

The TONE ADJUST knob has the FUN!

BeachcomberTM

G.E.B.
Metal Detectors



BEACHCOMBER G.E.B. *

OPERATING INSTRUCTIONS

FAMILIARIZING YOURSELF WITH YOUR DETECTOR

Grasp the handle of the BEACHCOMBER detector. Notice that the instrument has two control knobs. The one on the left is the TONE ADJUST and the one on the right is the GROUND BALANCE. Between them is a small jack which headphones can be plugged into. Also note the red switch button which is for battery testing. (See Battery Testing)

The TONE ADJUST knob has two functions:

1. It turns the instrument on and off, and
2. Adjusts the level of sensitivity to metal objects.

The GROUND BALANCE has one function:

1. It adjusts the detector so it will not react to the ground, or in effect, balancing it out.

On your BEACHCOMBER* detector, notice that at the end of the handle is a small meter with a red face plate and a white indicator needle. The meter is marked "Intensity." This enables you to visually locate hidden or buried objects and test the batteries.

At the back of the instrument is a plate which you can remove by pressing in and sliding down at the same time. Behind it is the battery pack in its compartment. On the back side of this plate is the model and serial numbers of your metal detector.

TUNING PROCEDURES

1. CONTROL FAMILIARIZATION

NOTE: This step must be carried out away from metal objects.

Turn TONE ADJUST to the right just past the click. Set GROUND BALANCE fully to the right. Hold search head 6" - 8" above ground, and adjust the TONE ADJUST control for a low tone in the speaker, with an approximate meter reading of 10 (from 0 - 20). Now lower the search head to the ground. The tone should get louder. Raise search head back to 6" - 8" above ground,

turning the GROUND BALANCE control all the way to the left. Readjust the TONE ADJUST control for a low tone, again lowering the search head to the ground. The tone should disappear. If the test does not work, move to another spot on the ground. You may be making these tests over a metallic object.

2. GROUND BALANCE PROCEDURE

The main function of your detector is to detect buried metallic objects and not the ground itself. To prevent detection of the ground, the ground must be balanced out, the procedure for doing so follows.

- A. Hold search head 6" - 8" above the ground.
- B. Set GROUND BALANCE control to its approximate center position.
- C. Adjust TONE ADJUST control for a low tone in the speaker.
- D. Lower search head to ground. The tone in the speaker will do one of three following things:
 - (1) Get louder. If so, continue to Step E.
 - (2) Disappear. If so, continue to Step F.
 - (3) Remain at a low level. If tone remains the same or changes little, then the detector is balanced to the ground and you are ready to start searching for buried metallic objects.
- E. Move the GROUND BALANCE control a small amount to the left and repeat Steps A, C, and D until you have reached the balance point where there is little change when lowering the search head to the ground. If the GROUND BALANCE control is adjusted past the balance point, proceed to Step F.

When the tone remains at a low level you are ready to hunt for all types of metallic objects.

- F. Move the GROUND BALANCE control a small amount to the right and repeat Steps A, C, and D until you have reached the balance point where there is little change when lowering the search head. If the GROUND BALANCE control is adjusted past the balance point go back to Step E.

When the tone remains at a low level, you are ready to hunt for all types of metallic objects.

Using either step, the balance point will be the same. There will be only one point in the GROUND BALANCE control where the detector will be balanced to the ground. It is very important to make small changes in the GROUND BALANCE control position to avoid going past the balance point. You will find that the

position of one control slightly affects that of the other. This is completely normal. Slight readjustment of the GROUND BALANCE control will be needed from time to time to take care of slight differences in ground from one location to another. This also is normal. Adjustment at first is a little tedious, but after several successful attempts the procedure will be mastered, taking very little of the operator's time.

BATTERIES

1. TESTING

Turn TONE ADJUST control to the right until a click is heard. Push the small red button on the control panel and observe the meter readings. It should read between 40 - 50 on the meter scale. If not, check battery connections and installation. If the batteries are installed correctly and still read below 40 install new batteries.

2. REPLACEMENT PROCEDURE

Press in and slide the back plate of instrument down, pull out battery holder, remove individual batteries from holder. To replace the batteries simply match the plus (+) and minus (-) symbols on the new batteries with the plus (+) and minus (-) symbols on the battery holder snapping the new batteries into place. Reinstall the battery holder into the instrument.

SEARCHING INSTRUCTIONS

To locate hidden or buried objects, slowly and systematically sweep the search head from side to side, advancing three inches forward per each sweep for maximum depth and coverage. Work the area chosen in blocks, marking your boundaries to insure complete coverage.

LISTEN FOR THE TONE

The tone coming from the speaker will tell you exactly where objects are located. When the volume of the tone increases, the loop is over the object. When the volume decreases, the loop has passed away from the object. The volume will be loudest when the center of the loop is directly over the center of the object. An exception to this rule, however, is a coin buried "on edge." In this case, the volume will be loudest when the edge of the loop passes over the coin.

Large or small increases in volume usually are caused by one of three things:

(1) the size of the object, (2) how deeply the object is buried or (3) a combination of the two. Generally, the larger the object, the greater the increase in volume. The deeper it's buried, the smaller the increase. Thus, a single coin, deeply buried, will cause only a slight increase in volume. A large object, buried just as deeply, will cause a much larger increase.

WATCH THE METER

The signal intensity meter located in the end of the BEACHCOMBER detector handle will give a visual reading at the same time the speaker gives a sound reading. Increases in sound will be matched by increases in the meter reading.

PRACTICE MAKES PERFECT

Here are a couple of ideas to help you sharpen your "shooting" skill:

1. Place a small object (your sample coin), a medium-sized object (a tin can lid will do nicely), and a large object (a frying pan from the kitchen) out on your lawn. Leave a few feet between them. Following the instructions above, tune your instrument. Pass the loop over each object, noting how much the volume increases or decreases as you move from object to object.
2. Take two quarters. Place one on top of the grass. A few feet away, dig a small hole no more than two inches deep and bury the other coin. Tune your instrument and pass the loop over the coin on the surface, then over the buried coin. Note how the volume increases or decreases as you move from one to the other.
3. Plant a "test garden." To get better acquainted with the various kinds of buried objects, bury some metal items at known depths. Make sure your test garden is located where you can get to it easily. It's best to make a map of the area, showing what is buried and its depth. Your test garden will help you practice and will also provide a handy method of periodically checking the performance of your instrument.

ADVICE ABOUT HEADPHONES

Headphones are excellent accessories. They concentrate the sound for you, permitting you to hear very slight differences in volume. They also shut out unwanted external noise which can interfere with your ability to detect objects. Persons with hearing problems are able to operate the instrument more easily. All in all, headphones make a wise investment.

PERIODICALLY READJUSTING THE SENSITIVITY

It is a good policy to periodically adjust the tuning slightly. As you become more experienced with your new detector you will begin to notice, just by differences in the tone you hear, whether the tuning needs to be adjusted. Remember, a properly tuned instrument insures that maximum sensitivity is maintained.

WHAT WILL YOUR INSTRUMENT DETECT?

Silver, lead, copper, bottle caps, tinfoil, gold, cartridge cases, rings, aluminum foil, brass and tin cans are some of the highly conductive metal objects that will cause a response in your speaker or headphones. Your instrument, however, will not detect sticks, rags, bones, paper, wood or other non-metallic objects.

The longer many metal objects have been buried, the better you may be able to detect them. A chemical reaction between such objects as silver or copper coins and the surrounding soil often creates a "halo" effect. This "halo" may cause your detector to register a much larger increase in volume than might otherwise be expected for a small coin. The "halo" can actually help you detect better. In fact, if the "halo" is strong enough, your instrument may continue to register even after you have dug up the coin!

PROPER CARE OF YOUR DETECTOR

1. CLEANING: Both the loop and rod are waterproof and can be cleaned with fresh water and a mild cleanser. After cleaning, dry the instrument thoroughly. Caution! Never raise the wet loop above the level of the instrument case. The instrument case is not waterproof and water may run down the rod into the case, damaging the electronic components.
2. WEATHER CONDITIONS: Protect your detector from excessively cold weather. Freezing can damage the electronic components, the case and/or the batteries. Excessive heat can also damage the instrument. Never leave it in the sun. It's best to lay it in the shade when temporarily not in use. If it's left in a car on a hot day, cover it with a blanket or something similar to protect it from the direct rays of the sun and then leave the windows slightly open to permit ventilation. Needless to say, protect your instrument if you operate it in the rain, as water may get into the instrument case.
3. SALT WATER: Salt water is very corrosive! After your detector has been exposed to salt water, rinse it thoroughly in fresh water, being careful not to let the loop rise higher than the level of the instrument case. Then wipe it with a cloth dampened with fresh water and dry it thoroughly.
4. STORAGE: If you plan to store your instrument for any length of time, unsnap the battery pack, remove it from the instrument and take the batteries out of the holder. Whenever your instrument is not in use turn the "TONE ADJUST" knob all the way to the left until it clicks off.

SOME THOUGHTS ON ETHICS

Treasure hunting is the kind of new hobby that fires the imagination and generates its own enthusiasm. It's the most natural thing in the world to dig as fast as

you can the minute you hear that first loud, unmistakable signal. It will be a real thrill to discover what treasure is right beneath your feet.

But stop a minute! Be a little far-sighted and consider the long-run too.

We strongly urge you to adopt a code of ethics which will preserve the environment and also the rights of treasure hunters to operate detectors with as few restrictions as possible.

Before you even begin a search, check the law, ordinance or regulations about hunting on publicly owned sites. Abide by the rules. If the area is private property, get written permission from the owner to search it. You may find he will be more eager to give permission if you suggest sharing your finds with him, or if you offer to search for a specific item he has lost.

About digging: In lawn areas use a screwdriver of no more than six or eight inches as your tool. Limit the size of the hole to a maximum of two inches in diameter, cutting a plug of sod which can be easily replaced after you make your find and fill the hole. Leaving holes is both unsightly and dangerous.

Detectors or detector modes designed for locating large and deeply buried objects should be used with discretion -- never in lawn areas, and with careful judgment in other locations. Consider the scar you may leave by your digging before you start. This will vary a lot from one part of the country to another, depending on local soil and climatic conditions.

Public officials and private property owners will be much more likely to allow continued treasure hunting if you do no environmental damage. You may even be able to increase your reputation as an ethical hunter by volunteering to carry out and dispose of whatever trash items you find.

Adoption of these attitudes can only enhance the public's opinion of treasure hunters and assure that many areas, both public and private, remain open to you and your new detector.

SERVICE AND WARRANTY INFORMATION

If your BEACHCOMBER metal detector is ever in need of service, ship it to us at the factory address below or to one of our Service Centers listed on the back of the warranty card. Insure it fully, prepay the charges and enclose a letter describing the nature of the problem. We'll correct the matter and return the instrument as soon as possible. As long as your instrument is under warranty there is no charge other than a small handling and postage fee.

Read your warranty card carefully. It describes completely what is covered and the length of the coverage. If you have any questions, don't hesitate to write to us. We will be happy to answer any questions you may have.

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