repair or replacement of the product if it is found to be faulty within the warranty period.

## 3. What's in the box?

Before beginning to install your DipSTIK Gauge, check to make sure that you have received the following parts:

- i) The DipSTIK Gauge
- ii) 50 feet of 1/4" (Outside Diameter) plastic tubing
- iii) One right angle tubing connector
- iv) One bubble plate (large metal disk)
- v) Two AA alkaline cells
- vi) One Manual (this document)
- vii) One masonry drill bit
- viii) Two mounting screws with plastic inserts
- ix) A Stick-On label "R-U-FULL-OF-IT" to record the full level of the liquid in the tank.

## 4. Installation

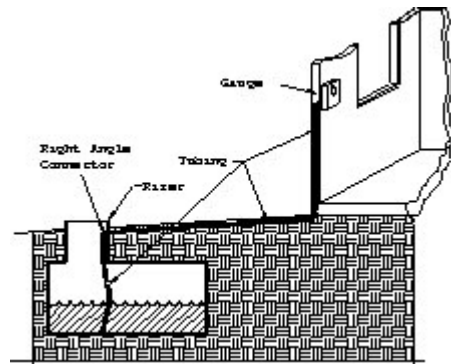
You have a choice of where to place the Gauge – indoors on a wall, outdoors on a wall, even on a post or tree. The Gauge may be mounted outdoors but should be protected from rain and direct sunlight. Shelter under a soffit or under a large tree is usually adequate. The plastic tubing will deteriorate if subjected to direct sunlight. It should be given adequate protection.

When choosing a location, bear in mind that the plastic tubing connects the Gauge to a fitting in the tank. Be sure you have an acceptable route for the tubing. There is no limit to how far the Gauge can be from the tank. Operation may become somewhat slower but the accuracy will not be impaired.

A total of 50' of tubing is supplied. If you require more you may use tubing of the type used in greenhouse irrigation systems.

For the simplest installation, mount the Gauge on a wall (either indoors or outdoors) near the tank. If you wish to conceal the tubing inside the walls, check to make sure that you can successfully route it through the walls.

The tubing must be mounted so that it slopes continuously toward the tank as shown in Figure 1. Any "loops" may create traps that collect condensation and lead to measurement errors.



The outdoor section of tubing can be run underground. This has the added advantage of protecting the tubing from damage. A depth of two or three inches is usually enough. If the tubing goes under a flowerbed or a grassed area, bury it deep enough to ensure that it does not get damaged when the flowerbed is tilled or the lawn is aerated.

The tubing goes into the tank through a small hole drilled in the riser above the tank (See Figure 1). For concrete tanks, a masonry drill bit is provided. This entry point is best located on the riser on the side closest to where the septic truck parks to ensure that it is less likely to be damaged by the large hose used during emptying.

The right angle tubing connector is used to keep the tubing close to one wall of the riser as shown.

The bubble plate (the 3" diameter metal plate) is attached to the bottom end of the vertical run of tubing inside the tank. The vertical length of tubing in the tank should be long enough to reach from the right angle connector to the bottom of the tank with about 2" of slack. Straighten the plastic tubing so that the bubble plate is sitting flat on the bottom of the tank.

Seal the opening where the tubing goes through the tank riser using a good grade of non-hardening sealant. Black roofing cement is suitable.

The Gauge is mounted to the wall by means of screws through the back of the case. To access the screw holes, remove the cover by depressing the catch at the top end and pulling the cover forward.

Connect the tubing to the Gauge as shown in Figure 2. Note that the tubing can exit through the back of the case (for installations with the tubing hidden in the wall) or through the bottom of the case (for flush mount installations).



The tubing is easier to attach if it is first warmed by dipping it in hot water.

Install the two AA batteries and replace the cover. The Gauge is now ready to use.

Figure 2.

## 5. Operation

To take a reading, press the button and hold it for a short time. You will hear a buzzing sound. If there is product in the tank, the needle on the

dial will rise, then stop. As soon as the needle stops rising, release the button. The needle may quickly settle back a small amount then remain stationary. The reading on the dial is now equal to the level of liquid in the tank (measured in inches).

Over the next few minutes the needle will slowly return to zero. To take another reading, simply press the button again and repeat the process. Note: you must press the button **every time** you want to take a reading.

When the Gauge is first installed you should compare its reading against a reading taken with a rod. They should agree to within one inch. This test should be done when the tank is nearly full. It is recommended that you repeat this test periodically.

You should determine a safe maximum level for the liquid in the tank. A good rule is to empty the tank when it reaches 80% of rated capacity. Never let the liquid level get high enough to fill any part of the riser that sits above the tank! A stick-on label "R-U-Full of It" is provided for recording the "80% Full" level. It should be filled in and placed on or near the Gauge.

**CAUTION: When pressing the button, never allow the needle to reach the pin above the 60" mark. Doing so will result in inaccurate readings and may permanently damage the Gauge. The Gauge will not function if there is ice in the tank or in the tubing. Readings will be erroneous and the Gauge may be damaged.**