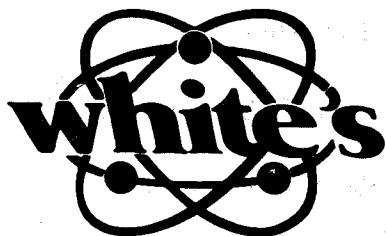


OPERATOR'S
INSTRUCTIONS

COINMASTER 6000/D SERIES 2



**A Message from
Mr. Kenneth White, Sr.
President, White's Electronics**

Congratulations! You are now the proud owner of one of the world's finest detectors. You'll enjoy the many relaxing hours you'll spend with your new detector.

Ahead of you lie exciting experiences you'll never forget. For years to come you'll have yarns to spin about the places you'll visit, the people you'll meet, the history you'll learn, and the treasures and relics you'll uncover. We envy your journey and wish you every success.

Before we tell you how to assemble and operate your instrument, however, there are two important points to leave you with:

1. Your new detector is precision-made and has been carefully tested at our factory. Properly cared for, it will last for years and years. Treat it like a good friend and it should never let you down.

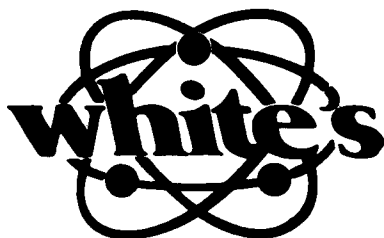
2. Any piece of fine equipment is only as good as the person operating it. Right now your detector is "smarter" than you, so you've got some catching up to do. Become very familiar with your instrument. Practice as much as you can. Soon it will become a part of you.

You and your metal detector will make an outstanding team. We've known many "shooters" who could follow in the tracks of others and find buried coins and rings the others had missed. You've got the equipment to out-shoot most anyone. Now all you need is the practice.

Good Hunting,

A handwritten signature in black ink that reads "Kenneth White". The script is fluid and cursive, with the first name "Kenneth" written in a larger, more prominent style than the last name "White".

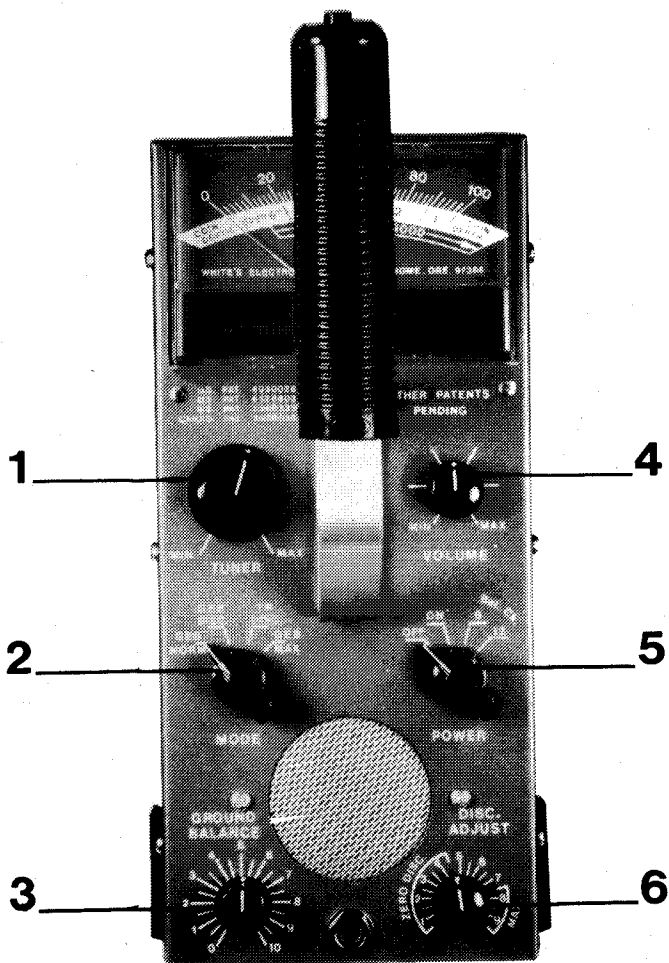
Kenneth White, Sr.



COINMASTER 6000/D SERIES2

SIMPLIFIED INSTRUCTIONS

FOR ACCURATE AND SUCCESSFUL TREASURE HUNTING WITH YOUR 6000/D SERIES 2 METAL DETECTOR, IT IS NECESSARY TO READ THE INSTRUCTION MANUAL. THESE SIMPLIFIED INSTRUCTIONS ARE ONLY INTENDED TO BE AN INTRODUCTION TO THE DETECTOR'S OPERATION, AND THE MORE DETAILED MANUAL.



Set the controls as follows before searching:

- | | |
|-------------------------|-------------|
| 1. TUNER | MINIMUM |
| 2. MODE | G.E.B. NORM |
| 3. GROUND BALANCE | 5 |
| 4. VOLUME | MAXIMUM |
| 5. POWER | ON |
| 6. DISC ADJUST | 6 |

Before searching, you must first "Ground Balance" the detector for the area in which you are going to hunt. Follow these instructions.

Holding the loop approximately 3 feet off the ground, push and hold in the button on the handle while turning tuner control (Number 1) clockwise until a faint tone is heard.

Release button and lower loop to the ground. If the tone increases, turn the ground balance control (Number 3) to 4. If the tone decreases, turn the ground balance control to 6.

Raise loop off the ground, again about 3 feet, push and release button to regain tuner setting, and lower the loop to the ground again. Listen to the reaction.

If there is very little change between the air tone and the ground tone, then your unit is properly tuned. However, if there is a noticeable change in the tone then make the necessary adjustments with your ground balance.

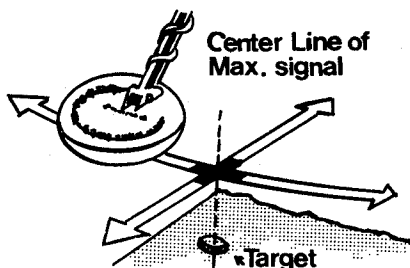
SPECIAL NOTE: Always turn the ground balance control to a lower number if the tone increases while the loop is on the ground. If the tone decreases, always turn the ground balance control to a higher number.

SEARCH PROCEDURES

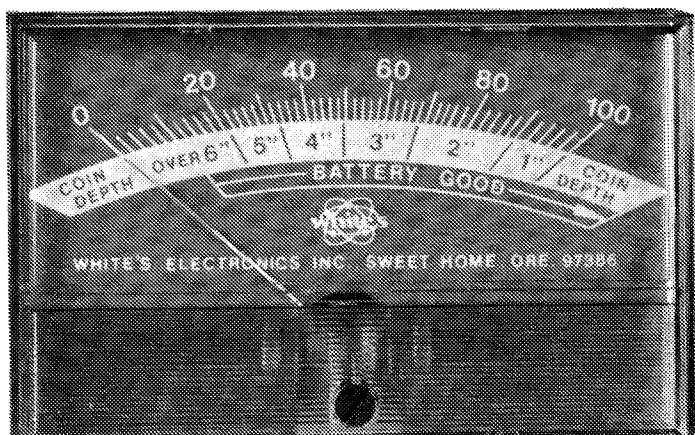
Set search coil near the ground and start search. Use easy sweeping motion (slowly) until you get an increases signal. Mark the spot with your eyes, and press and hold-in the button. This switches the detector into the G.E.B. DISC mode. Sweep the spot with the loop slightly above the ground and rapidly across signal. If no sound returns, signal was a nail, or small pieces of iron. If you do get a signal, release button and use the meter to pinpoint the object. You will find the target at the center of the loop when the meter's hand reaches its furthest point to the right. This highest meter reading will also tell you how many inches below the surface the object is. See the illustrations below

NOTE: It is possible to get a "good" signal in the G.E.B. DISC MODE and not in the normal G.E.B. MODE. In order to be a "good" signal you must have a positive response in both modes.

Method for pinpointing a target, using the meter and depth reading.



As the meter reads at its highest peak, the target's depth can also be read.



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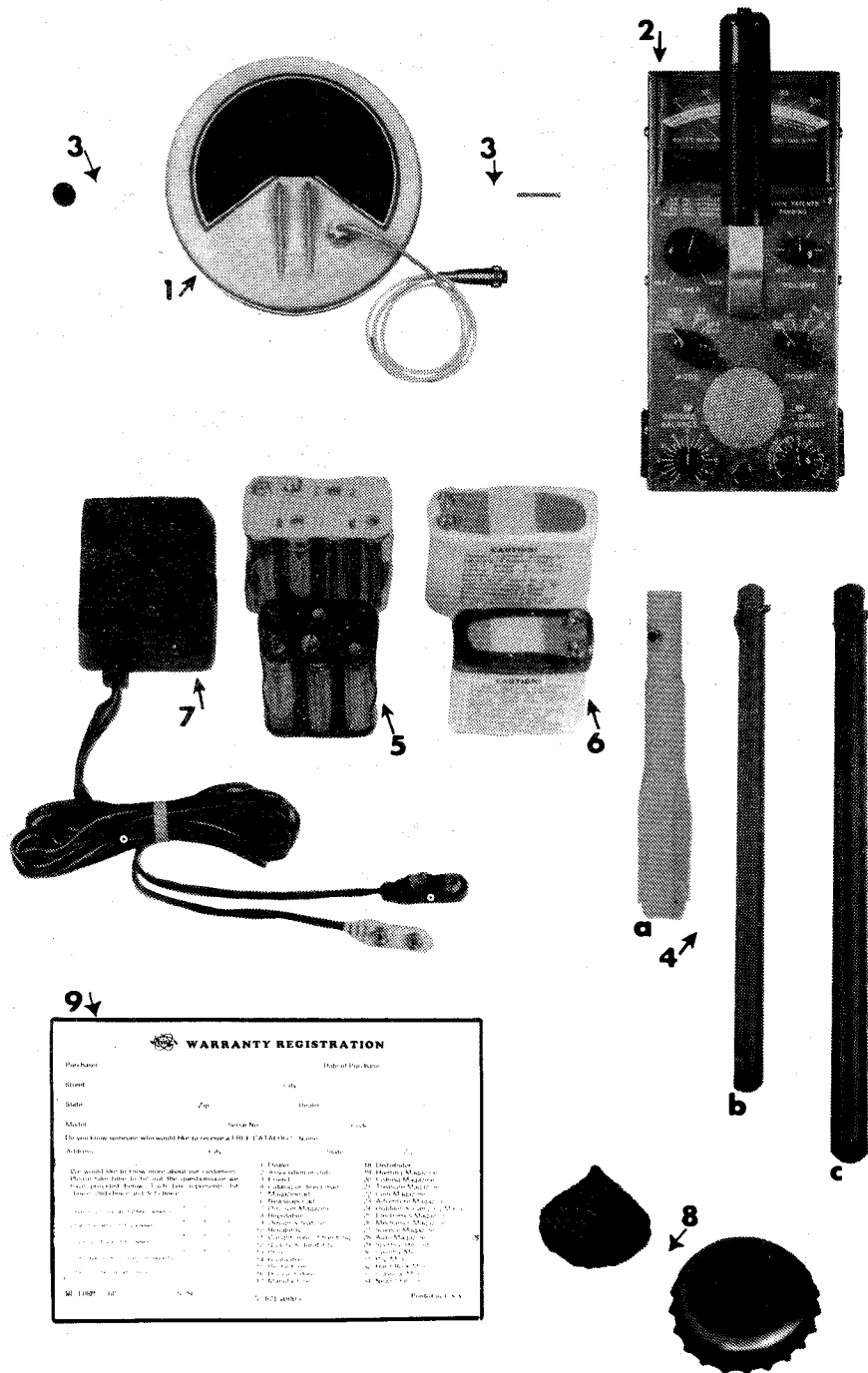
PARTS IDENTIFICATION

When you unpack your 6000/D Series 2, compare all of your parts with the parts listed on this page and the picture on the following page.

1. Detector Loop
 2. Instrument Control Box
 3. Loop Bolt, Thumbnut, Two Plastic Washers
 4. Loop Rod in Three Sections
 - a) Short White Plastic Section
 - b) Short Silver Colored Section
 - c) Long Silver Colored Section
 5. 9 & 12 Volt AA Penlight Battery Packs
 6. 9 & 12 Volt Rechargeable Batteries
 7. Battery Charger
 8. Test Samples
 - a) Bottle Cap
 - b) Ferrite Core
 9. Warranty Card: To be filled out and mailed within 10 days of purchase.
- If you don't find all the parts listed, contact your dealer at once.

ILLUSTRATION OF PARTS continued on next page. . .

ILLUSTRATION OF PARTS



ASSEMBLY DIRECTIONS

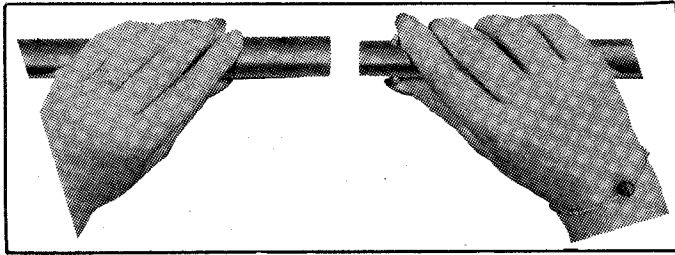


ILLUSTRATION A

Slide the short silver colored rod into the long silver colored rod, the end with the four sets of holes. The snap locks on the short rod will later be used to set desired length.

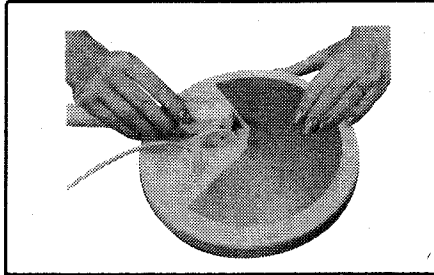


ILLUSTRATION B

Remove the two plastic washers, bolt and thumbnut. Connect the loop to the short plastic rod by placing the two plastic washers in the depressions on the rod. Next, line the holes on the loop bracket with the holes on the rod. Insert the bolt and thumbnut, tightening by hand.

CAUTION: Never tighten the waterproof cable fitting on the loop!

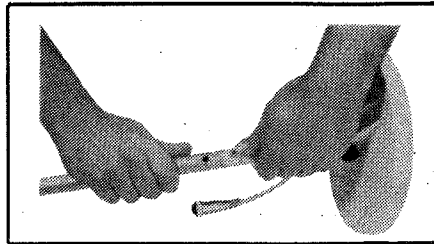


ILLUSTRATION C

Connect the short plastic rod with the attached loop to the joined silver colored rods.

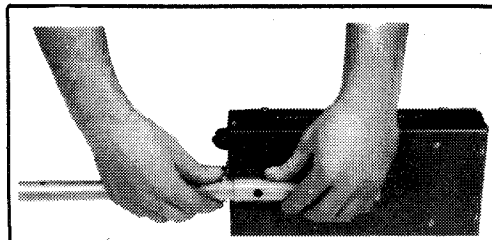
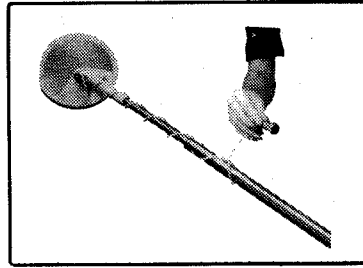


ILLUSTRATION D

Slide the completed rod sections into the bracket underneath the instrument control box.

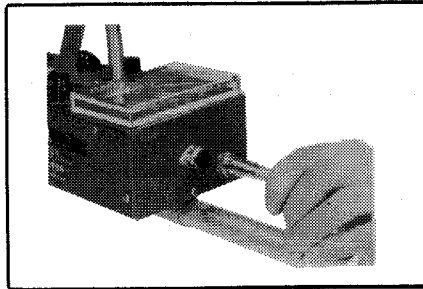
ASSEMBLY DIRECTIONS continued

ILLUSTRATION E



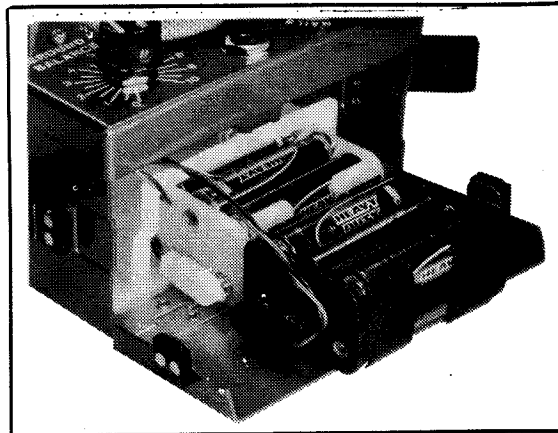
Wrap the cable around the rod so that it just reaches the instrument control box.

ILLUSTRATION F



Connect the loop cable to the front of the control box.

ILLUSTRATION G



Open the door on the rear of the instrument control box and connect the battery packs to the wire leads inside. NOTE: The white 12 volt battery pack is connected to the white wire. The 9 volt battery pack is connected to the black wire. Install the penlight battery packs inside the instrument and close the back. Connect the rechargeable battery packs to the recharger for the initial charge following directions on Pg. 24.

ASSEMBLY DIRECTIONS continued

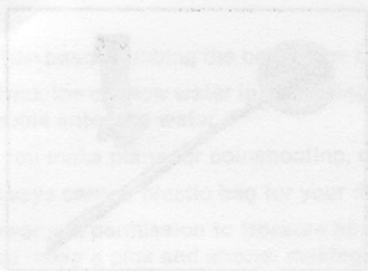


ILLUSTRATION H



Set the metal detector for your height by expanding the silver colored rods. The detector is now ready for use!

SPECIFICATIONS



SPECIFICATIONS continued

USES: Coin hunting, relic hunting, beachcombing/shallow water, prospecting

OPERATING FREQUENCY: 6.592 KHz, Crystal Controlled

AUDIO FREQUENCY: 412 Hz.

WEIGHT: 5 lbs. 2 oz.

OPTIMUM TEMPERATURE RANGE: 33-100 F

OPTIMUM HUMIDITY RANGE: 0%-75%

POWER REQUIREMENTS: 9 volts DC & 12 volts DC

BATTERY LIFE EXPECTANCY: 10 to 20 hours continuous use.

DEPTH CAPABILITY: U.S. 25 cent piece at 8" to 10 ". Your actual depth may vary as a result of mineralization, object size, loop size, length of time the object has been buried, and your skill.

LOOP SIZE: 8 inch diameter

LOOP TYPE: Concentric

SPECIAL FEATURES: Depth Reading and Zero Discrimination

MODES OF OPERATION: GEB NORMAL, GEB MAXIMUM, GEB DISCRIMINATION, TR DISCRIMINATION

White's Electronics, Inc. reserves the right to modify or improve the design capabilities of the 6000/D Series 2 without further notice.

DEPTH READING

Your new COINMASTER 6000/D SERIES 2 metal detector is a remarkable instrument. It is precision built, and its sophisticated circuitry is the most highly developed of any metal detector on the market. Combined with these technological characteristics is White's unique system of Depth Reading, a feature exclusive to White's Electronics and the 6000/D SERIES 2 metal detector.

This Depth Reading feature will aid you in the pinpointing and recovering of "good" targets. Used in pinpointing, the meter will show you the target's position by registering its depth below the surface. When the loop is at its closest point to the target, the meter will show the target's depth directly below the center of the loop. Before you recover the object, you will be able to judge how deep you will have to dig. This will help keep the size of the hole at a minimum, and will save time. An added advantage is that it won't be necessary to probe for an object in order to determine its depth. Probing can cause damage to the target.

The Depth Reading feature is designed to operate on objects approximately the size of a coin. Objects of this size, lying flat, will produce the most accurate depth readings. As with any special feature, the Depth Reading feature is engineered to aid you in the locating and recovering of valuable objects. The skill is yours, and with the new 6000/D SERIES 2, you are expertly equipped!

Examples: If the meter's highest reading is "60", then the object is 3" below the center of the loop. If the meter's highest reading is "100", then the object is either 1" below the center of the loop, or, may be along the surface of the ground, concealed in the turf for instance.

GLOSSARY OF TERMS

1. **DISC.:** Discrimination. Refers to the detector's ability to distinguish between "junk" and "good" targets.
2. **G.E.B.:** Ground Exclusion Balance. Refers to the detector electronically canceling out the effects of mineralized ground.
3. **Hot Rock:** Any rock which reacts positively to the detector, indicating a mineralization content.
4. **Mineralization:** Refers to the ferric oxide or magnetic content of the soil to which the detector will respond when not properly Ground Balanced, or when used in the TR DISC mode.
5. **Null Point:** Means the same as Zero Discrimination. It is the point at which the detector functions without any discrimination effect, and nothing will be rejected.
6. **Pinpointing:** The same as "Xing". Once a positive target has been located in a general area, this method is employed to determine its exact location before digging
7. **Target Rejection:** Refers to the detector giving a "negative" response to a target. The tone goes quiet rather than increasing in volume.
8. **Ground Rejection:** Ground Balance refers to the detector giving a "neutral" response to the ground. The threshold tone does not change in volume.
9. **Sweep:** Refers to searching an area. A method of swinging the loop slowly in front of you as you walk along so that you completely cover the ground for good targets.
10. **TH:** Treasure Hunting. A "THer" is a Treasure Hunter!
11. **Threshold:** The point of optimum tuning. At this point the detector operates at its maximum depth range. It is recognized by a slight audio tone.
12. **TR:** Transmit-Receive. TR DISC. refers to the detector mode that does not cancel out the effects of the ground, and which identifies good targets in non-mineralized areas.
13. **VLF:** Very Low Frequency. Refers to the detector's frequency of operation.

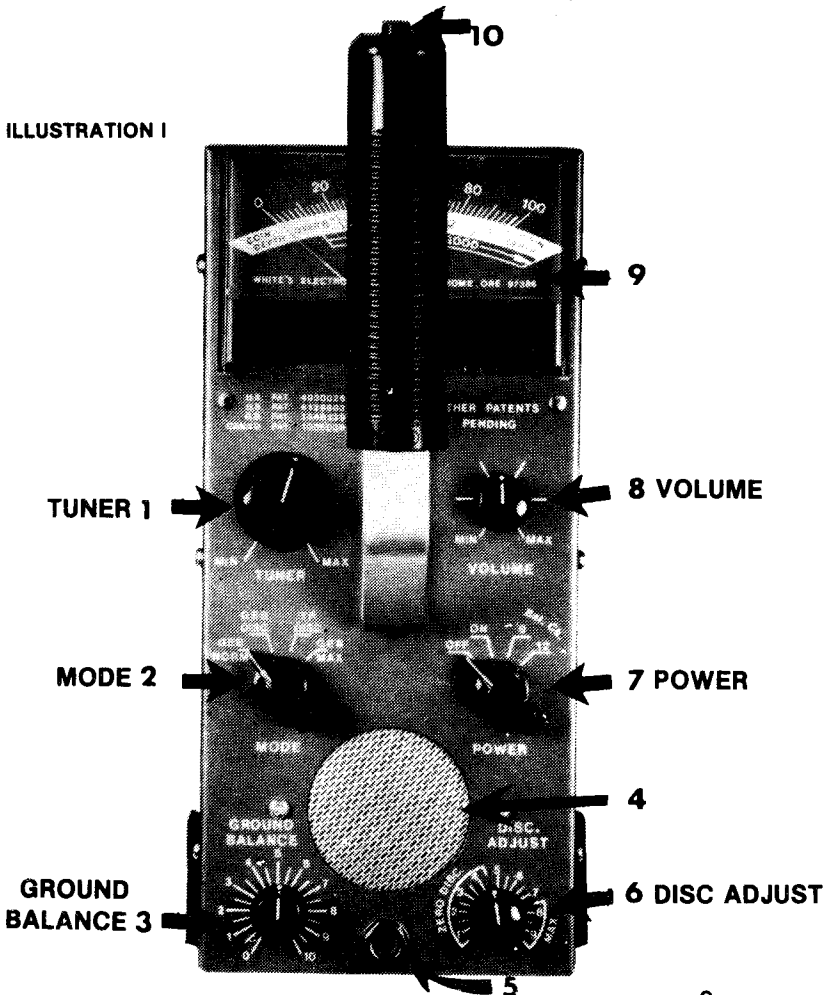
IDENTIFICATION OF CONTROLS

There are ten controls on the 6000/D Series 2 Instrument.

1. **TUNER:** Adjusts the detector for its Threshold tone.
2. **MODE:** Selects between the four separate modes of operation, which is like having four detectors in one.
 - a) **G.E.B. NORM:** Detects all metals and rejects the ground.
 - b) **G.E.B. DISC:** Used with the DISC ADJUST to distinguish between selected junk and good targets. Rejects the ground.

- c) TR DISC: Equipped with zero discrimination for quick ore-sampling and hot rock identification. Does not reject the ground but is useful in searching underwater, in areas of salt water, and where the loop cannot be rapidly swept.
- d) G.E.B. MAX: More sensitivity than the G.E.B. NORMAL mode. Rejects the ground.
- 3. GROUND BALANCE: Works in all three G.E.B. modes, allowing you to cancel out the effects of the ferric oxide (mineralization) content of the ground.
- 4. SPEAKER: Broadcasts the detector's audio tone; silent w/headphones.
- 5. HEADPHONE JACK: Allows you to listen to audio tone on headphones. This saves on power drain and gives you greater sensitivity in distinguishing differences in tone.
- 6. DISC ADJUST: Discriminate adjust allows you to distinguish between some junk items, such as nails, foil, pull tabs, etc., and good items, such as coins and rings. Adjustment is variable, allowing you to increase it only as necessary. Testing your machine will establish its null point. CAUTION: As with any discriminator on the market, when set to reject pull tabs or screw caps, the American nickel, some gold rings, and small gold items, will also be rejected.

ILLUSTRATION I



7. **POWER:** Turns the detector OFF and ON. Also used to test the 9 volt and 12 volt batteries in the instrument.
 8. **VOLUME:** Adjusts the loudness of the audio tone for speaker or headphones. Set at maximum, it will register the greatest difference between "positive" and "negative" tones. **IMPORTANT:** Use of headphones will require turning the volume level down from maximum. However, no sensitivity will be lost.
 9. **METER:** Calibrated for depth reading on coins and also checks batteries. Will also register strength of signal from the loop.
 10. **PUSH-BUTTON CONTROL:** Button is pushed in when tuning the detector to its threshold point. Acts as a memory for re-tuning detector to threshold - simply press and release.
- NOTE:** a) Push button tuning does not work in G.E.B. DISC mode.
- b) In G.E.B. DISC, holding the button in changes the mode to G.E.B. NORM.
- c) In any other mode, holding the button in changes the detector to G.E.B. DISC mode.
- d) The push-button can be used in pinpointing as it de-tunes the detector over a target for specific location. Depth reading will not be accurate when the detector is de-tuned.

TR DISC INDOOR TEST PROCEDURES

White's now has true zero discrimination in the TR DISC mode for quick ore sampling and hot rock identification. Since circuit tolerances can result in the true zero point being different from instrument to instrument, it is very important that you determine your detector's specific zero, or null, point before using it in the field. To do this, place your detector on a table with the loop extending into the air away from any metal. Remove any rings or watch that you may be wearing. You will need the small mineral sample which is supplied with your detector. See the illustration on Pg. 2

Set the controls as follows:

1. TUNER MIN
2. MODE TR DISC
3. GROUND BALANCE 5
4. DISC ADJUST 1
5. POWER Bat. Ck. 9
 If batteries show a meter reading in "Battery Good" range, proceed.
 If batteries show a meter reading below "Battery Good", turn to Pg. 24.
- POWER Bat. Ck. 12
 If batteries show a meter reading in "Battery Good" range, proceed.
 If batteries show a meter reading below "Battery Good", turn to Pg. 24.
6. POWER ON
7. VOLUME MAX
8. TUNE for threshold Press and hold in the push-button, then turn the "Tuner" clockwise until a slight tone is heard - release the button.
9. USING the mineral sample, move it directly towards the center of the loop, coming no closer than one inch from the bottom. (The tone should increase.) Then, move the sample away from the loop.
10. INCREASE the DISC ADJUST, in the area marked "zero disc", until there is only a slight decrease in the threshold tone, as you move the sample towards the loop.

11. RETUNE to threshold after you move the DISC ADJUST control each time, by pressing and releasing the push-button.
12. MARK the null point on the DISC ADJUST dial once it has been determined. This will represent your detector's true zero discrimination point and will never change.

The zero discrimination point relates to the TR DISC mode and will be used primarily for prospecting purposes. Setting this point permanently in no way affects the other functions or modes of the detector. When you wish to rely on it, simply turn your DISC ADJUST to this point which you have marked.

To test the TR DISC mode's response to good items and junk items, repeat the procedures above through #11 with a variety of samples, such as those used to test the GEB mode. As you increase the DISC ADJUST control, notice the way each item affects the tone and note at which number on the DISC ADJUST each item is rejected. Your notes will help you during field use. Remember, the tone will increase in response to good targets, and will go quiet in response to junk.

G.E.B. INDOOR TEST PROCEDURES

The following procedures will help you to become familiar with your metal detector's operation.

In order to test your detector, it is first necessary to tune it to the threshold point. To do this, place your detector on a table with the loop extending into the air away from any metal. Remove any rings or watch that you may be wearing. Obtain a few test samples, such as a coin, ring, bottle cap, nail, pull tab, and foil gum wrapper, etc..

Set the controls as follows:

1. TUNER MIN
2. MODE G.E.B. NORM
3. GROUND BALANCE 5
4. DISC ADJUST 5 (or Null Point)
5. POWER Bat. Ck. 9
If batteries show a meter reading in "Battery Good" range, proceed.
If batteries show a meter reading below "Battery Good", turn to Pg. 24 .
6. POWER Bat. Ck. 12
If batteries show a meter reading in "Battery Good" range, proceed.
If batteries show a meter reading below "Battery Good", turn to PG. 24 .
7. POWER ON
8. VOLUME MAX
9. PRESS and hold in the push-button, then turn TUNER clockwise until the threshold tone is barely audible.
10. RELEASE the button.
11. HOLD a coin in front of the loop face as shown in the Illustration, and notice the reaction in the tone. Move the coin closer and farther from the loop, and to either side of the loop and notice how the tone changes. The tone should increase as the coin is brought nearer to the loop. Repeat this test using the ring.
12. HOLD a nail in front of the loop and repeat the movements above. Test the bottle cap, pull tab, etc. in the same way.

13. NOTICE that the coin and ring react just like the nail, bottle cap, pull tab, etc.! In the G.E.B. NORM mode, all metals are detected, and the ground will be cancelled out.

The above procedures can be repeated, but with the MODE selected to G.E.B. MAX. This increases the sensitivity of the G.E.B. NORM mode.



ILLUSTRATION J

G.E.B. DISC INDOOR TEST PROCEDURES

Tune your detector in the G.E.B. NORM mode, following the previous instructions. Put the MODE switch to G.E.B. DISC. You are now ready to test.

1. PLACE a coin in front of the loop. You will notice that if the coin is held still, the detector does not sound off, although the meter will still read the depth. But, when you move the coin rapidly in front of the loop it will sound off.
NOTE: In this mode, the detector must be in motion across the target in order for it to react positive or negative.
2. TEST each one of your samples in this rapid motion way, noting the difference in tone that each produces.
3. INCREASE the DISC ADJUST gradually and repeat the above test of each sample. Notice the difference each one produces in the tone.
4. CONTINUE this process noticing at which point on the DISC ADJUST each object is discriminated against. An object is rejected when the tone goes quiet. Make notes for these points.

When using the discrimination mode, you should use no higher level of discrimination than is necessary for the type and amount of trash that is in the area you are searching. Increasing the discrimination level will reject certain items of junk, but will also reject certain good items, such as the American nickel, and some small gold items. Therefore, you should note where certain items are rejected on the DISC ADJUST control. Also, some depth loss will result at the very high or very low levels of discrimination.

G.E.B. FIELD TUNING PROCEDURES

Your detector needs to be Ground Balanced for each location in which you are searching. Following is an initial tuning procedure. But, with experience you will learn shortcuts and a procedure which best suits you. Remember, the G.E.B. NORM is an all metals mode.

Set the controls as follows:

1. TUNER MIN
2. MODE G.E.B. NORM
3. GROUND BALANCE 0
4. DISC ADJUST 5 (or Null Point)
5. POWER Bat. Ck. 9
Make sure batteries are rated in "Battery Good" range.
6. POWER Bat. Ck. 12
Make sure batteries are rated in "Battery Good" range.
7. POWER ON
8. VOLUME MAX
9. PRESS and hold in the push-button with the detector's loop in the air waist high. Turn the TUNER clockwise until the threshold tone is slightly heard. Illustration K.



ILLUSTRATION K

10. RELEASE the button. Pushing and releasing button will retune.
11. LOWER the loop to the ground, as in Illustration L pg 13.
12. LISTEN to the threshold tone as the loop nears the ground.
13. IF THE TONE DECREASES, raise the loop back up waist high and increase the GROUND BALANCE control (clockwise) to 3.
14. PRESS and release the push-button to retune to threshold.
15. LOWER the loop to the ground and listen to the threshold tone.

ILLUSTRATION L



16. IF THE TONE INCREASES, raise the loop back up to waist height and decrease the GROUND BALANCE control (counter-clockwise) to 2.
17. PRESS and release the push-button to retune to threshold.
18. IMPORTANT: If the threshold tone increases when the loop is lowered to the ground, decrease the GROUND BALANCE. If the threshold tone decreases when the loop is lowered to the ground, increase the GROUND BALANCE. Continue this process, retuning each time, until the threshold tone remains the same whether the loop is in the air or on the ground.
19. NOTICE: If you have difficulty adjusting the GROUND BALANCE to obtain a constant threshold, you may be over some metal. Move to another spot and repeat procedures.

The above procedures also apply to the detector in the G.E.B. MAX mode.

ILLUSTRATION M



It is advisable to hunt in the G.E.B. NORM, all metal, mode in areas with small junk content. However, when you wish to distinguish between junk and good targets, you should switch your detector to the G.E.B. DISC mode. Follow these procedures.:

1. MODEG.E.B. DISC
2. DISC ADJUSTSet to desired discrimination level.
3. Search while keeping the loop in constant motion. Illustration M.

IMPORTANT: It is also possible to switch your detector into G.E.B. DISC mode by pushing in and holding the push-button while operating in the G.E.B. NORM mode. This allows you to hunt in the all metal mode until you come to a target. At this time you would want to distinguish between its being junk, or, good. Holding the button in, rapidly sweep the target and listen to the affect it has on the tone. Illustration M . With experience you will be able to determine if the target is worth digging. Releasing the button returns the detector to the G.E.B. NORM mode.

TR DISC FIELD PROCEDURES

In the TR DISC mode you will not be able to cancel out the effects of the ground. This will require more practice and patience on your part, but in non-mineralized areas the detector's performance will be worth it! The TR DISC mode is especially useful in areas where there is no room to swing the loop, as is required in the G.E.B. DISC mode. It's necessary when searching in shallow waters; or on beaches with high salt content, because the discrimination control can be set to reject the salt content. And, it is used for prospecting. Threshold remains the same when set in G.E.B. mode.

Set the controls as follows in order to begin searching:

1. LOWER the loop to approximately $\frac{1}{2}$ " off the ground as in Illustration N.
2. MODETR DISC
3. SET the DISC ADJUST for desired discrimination level.
4. PRESS and release push-button to retune to threshold.
5. LOWER loop COMPLETELY to the ground.
6. SWEEP the loop as shown in Illustration O on page 15.
7. **IMPORTANT:** If the loop is tilted or if you lift the loop up, the tone will get louder. To help eliminate false signals caused by tilting or lifting, try to keep the loop parallel while you sweep. Illustration N .

The detector in the TR DISC mode will not cancel out the effects of the ground. The more the tone changes from the slightest up or down movement of the loop, the more mineralized the soil.

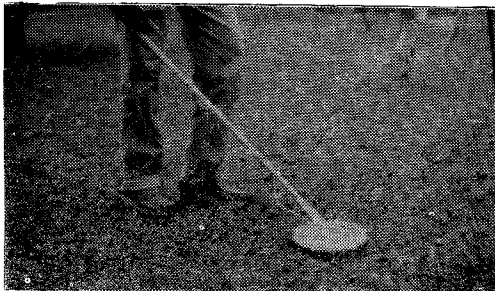


ILLUSTRATION N

COINSHOOTING

Coinshooting can be divided into two categories:

NORMAL COINSHOOTING and **RAPID COINSHOOTING**.

In **NORMAL COINSHOOTING**, if you want to locate all coins, both shallow and deep, use the G.E.B. NORM or MAX mode to search and pinpoint the object. This is the all metal mode which rejects the ground. After locating the object, depress and hold in the push-button to change to the G.E.B. DISC mode to identify the target as good or junk. You will rapidly sweep over the target so the tone can tell you if it is good or junk. A set of headphones, time, and patience, will also help. White's 6000/D 2 is the first ever metal detector to be equipped with a depth reading feature. Built in to read automatically, it is active in every mode and requires no switching procedure. Once you have located a target, pinpoint it by use of the meter. The strongest peak of the meter will indicate the depth of the target. **IMPORTANT:** The detector must be ground balanced properly in order for the depth indicator to be accurate, thus you may need to retune once you've located a target.

1. In **NORMAL COINSHOOTING**, sweep the loop very slowly in front of you as you walk along. Illustration O.
2. The search signal and tone will "peak" as the target center is passed.
3. Try to keep the detector coil parallel to the ground at all times and avoid lifting the coil off the ground at the end of each sweep.

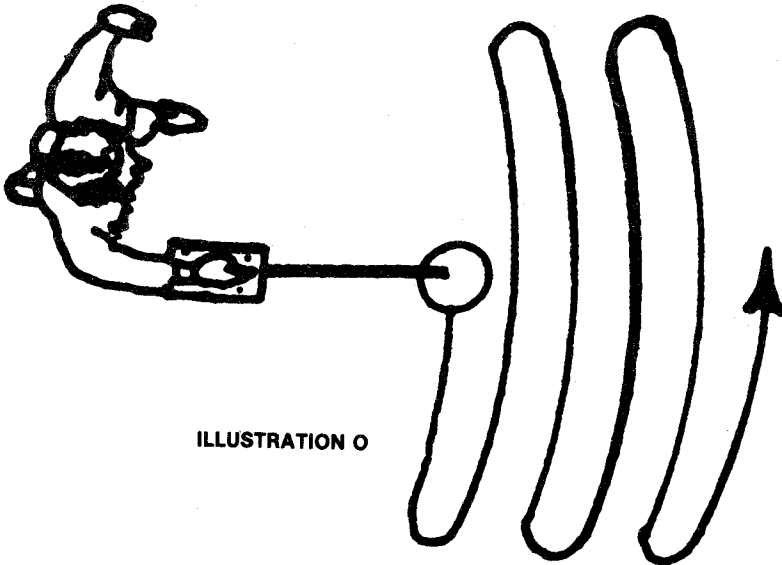


ILLUSTRATION O

COINSHOOTING continued

4. Keeping the detector coil parallel to the ground prevents the loss of detection on some deeper targets. On a careless swing you are putting some distance between the loop and target by lifting it off the ground.
5. When you have located a target that sounds promising, hold in the push-button to switch the detector to the G.E.B. DISC mode. Also, set your desired discrimination level.
6. Cross the target with a broad, rapid, sweep; first in one direction and then at right angles to ensure a uniform reading. Illustration R pg 17.

NOTE: The G.E.B. DISC mode relies on motion for proper operation. To produce the best possible signal, keep the loop in motion in a wide enough sweep to analyze the signal by its characteristic sound.

7. The object may be identified by the type of signal it produces. In some instances, some junk objects may be recognized by their erratic signal or the extra large area producing the signal.
8. If you detect an object which produces a signal over a much larger area than a coin, ring, or other valuable, it may be several coins together in a group. Illustration P .
9. To distinguish each separate object, sweep at different angles to screen out unwanted objects or to pinpoint a single object. Illustration Q .

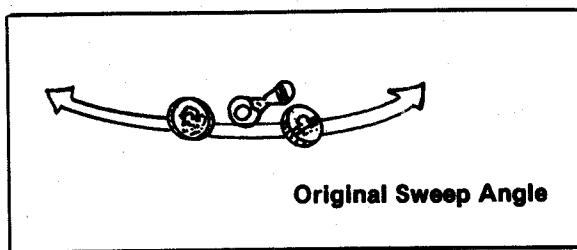


ILLUSTRATION P

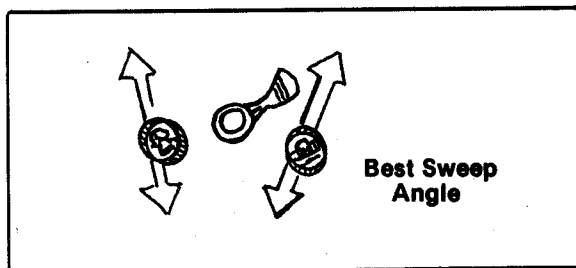


ILLUSTRATION Q

COINSHOOTING continued

10. To distinguish a coin from a bottle cap, with the DISC ADJUST set to reject pull tabs, increase sweep speed. This will make the signal from a good object better, and cause a bottle cap signal to drop out. This is one of two methods to identify and reject bottle caps.
11. Another way to identify and reject bottle caps is to place the detector in the TR DISC mode and set the DISC ADJUST to the point at which foil is rejected. Then, slowly sweep the target again. A bottle cap is always a strong signal and can usually be rejected in this mode with great certainty.
12. When you have decided the target is a good object, retune, pinpoint it, and use the depth gauge to find out how far below the surface it is.
13. When in doubt about the target . . . DIG! You will learn with experience, which targets are truly worth digging. But until then, don't miss a valuable opportunity!

RAPID COINSHOOTING

In areas with a heavy concentration of junk, it is best to search with your detector in the G.E.B. DISC mode.

1. After initial tuning and selection of the desired level of discrimination, place the 6000/D 2 in the G.E.B. DISC mode.
2. Move the detector coil in a broad sweep, as shown in III. M on pg. 13, keeping the loop in constant motion.
3. Keep the loop slightly above the ground and avoid contact with it so that you won't generate a target or object "type" of signal. A good target will produce a clean, unbroken, signal over the object area.
4. When a promising signal is found, hold in the push-button to switch the detector to the G.E.B. NORM mode for meter & sound pinpointing. Use of the meter will also indicate depth.
5. Pinpoint the object in the G.E.B. NORM mode as shown in Illustration R .
6. NOTE: The 6000/D SERIES 2 is designed to identify an object by its metallic composition, whether it is magnetic or conductive. There are some objects which resemble a coin or valuable metal and which you will detect as a coin, although it is not one. Fortunately, such objects are in the minority.

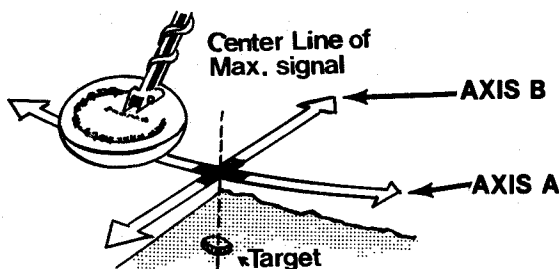


ILLUSTRATION R

RELIC HUNTING

There are many areas where relics and other historically valuable objects have been lost due to battles, such as in the Civil War. Old homesteads, ghost towns and dump sites will yield up displaced treasures. You should research areas where people lived, or fought, to determine good hunting locations before setting out to search. In such areas almost any metallic object may be of interest. To locate them on the site, it is best to use the G.E.B. NORM, or G.E.B. MAX, mode.

1. Follow the initial tuning procedures.
2. To narrow your search to include only items such as brass, metal buttons, rings, medals, or buckles, hold in the push-button to switch to the G.E.B. DISC mode, which will allow you to discriminate against other objects.
3. If too much ground clutter is present, such as pull tabs, you may want to set the DISC ADJUST to the level at which pull tabs and screw caps are discriminated against.

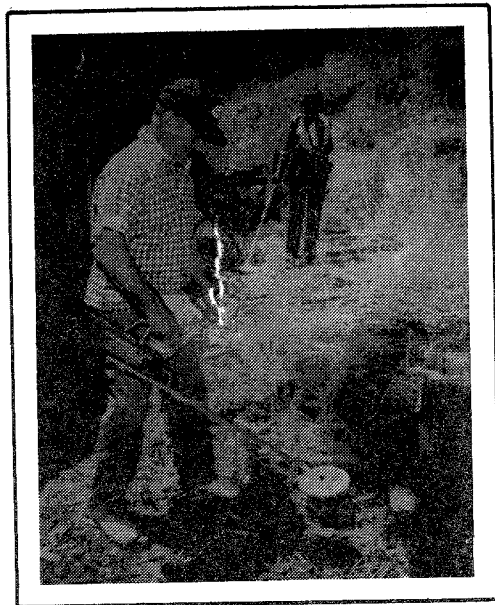


ILLUSTRATION S

BEACHCOMBING

The 6000/D SERIES 2 is designed to be used in areas of wet or dry sand and salt or fresh water. The TR DISC mode can be used on the ocean beach, or in other areas of high salt concentration, by tuning the DISC ADJUST for saltwater. Primary searching can be in G.E.B. NORM.

1. Set the mode for TR DISC after initial tuning. If operating over salt water, or in it, tune out its effects by adjusting the DISC ADJUST control. (For non-mineralized beaches)
2. If the G.E.B. DISC mode is selected for the primary search, (On mineralized beaches) hold in the button to change to G.E.B. NORM mode for pinpointing.
3. If the G.E.B. NORM mode has been selected for the primary search in a salt-free area, it may be necessary to adjust the GROUND BALANCE control to compensate for changing soil conditions. Switch to G.E.B. DISC mode for object identification as is done in coinshooting, using the push-button.
4. If you are planning to do an extensive amount of beachcombing, a basket is needed with about 3/8" mesh or slightly larger. You will scoop the target bearing sand into the basket in order to sift the sand out, allowing the coin to remain behind.

PROSPECTING

In prospecting, you will want to locate an area with gold or similar valuable metals. Gold nuggets or gold dust are usually found along with a highly mineralized "black sand". You can either pan for gold dust or tune out the "black sand" effect with the GROUND BALANCE control and search for nuggets.

1. Place the detector in G.E.B. NORM mode.
2. Search in areas where the ground signal increases greatly, even with occasional raising and lowering of the detector loop and push-button retuning.
3. An excellent place to search is in a stream bed (a wash or dry creek bed). Especially good places are downstream from known mining and mineral areas.
4. Once you have detected a possible gold bearing rock, you should switch your 6000/D SERIES 2 into the TR DISC mode and set the DISC ADJUST control to its null point. This zero discrimination level will help to identify it as a hot rock and can be used for quick ore sampling.

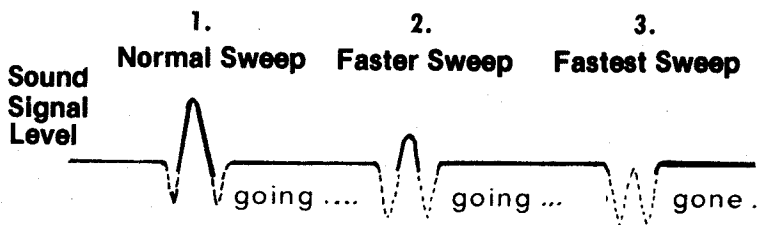
TIPS FOR DEVELOPING YOUR SKILLS

1. "How deep will it go?" In the G.E.B. MODE of operation, the depth is determined by four main factors.
 - a. The SIZE of the object.
 - b. The SIZE of the loop.
 - c. The LENGTH OF TIME the object has been buried.
 - d. The SKILL of the operator.

In the TR DISCRIMINATE MODE the depth is determined by the same four main factors plus one other - the AMOUNT OF MINERALIZATION.

The longer an object has been buried, the better you will be able to detect it. A chemical reaction called a "HALO" effect may cause your detector to register a much larger increase in volume than might otherwise be expected for a small coin. If the effect is strong enough, your detector may continue to register even after you have dug up the coin.

2. "What will the detector locate?" Silver, lead, copper, bottle caps, tin foil, pull tabs, cartridge cases, rings, brass and tin cans are just a few of the conductive objects which can be detected. Your detector will not locate sticks, rags, bones, paper, wood or other non-metallic objects.
3. Learn how to interpret different types of responses from your detector such as the following:
 - a. In the G.E.B. DISC MODE BOTTLE CAPS produce a coin-like sound, but there are two ways to identify and reject BOTTLE CAPS. One way is to place the detector in the G.E.B. DISCRIMINATE MODE, and the DISCRIMINATE LEVEL to PULL TABS. Then sweep with a fast SWEEP speed. This is necessary to reject a BOTTLE CAP in the PULL TABS position as shown in ILLUSTRATION T.



"BOTTLE CAP SOUND"

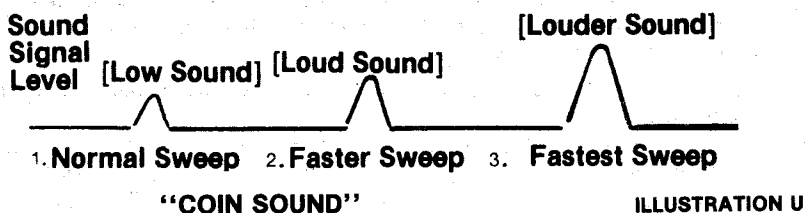
ILLUSTRATION T

TIPS FOR DEVELOPING YOUR SKILLS continued

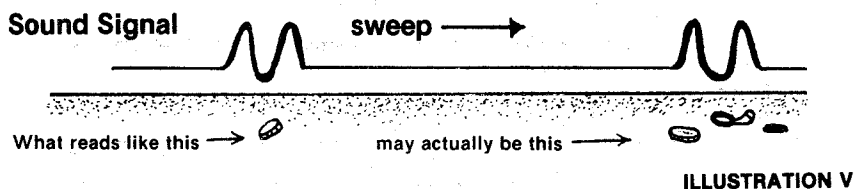
If the object is a coin or other valuable metallic object, the sound signal level will increase with a fast sweep speed rather than drop out as shown in ILLUSTRATION U

A second way to identify and reject BOTTLE CAPS is to place the detector in the TR DISC mode and set the DISC ADJUST to the foil setting. Then, slowly check the target area again. A BOTTLE CAP is almost always a strong signal and can be easily identified in this mode.

With this fantastic detector, you will get very deep objects in the G.E.B. DISC MODE regardless of the soil conditions. But, occasionally you might dig up a bottle cap by mistake, so learn to identify them!



- b. SWEEP ANGLES are important in locating and pinpointing a combination of objects. For example, with the detector set at G.E.B. DISC MODE and the DISC ADJUST set at the PULL TAB DISCRIMINATION LEVEL you will often get an audio signal as an ILLUSTRATION V .



If you are tempted to pass on and forget such a signal, don't. Instead, do the following:

1. Switch to the G.E.B. NORMAL for pinpointing.
2. Sweep the detector coil across the target area in both directions. You may be able to isolate the signal from more than one object.
3. If it appears that there is more than one object present, try sweeping the detector coil at different angles with the detector in G.E.B. DISCRIMINATE MODE for the most reliable reading. See ILLUSTRATION Q pg 16.

TIPS FOR DEVELOPING YOUR SKILLS continued

4. **TOO BIG TARGET** signals are produced by objects possessing a large surface area and may consist of an alloy or plating which causes the detector to respond to the non-ferrous or non-iron portion of the object. Such objects include beer cans, pop cans, and alarm clocks. Characteristics of such signals include:
 - a. The size of the signal both in ground area and strength.
 - b. The distance you can raise the swinging detector coil above the ground before it fades. You may detect pennies buried about 5 or 6 inches below the surface of the ground and yet hit a strong signal with the detector coil raised 10 inches above the ground. Such a signal will not be produced by pennies, quarters or dollars, unless possibly there is a large quantity buried in one place such as in a gallon can. To check out such a signal, see how far you can raise the swinging detector coil above the ground before it fades, and test it in the TR DISC MODE.
 5. **DEPTH READING** can be accomplished as follows:
 - a. To be sure of the most accurate depth reading it is important that the detector be properly ground balanced and that the object is approximately "coin" sized.
 - b. Set the detector in the G.E.B. NORM MODE and retune off to the side. Then place the loop over the target.
 - c. Watching the meter, "X" the target for the strongest signal.
 - d. When the meter hand is as far to the right as it will go, the depth can be read directly from the meter scale.
 6. **PUSH BUTTON** retuning may be necessary due to changing ground conditions when searching in the G.E.B. MODES or TR DISCRIMINATE MODE. To retune, just press the button and release.
 7. **PINPOINTING** a target or object can be accomplished by sweeping a target in one direction and sweeping it at right angles to the original direction as shown in ILLUSTRATION R . This is called "X"ing the target. It is also helpful to sweep the target at several different angles as you move around it. Coins will usually produce one reading regardless of sweep direction.
- IMPORTANT:** During your search, if the G.E.B. DISC responds to a good target, you can pinpoint it by holding in on the push-button which switches the detector into the G.E.B. NORM MODE and "X"ing the target. **HOWEVER**, when detuning the detector to pinpoint a target, the Depth Reading will be incorrect. (The meter will not indicate correct depth.)
- a. It is possible to exactly pinpoint the target's location by detuning the detector in the G.E.B. NORM MODE.
 - b. Move the loop across the target, noticing at which point the tone is loudest. Make the next sweep at 90 degrees to this point.
 - c. Detune the detector as you move the loop closer and closer to the target by pressing and releasing the push-button several times, until there is only a very slight signal heard as you "X" the target.
 - d. The object will be directly below the center of the loop.
8. Always "criss-cross" an area when searching it.
 9. After you have dug up a coin, always check the hole again for more.
 10. Don't forget to fill in the hole! Public and private officials, and property owners, will be more likely to allow continued Treasure Hunting in the area if you do NO environmental damage.

TIPS FOR DEVELOPING YOUR SKILLS continued

11. When beachcombing the best place to look for coins is near concession stands.
12. Check the shallow water in swimming areas. Most rings and coins are lost when people enter the water.
13. If you make plans for coinshooting, check the history records of the area.
14. Always carry a plastic bag for your detector in case you get caught in the rain.
15. Never ask permission to treasure hunt over the phone. People tend to visualize you using a pick and shovel, making large holes.
16. Join a local historical society or get acquainted with its members.
17. When coin hunting, search parks, school yards and areas where fairs or carnivals were recently held.
18. Always carry extra batteries with you in case the set in the instrument get too low for maximum power.
19. If you want more weight on your loop, for use underwater for example, obtain an old glass insulator. Chisel its end out and slip it over the extension rod to rest on the loop. Caution: Take proper precaution when working with glass.
20. If you are planning a treasure hunting trip away from home, it's a good idea to have a backup unit in case something happens to your primary detector. A White's COIN TR could serve as an excellent backup . . . it's inexpensive and effective!

PROPER CARE OF YOUR DETECTOR

The following are precautions you should take to protect your instrument from harm, ensure its long life and avoid nullifying the warranty.

CLEANING: The loop and rod or probe are waterproof. They can be cleaned with fresh water and a mild cleanser. After cleaning, however, dry the instrument thoroughly. **CAUTION:** The instrument case is not waterproof, and water - if allowed to enter it - will damage electronic components.

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. 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 detector if you operate it in the rain, as water may get into the instrument case.

SALT WATER: Salt water is very corrosive! Immediately after your detector has been exposed to salt water, rinse it thoroughly with fresh water, being careful not to allow water to enter the instrument case. Then wipe it with a cloth dampened with fresh water and dry it thoroughly.

ADDITIONAL PRECAUTIONS: Avoid dropping your detector. Do not use WD-40 on any of the electronic components. Avoid sharp jars to the loop. Do not allow batteries to corrode inside the instrument.

BATTERIES (NON-RECHARGEABLE)

Batteries are the lifeblood of your instrument. Full voltage is necessary to assure best possible performance. Your white battery pack holds eight 1½ Volt AA penlight batteries. Your black battery pack holds six 1½ Volt AA penlight batteries. These are available at drug and grocery stores almost everywhere. Any brand will work well, although many "shooters" recommend the alkaline type for longer life.

To change batteries, first remove the battery pack from the instrument. Before you remove any batteries, examine the pack. Note the exact position of each battery and the position of the battery lead snaps. Your detector will not work unless the batteries are properly installed and the battery lead is properly connected.

Each battery has a positive (+) end and a negative (-) end. The plus (+) and minus (-) symbols are clearly marked on all batteries. Remove one of the batteries from the battery pack. Notice that the slot from which it was removed also has the positive (+) and negative (-) symbols clearly marked.

To replace the batteries, simply match the plus (+) and minus (-) symbols on the battery snap and then snap the new battery into place.

The battery lead snaps must also be matched to the button snaps on the pack - plus (+) to plus, minus (-) to minus - before you reconnect the power cable.

RECHARGEABLE BATTERIES

As far as we know, White's has become the first to include a rechargeable battery system with a metal detector. This rechargeable system could save you up to \$2,000 in regular batteries over the life of your rechargeable pack. These NICKEL CADMIUM batteries can be recharged as many as 1,000 times or more. Our tests show that under normal conditions you may expect anywhere from 10 to 20 hours of continuous use before you would need to recharge them. If used for only a few hours a day, you can expect many more hours of use.

The 6000/D Series 2 has a completely redesigned regulator circuit. This circuit was designed around the new rechargeable battery packs. The rechargeable packs will show a maximum charge at about 80 on the meter. The meter circuit was designed this way to show the actual discharge rate of the packs when they start their discharge cycle. The unit will operate within specifications in the range of 15 to 100 on the meter. The reason the standard battery packs register above 80 with a full charge is due to the difference in the discharge rate of each type of battery at the beginning of each cycle. This is normal.

The rechargeable battery pack supplied with the 6000/D Series 2 is designed according to factory specifications for this instrument. Use of rechargeable batteries with other specifications may void the warranty.

OPERATING YOUR CHARGER

1. Connect the white terminal to the large, 8 cell battery pack (9.6 volt). Connect the black terminal to the small, 6 cell battery pack (7.2 volt).
2. Plug the charger into electrical outlet.
3. CHARGE the packs 8 hours.
 - a. Before the first use.
 - b. After storage periods of 2 weeks or more.
 - c. When the battery packs test below "15" on the meter.

IMPORTANT CAUTIONS ABOUT YOUR BATTERIES

1. The battery packs should not be left on the charger for any longer than 10 hours.
2. Be sure to connect to the correct terminals.
3. Do not dispose of batteries in a fire.
4. Do not attempt to replace one defective cell in your pack.
5. Do not allow any metal (including rings and other jewelry) to lie across the terminals on your packs. The VERY LARGE CURRENT available will cause burns and is dangerous.
6. Do not place the pack in your pocket where it might short against coins, etc.
7. Your RECHARGEABLE BATTERY SYSTEM (charger and packs) has a specific charge current. Do not attempt to mix other chargers or packs with this rechargeable system. The batteries may explode if the charge current is too high.
8. Non-rechargeable batteries may explode if you attempt to charge them.

SERVICE TIPS

Here are some service tips that may help if difficulties are encountered:

1. The detector is "Dead", will not operate:
 - a. Check battery condition and battery leads.
 - b. Check for proper connection of the coil cable.
 - c. Check controls for intermittent operation.
2. Oscillating or pulsing speaker sound:
 - a. This effect is many times due to external electric sources such as: Other nearby metal detectors, power lines, television sets, and CB radios.
 - b. In many cases moving to another area may be necessary. If the problem persists at other location, the detector may need servicing.
3. Erratic operation:
 - a. Check for loose battery connections.
 - b. Be sure the coil cable is wrapped snugly around the rod and properly connected.
 - c. Check battery condition.
4. The detector "drifts" out of tune:
 - a. Drift may occur as a result of sudden changes in temperature. Allow stabilization time.
 - b. The detector may appear to drift if not properly ground balanced in the G.E.B. MODES, or if used in the TR DISC MODE in mineralized soil areas.
 - c. Steady drift may be caused by component failure.
5. No sensitivity in the discriminate modes:
 - a. G.E.B. DISC MODE: Insufficient signal as a result of not sweeping the loop over the target.
 - b. TR DISC MODE: Reduced depth as a result of increased ground mineralization.
6. Headphones (Stereo):

This instrument is equipped with a mono-headphone jack. Sound will emanate from only one side of the headphone unless modified for mono use.

SERVICE AND WARRANTY INFORMATION

If your new metal detector is ever in need of service, ship it to the factory, or, one of the Service Centers. For the name, address, and telephone number of a local service center, call **TOLL FREE: 1-800/547-6911**.

When the matter is corrected, the instrument will be returned 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 carefully as it describes completely what is covered and the length of the coverage. If you have any questions, don't hesitate to write the factory.

WHITE'S ELECTRONICS LIMITED WARRANTY

If within two years (24 months) from original date of purchase, your White's detector fails through normal use and due to defects in either material or workmanship, White's Electronics will repair or replace, at its option, all necessary parts without charge for parts or labor. Simply return the detector, with all transportation charges prepaid, to the nearest White's Electronics Service Center or to the factory headquarters. NOTE: If instrument fails in first 90 days, return shipping will be prepaid if proof of purchase date is provided. Include a description of the problem. Include \$5.00 for return postage, handling and insurance if after 90 day period.

Items excluded from this warranty are batteries, headphones, charger, rechargeable batteries, and other accessories.

The warranty is not transferable. Nor is it valid unless the **Warranty Registration Card** enclosed in the shipping package is returned to the factory address below within ten (10) days of original purchase for the purpose of recording that date, which is the actual commencement date of the warranty. The warranty does not cover damage to detectors caused by accident, misuse, neglect or unauthorized service.

Duration of any implied warranties (e.g., merchantability and fitness for a particular purpose) shall not be longer than the stated warranty. Neither the manufacturer nor the retailer shall be liable for any incidental or consequential damages resulting from defects or failures of the instrument to perform. Some states, however, do not allow limitations on the length of implied warranties, or the exclusion of incidental or consequential damages. Therefore, the above limitations and exclusions may not apply to you. In addition, the stated warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

White's Electronics, Inc.
1011 Pleasant Valley Road
Sweet Home, OR 97386 U.S.A.



Treasure Hunter's Code of Ethics

1. Respect the rights and property of others.
2. Observe all laws, whether national, state or local.
3. Aid law enforcement officials whenever possible
4. Never destroy priceless historical or archeological treasures.
5. Leave the land and vegetation as it was. Fill in all holes.
6. Remove all trash and litter when you leave.
7. All treasure hunters may be judged by the example you set. Always conduct yourself with courtesy and consideration for others.

WHITE'S ELECTRONICS, INC.

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