



and to report depth of targets of any size...not just coins. In fact, the detector's amazing "TreasureVision" on the Display Screen will indicate both target size and depth.

This exciting OneTouch metal detector is automatic and surprisingly easy to operate. Yet those who have special demands will find the GTI 2000 meticulously adaptable to any personal style of treasure hunting. Microprocessor-controlled circuitry truly makes this the deepest-seeking detector known to man.

Although the GTI 2000 is built to withstand rugged treatment outdoors while giving years of trouble-free service, always remember that this detector is a precision electronic instrument. Protect it from extreme heat and cold as well as mist, rain or blowing sand. Keep it as clean as possible.

## SPECIAL NOTICE

The Garrett GTI 2000 Deepseeker metal detector with TreasureVision™, TreasureTalk™ and Graphic Target Analyzer™ truly adds a new dimension to treasure hunting. A precision electronic instrument that utilizes the miracles of high technology to help locate coins, jewelry, gold nuggets or any other kind of metallic object, the GTI 2000 will accomplish more than any other detector ever manufactured.

**NOTE:** All the basic information you will ever need to know to find treasure with the GTI 2000 can be found on Pages 23-27. Later pages describe all of its amazing capabilities and provide more details on receiving full benefits from their operation.

Deepseeking sensitivity and precise discrimination enable this marvelous instrument to identify targets by size as well as conductivity

## CONTENTS

To The Owner .....	6
Assembly .....	8
Touchpads .....	12
Display Screen .....	17
TreasureVision .....	19
TreasureTalk .....	22
<b>BASIC INSTRUCTIONS</b> .....	23
Discriminate Mode .....	30
Mode Selections .....	31
Setting Discrimination (Notches) .....	35
Operating Settings .....	39
Search Aids .....	45
All-Metal Mode .....	49
Manual Ground Balancing .....	52
Auto Track .....	53
Treasure Imaging .....	56
Depth Reading on GTA Scales .....	57
Size/Depth on Imaging Grid .....	58
Imaging Grid Illustrations .....	59
'Cone' Effect .....	61

Bench Testing .....	62
Field Operating Recommendations .....	64
Target Identification .....	64
Using <i>Search Image</i> .....	66
Recovery/Pinpointing .....	67
Setting Sensitivity (Depth) .....	70
Test Plot Construction .....	71
Headphone Jack .....	73
Searchcoils .....	73
Battery Information .....	74
Recommended Accessories .....	78
Maintenance .....	79
Specialized Hunting:	
Coins .....	80
Gold .....	82
Repair Service .....	86
Recommended Reading .....	88
Book Order Form .....	89
Specifications .....	92
Code of Ethics .....	94

Just touch the **POWER** touchpad and begin hunting immediately without interference from ground minerals. As the world's most intelligent detector, the GTI 2000 is preset at the factory to begin operations automatically in a *Coins* detection mode. Of course, you can easily adjust the instrument to operate in other *Discriminate* modes or in the *All-Metal* mode.

When you find a target, Garrett's revolutionary GTA display instantly directs you to the range of targets on the Target ID Guide. Press the **TREASURE IMAGING** pad to discover its exact location, size, depth and as well as clues to its identity. To prospect for precious metals or hunt for deeply buried caches switch to the *All-Metal* mode and *Fast Track™* will ground balance the circuitry of your detector precisely and immediately.

Welcome again to the Garrett treasure hunting fraternity. In becoming a part of this great tradition, you follow the route of multitudes of successful treasure hunting hobbyists. Now, find your own treasures with one of the world's most capable and universal metal detectors...yet one that is amazingly easy to operate!

## TO THE OWNER

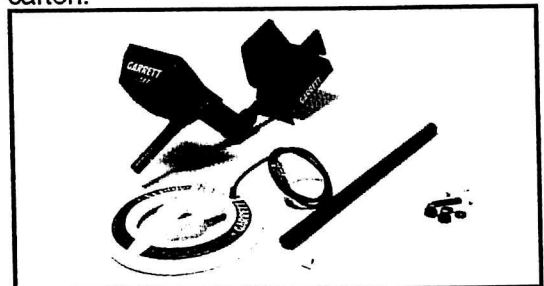
As the proud owner of a Garrett GTI 2000 Deepseeker with *TreasureVision*, *Treasure-Talk* and *Graphic Target Analyzer*, you join a worldwide fraternity of treasure hunters who have used Garrett instruments to find coins, jewelry, relics and gold nuggets worth millions of dollars. This Manual will describe basic functions of the GTI 2000 and explain how its target identification and sizing, deepseeking and discrimination capabilities can find treasure.

Your GTI 2000, whose microprocessor-controlled circuitry has been acclaimed and proven through countless hours of field use, is unparalleled in the *simplicity* of its ability to locate coins, jewelry and other metallic objects. You will be able to identify the size and depth of any target you locate, and an actual voice is available to assist you.

The GTI 2000 offers dedicated metal detector hobbyists added depth with a true *All-Metal* (Deepseeking) mode and the adjustment precision available only with computerized controls.

## ASSEMBLY

Your GTI 2000 is shipped complete in one carton:



- A. Control Housing
- B. Upper & Lower Stems
- C. Scorcher Imaging Searchcoil
- D. Parts Envelope

Make certain all of these parts are included and are undamaged. Report any shortages or damages to your dealer *immediately*.

Follow these assembly instructions. No tools are required. Hand pressure will be satisfactory for all tightening.

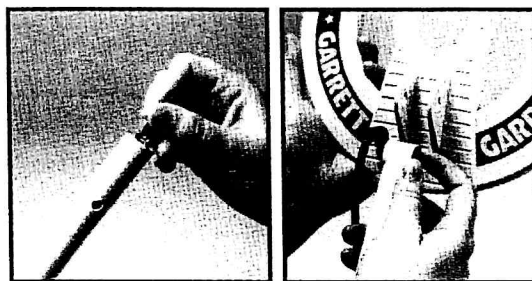
Inspect contents of the clear plastic envelope which are shown on the facing page.



- A. One (1) spring clip
- B. Two (2) knobs
- C. Two (2) washers
- D. One (1) threaded bolt

1. Compress the button end of the spring clip and insert, **button-end first**, (as shown at left on the following page) into the lower stem of your detector so that the buttons pop out of the holes as they do in the stem connector at the rear of the electronic control housing. These two sets of buttons will enable you to secure the top stem to the control housing and to adjust the length of the overall stem to your height so that you can scan with the detector comfortably.

9

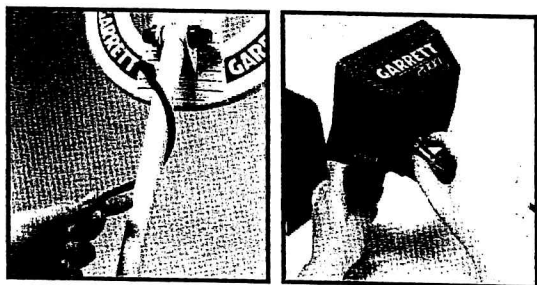


2. Attach the lower stem to the Scorchers imaging searchcoil by inserting the two rubber washers onto this stem (as shown in photo at right) and slipping the searchcoil onto it. Place the threaded bolt through the holes in the connector and *hand-tighten* the knobs. Use no tools.

3. Depress buttons in the Control Housing stem and slide on the Upper Stem.

4. Depress the buttons in the Lower Stem and insert it into the Upper Stem. Buttons will pop into the holes, and you can achieve the desired stem length. The third set of holes from the end is most commonly used.

10

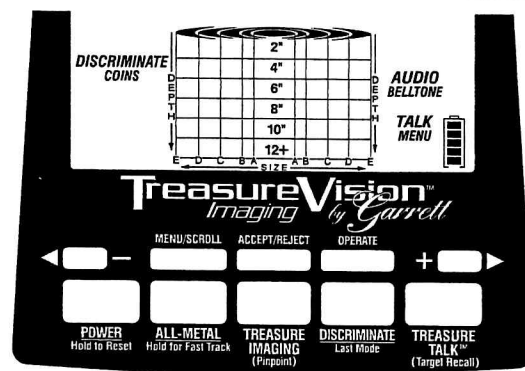


5. As shown above, left, wrap searchcoil cable securely around stem and connect to detector. The first cable turn goes over the top of the stem. The cable should be snug but still slightly loose so that the angle of the searchcoil can be changed easily, if required. To connect cable to the detector insert the cable connector into the connector on the control housing as shown above (right) and rotate the collar clockwise until secure (approximately four (4) turns). Hand tighten only.

Your GTI 2000 is fully equipped with eight (8) AA batteries, discussed on Pages 74-77.

11

## TOUCHPADS



### Power

- Turns detector on;
- Turns detector off;
- Returns detector to factory settings.

### Menu/Scroll

Allows the operator to scroll through the following settings to make adjustments or turn them on or off:

12

#### In both Discriminate and All-Metal mode:

- Sensitivity (Depth)
- Threshold (Audio Level)
- Frequency
- Volume
- Tone
- Search Image
- Talk (Voice)
- NiCad (Battery)

#### In Discriminate mode only:

- 5 Modes — *Coins, Jewelry, Relics, Zero, Custom*
- Surface Elimination
- Salt Elimination
- Belltone audio
- Bi-Level audio

#### In All-Metal mode only:

- Manual Ground Balance
- Auto Track

#### All-Metal (Fast Track)

Press and release to activate the *All-Metal* (Deepseeking) mode;

Press and hold to activate *Fast Track* ground balancing function. (See Page 50.)

13

#### Treasure Talk

Permits *TreasureTalk* on demand when a target is detected. Pressing this pad will cause the voice to give the Upper Scale ID number, size and depth of the target last detected.

#### — & +

These touchpads permit precise regulation of the GTI 2000 Deepseeker. You will note that on certain *Menu* adjustments each press of a touchpad causes segments on the Lower Scale to move rather rapidly either to the right (+) or to the left (—). After 20 movements on the Lower Scale, an Upper Scale segment will move. This operation is similar to that of the decimal system.

The + and — touchpads enable the following regulation:

- Permit alternation between the five *Discriminate* search modes;
- Permit adjustment of levels of *Sensitivity* (Depth), *Threshold*, *Frequency*, *Volume*, *Tone* and *Talk* in *Discriminate* and *All-Metal* modes; *Surface Elimination* in *Discriminate* mode; and *Auto Track* in *All-Metal* mode.

15

#### Accept/Reject

Functions in the *Discriminate* modes only; permits acceptance or rejection of specific target segments shown on the Lower Scale to establish discrimination notches.

See Page 17 for location of scales and Page 35 for explanation of notches.

#### Treasure Imaging (Pinpoint)

When pressed and held, activates the automatic pinpointing function in either mode with signal strength shown on Upper Scale, depth of target on Lower Scale and size and depth of target on the Imaging Grid. (See Page 56.)

#### Operate

Returns to operate (hunting) mode after any change or adjustment of controls.

#### Discriminate (Last Mode)

When hunting in a *Discriminate* mode, returns detector to the mode (*Coins, Jewelry, Relics, Zero, Custom*) that was *previously* being used.

When hunting in the *All-Metal* mode, activates the *Discriminate* mode that was last being used.

14

– Activate (+) or turn off (—) *Salt Elimination*, *Belltone* and *Bi-Level* target audio in *Discriminate* mode.

– Activate (+) or turn off (—) the *Search Image* function or *NiCad* battery gauge in either mode;

– Move cursor in the Upper Scale when discrimination is being set in the *Discriminate* mode;

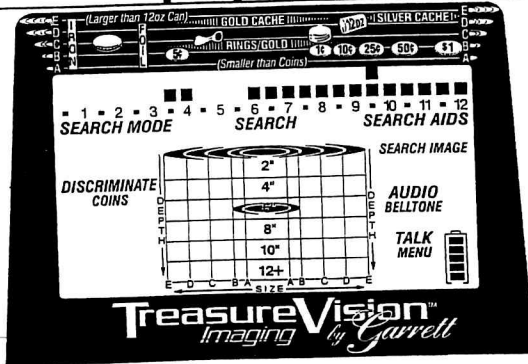
– Permit adjustments to be made that achieve precise manual ground balance in the *All-Metal* mode.

Experiment with these touchpads yourself and experience the precise degree of regulation possible with the GTI 2000.

16



## Display Screen



The complete operating status of your detector is shown on the screen at all times. When the **TREASURE IMAGING** (automatic pinpointing and sizing) touchpad is pressed and held, size and depth of targets will also be shown.

The mode in which you are searching will always be shown on the left side of the screen under the **SEARCH MODE** heading.

**MENU**, **SEARCH** and **IMAGE** are shown at the top of the screen in its center to indicate

17

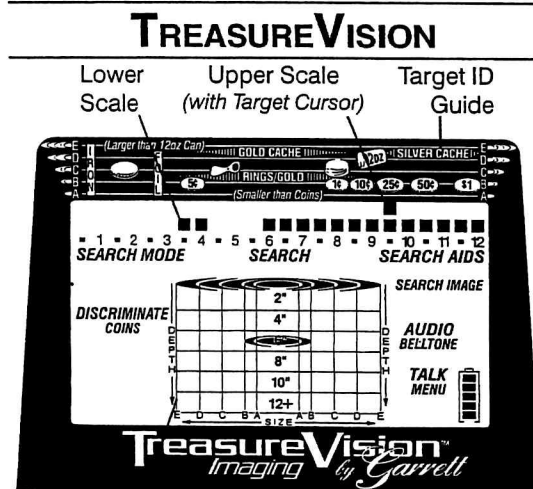
detector status. **MENU** is shown when the detector is being regulated. **SEARCH** will be illuminated whenever you have pressed the **OPERATE** touchpad and are hunting, and **IMAGE** when you press and hold the **TREASURE IMAGING** touchpad.

On the second line are the detector functions that you can regulate as desired: *Sensitivity*, *Threshold Frequency*, *Volume* and *Tone*. When one of these functions has been illuminated by use of the **MENU/SCROLL** touchpad, it can be regulated by pressing the + or — touchpads.

Current status of the various Search Aids that you have selected will always be shown on the right side of the screen under the **SEARCH AIDS** heading.

*TreasureVision*, explained on the following three pages, permits the Display Screen to present *Imaging by Garrett*. Experience with *TreasureVision* will enable a hobbyist to identify targets to an amazingly precise degree before they are recovered.

18



Imaging Grid

This function of your new Garrett GTI 2000 enables the Display Screen to show the status of targets that have been discovered.

### Target ID Guide

This guide printed above the screen showing coin denominations, gold, silver and other typical metallic objects is designed to relate

19

location of the Target Cursor with the Imaging Grid (see following page) to help identify discoveries. Note the five letters (A,B,C,D,E) on each side and the horizontal color-coded lines connecting them. These refer to the five relative sizes on the Imaging Grid.

The example on Page 19 shows a B-size object, with the cursor's location indicating it is probably a quarter. Coins are shown on Line B (red) since they will always be indicated as a B-size target.

### Upper Scale

- Indicates target(s) discovered and their conductivity;
- Indicates target strength in *Treasure Imaging*;
- Indicates levels of control settings.

### Lower Scale

- Discrimination segments (notches);
- Indicates depth of all targets in inches when in *Treasure Imaging*;
- Indicates fine levels of control settings.

### Imaging Grid

Five target sizes are shown on the color-

20

coded Imaging Grid with depth indicated in two-inch increments by the target's location on the grid. With the detector in its factory preset mode sizes and depths are shown only when the **TREASURE IMAGING** touchpad is pressed and held. When *Search Image* is being used, sizes and depths of all accepted targets will be shown as they are discovered.

**Size A** — Solid small oval (orange): targets smaller than coins, including small bits of iron and foil;

**Size B** — Oval extending to B grid lines (red): all U.S. coins, most rings and small metal trash such as pieces of pulltabs;

**Size C** — Oval extending to C grid lines (purple): targets larger than coins and smaller than 12-oz. cans, such as large rings, small belt buckles, jewelry and such trash targets as screwtops, bottlecaps and complete pulltabs;

**Size D** — Oval extending to D grid lines (blue): larger belt buckles, large jewelry items, 12-oz. cans and other items of similar size;

**E** — Oval extending to E grid lines (green): objects larger than a 12-oz. can, such as kettles, strongbox or big metallic trash.

## LET'S GO HUNTING NOW!

The next *five pages* of this Owner's Manual are all that you *may ever need to read* about your new Garrett GTI 2000 Deepseeker. This OneTouch detector is today's most advanced; yet, its *basic* automatic operation makes it as simple to operate as any detector ever manufactured. You can begin hunting with it *immediately*. No special instructions are needed beyond what's included in the next five pages. More importantly, you can start finding coins and other treasures *right now!* Here's how.

### To Begin

1. There are no dials to turn...no controls to adjust. Just grasp the handle of your GTI 2000, and hold the searchcoil at least three feet away from any large metallic object.

2. Touch and release the **POWER** touchpad. *TreasureTalk* will inform you, "Ready, Discriminate, Coins." You are now operating in the factory-set *Discriminate/Coins* mode, and the GTI 2000 will begin detecting. The GTI

## TREASURETALK

Your new GTI 2000 utilizes Garrett's exclusive voice function, *TreasureTalk*, to make treasure hunting even easier. The GTI can provide spoken information to assist in setting the detector and finding targets.

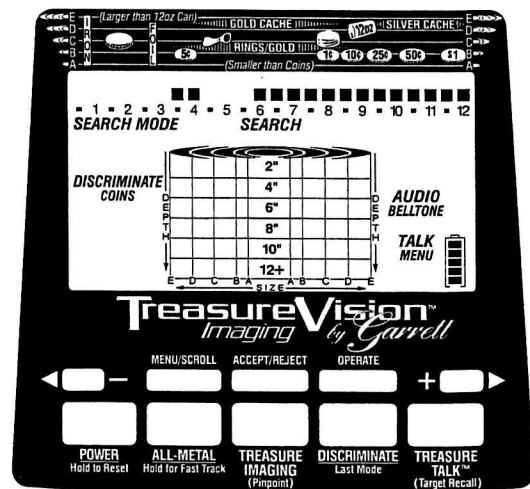
Three levels of *Talk* are available through use of the **MENU/SCROLL** and + and — touchpads:

**Menu:** Allows voice prompting only when the detector is being adjusted.

**Image:** Allows voice prompting both when adjustments are being made and when target size and depth information is available as **TREASURE IMAGING** touchpad is released.

**Search:** Provides voice prompting at all times, including ID Scale numbers and size.

**NOTE:** *TreasureTalk* is also available "on demand." Press **TREASURE TALK** and the voice gives the Upper Scale ID number of the target just detected, plus size and depth when *Search Image* is being utilized.



screen appears as shown above. You can see that you are operating in the *Discriminate/Coins* detection mode with *Belltone* audio turned on and *TreasureTalk* at the *Menu* setting, preset at the factory.

3. Your GTI 2000 begins operating with all settings at factory-set levels. Any of the settings can be changed easily, **but you may**

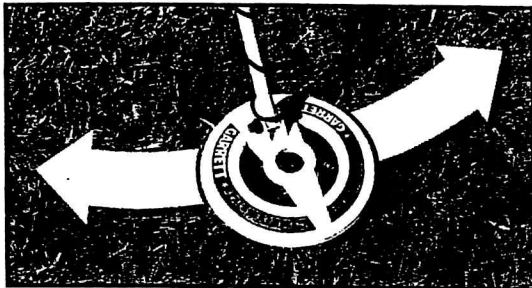
**never want to do so!** It is recommended that you use these settings the first 10 hours you hunt with your detector.

### Scanning

Swing the searchcoil back and forth in front of you in a straight line or slight arc as shown in the photograph below. Keep the searchcoil moving at a rate of about one to two feet per second. Maintain your coil at a height of one to two inches above the ground. It is important that the coil be kept level at all times.

### Discovery

Detection of all metal targets will be indicated by the appearance of a Target Cursor on the Upper Scale. A cursor will appear, as



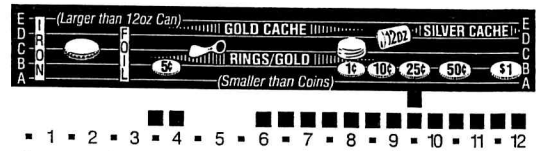
25

Pinpointing and sizing through use of the revolutionary "Imaging by Garrett" function of the GTI 2000 can be an invaluable aid to treasure hunting. Techniques for their effective use are explained more fully on Pages 56-61.

**To turn off your detector:** Simply press and release the **POWER** touchpad. *Treasure-Talk* reports, "Power Off," and operating battery power is disconnected.

Charles Garrett recommends that you first become familiar with your new detector by hunting for at least 10 hours in the factory preset *Discriminate/Coins* mode and that you read carefully the Warning on the back cover.

27



shown above, to indicate every detected target and will remain for three seconds or until a new target is detected (whichever comes first). Desirable targets will also cause an increase in sound. The above illustration shows a cursor at 9+, which would be a quarter if *Treasure Imaging* determines it to be a B-size target. Locate your target by scanning back and forth over it to determine where signals are strongest.

### Treasure Imaging

Press and hold this touchpad to put the detector into a *Pinpoint* mode to locate your target more precisely and also to determine its relative size and depth, which will be shown on the *Imaging Grid* while the **TREASURE IMAGING** touchpad is being held. Size and depth of the target will be given audibly upon release of the **IMAGING** touchpad if *Treasure-Talk Level Image* or *Search* is activated.

26

## STOP READING!

You now know enough about operating the Garrett GTI 2000 to enable you to find treasure anywhere in the world for the rest of your life! If you want to become more proficient with your detector...if you want to add a new dimension to your hunting by learning more about using the revolutionary imaging possible with *TreasureVision*...if you want to learn how to establish discrimination "notches" for your very own precise style of hunting...

### Read on!

By now you are also certainly impressed with the *super* sensitivity, depth capabilities and the target analysis of this detector which utilizes DSP (Digital Signal Processing) to give it advanced detection capabilities not found in any other detector.

You may have encountered an occasional instance when *TreasureVision* seemed to present inconsistent information. This probably occurred when your detector was attempting to analyze two or more targets beneath its searchcoil or when you have not properly centered the coil over your target.

28

This problem of analysis occurs with all detectors, but the GTI 2000 discovers vastly more targets than old-style instruments with their limited circuitry. In addition, the deep-seeking power of the detector may sometimes cause it to detect and fail to identify clearly a target some distance away, one over which your searchcoil has not even scanned. Proper operating technique will enable you to use properly the array of data presented by *TreasureVision* to become aware, however, of the precise nature of all these targets.

You will quickly master these techniques and learn why the GTI 2000 with DSP, *TreasureVision*, *TreasureTalk* and controls based on patented microprocessor technology has more accurate discrimination and better sensitivity and effectiveness than any other detector ever manufactured.

If you are ever unsure about the settings of your GTI 2000, press and *hold* the **POWER** touchpad for five seconds or until the detector "beeps" to restore factory settings.

29

In the *Discriminate* mode you can press **MENU** and use the + touchpad to rotate through five different modes of detection that are available, each with a specific discrimination configuration as shown on the Lower Scale. When the name of the particular mode you select is constant, while the other four are blinking, either press the **OPERATE** touchpad to begin hunting or the **MENU** touchpad to move to another control selection.



**COINS** — Discrimination preset in the detector for this *Discriminate* mode that is shown above is designed to eliminate detection of lower conductivity trash targets, such as bottlecaps, most pulltabs and other objects normally encountered in coin hunting. Some bent pulltabs and pieces of tabs may not be eliminated from detection. Successful

31

## DISCRIMINATE MODE Selections

When you touch the **POWER** touchpad, your GTI 2000 is ready to hunt in a *Discriminate/Coins* operating mode with threshold, sensitivity (depth), tone and other controls preset at the factory, as shown in the GTI Screen's upper center as you step through the *Menu*. As explained in the following pages, settings can be easily changed through regulation of the + and — touchpads.

In its *Discriminate* mode the GTI 2000 functions like all other detectors and must be moving slightly for detection to occur. Microprocessor-controlled DSP circuitry of the GTI 2000, unlike that of ordinary detectors, however, adapts automatically to the speed of any movement. This means that your searches will have the same high degree of accuracy whether you are scanning rapidly to cover a large area quickly or moving slowly over a location with multiple targets.

Automatic circuitry is designed to provide precise ground balance at any speed.

30

treasure hunters, however, all understand that they must dig *some* junk occasionally. Correct operation of the GTI 2000 should reduce this wasted effort.



**JEWELRY** — This *Discriminate* detection mode, above, is specifically designed to aid in hunting for jewelry, with discrimination in the detector's circuitry set to eliminate such trash targets as lower conductivity items and bottle caps.

**RELICS** — This *Discriminate* detection mode, shown atop the facing page is specifically designed for relic hunting, with discrimination in the detector's circuitry set to eliminate trash targets normally associated with hunting for relics, while including those in the lower conductivity range — items that are generally sought by most relic hunters.

32



**ZERO** — This mode, shown below, permits you to hunt with no discrimination and offers a method of "dual-mode" hunting. Your detector will give an audible signal to announce almost every piece of metal it scans over while cursor(s) indicate them. You can then press **Last Mode** to return to another of the *Discriminate* modes to "quick-check" a target.



**CUSTOM** — This *Discriminate* mode was designed to be set by the operator. When the

## SETTING DISCRIMINATION (Making Notches)

Using only the discrimination of its factory-set *Coins*, *Jewelry*, *Relics* and *Zero* operating modes, the GTI 2000 will more than satisfy the discrimination requirements of almost every treasure hunter. Many will never require any other discrimination. Still, this detector offers more — *Custom* discrimination — to tailor a detection mode to any requirement by setting precise detection "notches."

The Lower Scale contains Discrimination Segments. Those that are turned on (darkened) represent targets whose conductivity will cause sound to increase when they are detected in any *Discriminate* mode. In the *Zero* mode all segments are turned on, which indicates that every metal target will cause the audible sound of the GTI 2000 to increase. Through use of the +, — and **ACCEPT/REJECT** touchpads, specific "notches" can be created by turning discrimination segments on and off in any of the five *Discriminate* operating modes.

detector leaves the factory, *Custom* has been set to the *Coins* mode. Through use of the **ACCEPT/REJECT** touchpad, a hobbyist can modify this mode to his or her individual specifications. (See the following pages.) These modifications will be retained by the detector's memory when it is switched off.

Many GTI 2000 owners will never use the *Custom* mode, and when hunting in the *Discriminate* mode will use only the preset *Coins*, *Jewelry*, *Relics* or *Zero* modes. Complete instructions for setting discrimination notches for any of these modes can be found on the following four pages of this manual.

**Note:** When the detector is turned off and then turned back on again, it will begin operations in the mode in which it was previously operating unless the **POWER** touchpad is pressed and held. Factory settings will then be restored with the detector operating in the *Discriminate/Coins* mode.

There are two methods of setting discrimination in any *Discriminate* mode.

**First Method:** While in the *OPERATE* mode press the + and — touchpads to position the blinking cursor above the Discrimination Segment corresponding to the particular target to be detected or ignored. If the segment is turned on (showing), that particular target will be detected. If you wish to reject that type target, press the **ACCEPT/REJECT** touchpad. The segment will be turned off and disappear, creating a "reject notch." If the Lower Scale segment is not showing, press the **ACCEPT/REJECT** touchpad to turn it on, creating an "accept notch," and your GTI will sound off on targets represented by that segment.

**Second Method:** Pass the searchcoil over an object to be accepted or rejected as a target or pass the particular target across the face of the coil about two inches away. Check to make certain of the location of the target cursor on the Upper Scale. If the segment below is not showing, press **ACCEPT/REJECT** to turn it on. If it is showing, pressing this pad will turn it off.



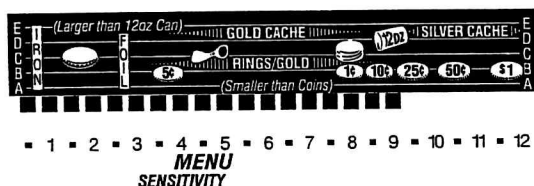
**Remember:** When you press the **ACCEPT/REJECT** touchpad, you cause the discrimination circuit to *reject* a target that is shown on corresponding segments of both the Lower and Upper Scales. This *rejection* will be indicated as the Lower Scale Discrimination Segment disappears.

The same touchpad is used to cause the detector to *accept* a target. When such a desired target is being shown by the cursor but not the corresponding Discrimination Segment below, press the **ACCEPT/REJECT** touchpad. The segment will be turned on and appear, indicating that your desired target will now cause an increase in sound.

**Note:** It is important to remember that each time the detector is turned off **ACCEPT/REJECT** selections will be retained *only* in the *Custom* mode. Any **ACCEPT/REJECT** modifications you have made in the preset *Coins*, *Jewelry*, *Relics* and *Zero* modes will be lost, since these four modes return to factory-set detection settings each time the detector is turned off and turned back on. *Custom* mode discrimination changes will

37

## DISCRIMINATE MODE Operating Settings



### Sensitivity (Depth)

After pressing the **MENU** touchpad to display **SENSITIVITY** on the screen (shown above with factory setting at approximately 75% as indicated on the Upper Scale), you will be prompted by *TreasureTalk*: "*Sensitivity*," and you will be informed of your current setting. Use the + and — touchpads to adjust the depth to which your detector will operate most effectively. These changes will be shown on the Upper Scale and you will be informed by *TreasureTalk* as you make them.

Although the instrument's maximum depth is usually desired, this is often not feasible because of the type of soil over which you are

39

be lost only when **POWER** is held for five seconds for return to factory settings.

### Why Use Notches?

There are numerous reasons why you would want to accept or reject specific targets:

- You may be looking for *only one item*...a certain lost earring, for example. You can use the matching earring to set notches on your GTI to accept *only that type* of metal target.
- You may be hunting in an area where you are plagued with a specific type of trash. You can reject *just this type* of trash metal and continue to hunt with no other discrimination, detecting all other metal.
- You may have your own *special* ideas for designing a mode of detection. The Garrett GTI 2000 Deepseeker gives you virtually unlimited opportunities to test any and all your ideas...and, to try them out easily and quickly. No other metal detector permits more accurate or precise discrimination.

**Factory Settings:** Remember that you can return to preset factory settings at any time simply by pressing and holding the **POWER** touchpad for five seconds.

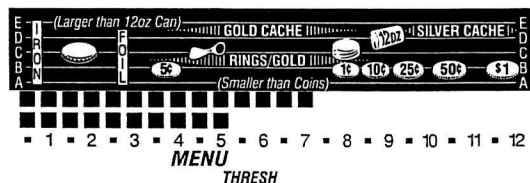
38

scanning or because of electromagnetic or power line interference. Ground mineralization and other considerations can cause static and inhibit the detector's ability to interpret target information. This control option permits you to achieve a stability that permits maximum detection depth possible in relation to any conditions.

Press + to increase detection depth. Press — to decrease. A single touch and release adjusts the level in a small increment. A continuous pressing results in a continuous adjustment.

### Threshold

After pressing the **MENU** touchpad to display **THRESH** on the screen (below, with factory setting indicated on Upper and Lower Scales), you will be prompted by *TreasureTalk*: "*Threshold*," and you will be informed of



40

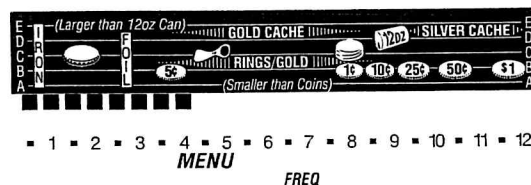
your current setting. Use the + and — touchpads to adjust the threshold of sound that is being produced by the GTI 2000 as it scans. Multiple touches will increase or decrease the sound level. Changes can be seen on the Upper and Lower Scales and you will be informed by *TreasureTalk*.

You can search silently or at any level of constant sound. It is recommended that you always operate the instrument at a minimum level of audible sound. You can hear the audio increase sharply whenever a desirable target is encountered. (Remember, a cursor will indicate every target.) When headphones are used, it will usually be necessary to decrease the threshold level since sound is more audible through headphones.

### Frequency

This detector is capable of operating at eight different detection frequencies or channels, which you will find valuable if you participate in competition hunting or if you enjoy hunting with others. In fact, operating your GTI 2000 at a different frequency might be necessary any time two or more detectors are being

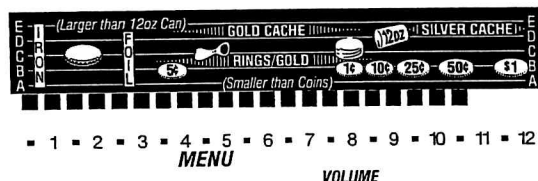
41



used so close together they that their signals interfere with one another. Outside electrical or atmospheric interference can also cause a interference that results in strange sounds.

Whenever you hear unusual sounds and believe that you are encountering interference, press and release the **MENU** touchpad until *FREQ* appears on the screen, as shown in the illustration above. You will be prompted by *TreasureTalk*. "Frequency," and informed of your current setting. The Upper Scale will indicate the frequency at which your detector is now operating. Use the + and — touchpads to change this frequency until you find one with little or no interference. As you make these changes, you will be informed by *TreasureTalk*.

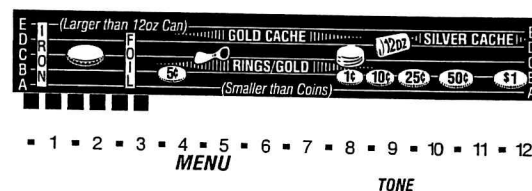
42



### Volume

After pressing the **MENU** touchpad to display *VOLUME* on the screen, the factory setting for the loudness of the target sound will be indicated on the Upper Scale, as shown in the above diagram, you will be prompted by *TreasureTalk*: "Volume," and informed of your current setting. Use the + and — touchpads to adjust audio to the target sound volume that you prefer. Touching the + pad will make the sound louder, while touching the — will lower the volume. You will also be informed by *TreasureTalk* as you make changes. Since this adjustment controls the maximum volume of sound produced by the GTI 2000 when a target is encountered, it will not affect the threshold level you have already selected as the primary audio function of your detector.

43



### Tone

After using the **MENU** touchpad to display *TONE* on the screen, the factory tone setting will be indicated on the Upper Scale, as shown above, and you will be prompted by *TreasureTalk*: "Tone," and told the number of your current setting. Use the + and — touchpads to adjust the audio to preferred pitch or tone. Touching the + pad will raise the tone into a higher treble range, while touching — will lower the pitch to a bass tone. All touches will make changes indicated on the Upper Scale. You will also be informed by *TreasureTalk* as

44

you make changes. Experiment to find the pitch that suits your hearing.

## SEARCH AIDS

### Search Image

Use the **MENU** and + and — pads to display *Search Image* and if these words and the Imaging Grid are blinking, press + to turn it on. When this *Search Aid* is turned on, *TreasureVision* will constantly display the size and depth of accepted targets while you are searching. It therefore will not be necessary to use the **TREASURE IMAGING** touchpad to obtain size and depth information.

You can press — to turn off the function and cause the words and the grid to blink. *TreasureTalk* will inform you whether the *Search Image* function is on or off.

### Surface Elimination

This *Search Aid* is for use in areas where large quantities of metallic trash are present on the surface or at shallow depths. Utilizing this function eliminates detection of objects of *all* sizes to the specified depth. After using the **MENU** touchpad to display *Surface Elim* on

45

ever a target of high conductivity (first nine segments from right on the Upper Scale), such as a coin, has been located. Other acceptable targets will cause an audio increase.

If you wish to use the *Belltone* audio enhancement for target sounds, no action is necessary at factory settings. To turn off this function use **MENU** to display the word, press — and the letters will begin blinking. Pressing + will turn it back on. *TreasureTalk* will inform you if it is on or off.

### Bi-Level

Two distinctly different types of sound are produced when the *Bi-Level* audio enhancement is being used. Targets of higher conductivity produce a higher-pitched sound. Targets of lower conductivity (nickels or lower on the Target ID Guide) are identified with a sound that is pitched slightly lower.

If you desire *Bi-Level* audio, use **MENU** to display *Bi-Level* and press the + touchpad to turn it on when blinking. To turn off the function press — and cause the letters to begin blinking. *TreasureTalk* will inform you if it is on or off. When both *Belltone* and *Bi-Level* are

47

the screen, You will be prompted by *TreasureTalk*: "*Surface Elimination*" and informed of its current setting. It will be turned off at the factory settings.

If you desire to use this *Search Aid*, press the + and — touchpads to set the desired elimination depth. This depth (to 4 inches) will be shown on the Upper Scale and on the Imaging Grid. *TreasureTalk* will also inform you as you make the settings.

### Salt Elimination

When hunting on an ocean beach or in any area with high salt content, you may want to use this *Search Aid* to eliminate interference caused by wetted salt. If you wish to turn on the *Salt Elimination* aid, use the **MENU** to display *Salt Elim* and press + when the word is blinking to turn it on. Press — to turn off the function and cause the word to blink. *TreasureTalk* will inform you whether the *Salt Elimination* function is on or off.

### Belltone

Garrett's *Coin Alert™ Belltone*, which is the factory *Audio* setting for the GTI, will signal the operator with a special ringing sound when-

46

turned off, the detector searches with *Standard* audio.

### Talk

This control selection enables you to change *TreasureTalk* from its factory setting of *Menu*, which allows voice prompting only when the detector is being adjusted. Read Page 22 for complete information.

If you choose to change this setting, use the **MENU** touchpad to display *TALK* and use the + and — touchpads to turn the setting you choose on (constant words) or off (blinking). The — touchpad can be used to turn off the *Talk* function entirely.

### Battery Gauge

The scale at the lower right of your GTI 2000's screen will indicate accurately the condition of standard (carbon or alkaline) or NiCad rechargeable batteries. See Pages 74-77 for complete Battery information.

48

## ALL-METAL MODE



After you press this touchpad, the Graphic Display will indicate that you are operating in an all metal (deepseeking) mode. Garrett's exclusive *Fast Track* feature can be used to ground balance your detector automatically, and *Auto Track* can continually work to keep it ground balanced over varying soil mineralization conditions.

In this mode it will be possible for you to let the searchcoil hover almost motionless over a target while listening for signals. This is true all metal detecting, which produces the deepest-seeking signals.

You will want to hunt in this mode when greatest depth is sought, such as when searching for caches or deep relics. Gold hunting

(electronic prospecting) will also be carried out in this mode. You will probably prefer to use this mode when searching for nuggets or at other times when highly mineralized ground is encountered. Because the *All-Metal* mode permits *no discrimination*, your detector will give an audible signal to indicate every piece of metal it scans over.

Even though precise ground balance is adjusted automatically and continuously through *Fast Track* and *Auto Track*, it is possible to ground balance the detector manually, as described on Page 52.

*Fast Track* ground balancing is accomplished by pressing and holding the **ALL-METAL/Fast track** touchpad while "bouncing" the searchcoil from two to eight inches above the ground. When there is a minimal audio response from the ground, release the touchpad and begin hunting. When the touchpad is released, *Auto Track* continues to make all adjustments necessary to eliminate ground minerals from detection.

The speed of the *Auto Track* function can be increased by using the + touchpad or

49

decreased by using the — pad. (See Pages 53-54).

With some extreme ground conditions the detector may not be able to achieve perfect ground balance automatically, but it will always adapt itself to the best possible solution.

## ALL-METAL MODE Operating Settings

Because the following control functions are utilized in both the *Discriminate* and *All-Metal* modes, instructions for their use can be found on the preceding 11 pages:

**Sensitivity (Depth)**

**Threshold**

**Frequency**

**Volume**

**Tone**

**Search Image**

**Talk**

**Battery**

### Manual Ground Balance

This control selection will rarely be required since the detector's internal circuitry and the

*Auto Track* automatic ground balancing function described on Pages 53-54 will usually be satisfactory. Under unusual conditions, if your audio signal continues to increase or decrease to any degree because of ground conditions, more precise manual ground balancing may be required. You may also want to use the *Manual Ground Balance* function to ground balance slightly positive to enhance gold nugget detection or balance slightly negative to reduce "hot rock" detection.

**To Ground Balance Manually:** Use the **MENU** touchpad to display **MANUAL GROUND BAL** on the screen. *TreasureTalk* informs you that this function is now available and indicates the value of its current setting. Raise and lower your searchcoil and listen closely to the audio signal. If the sound grows louder as you lower the coil, press the — pad several times.

Lift your searchcoil again and lower it to operating height. If the sound level now decreases, you have made too great a negative adjustment. Press the + touchpad once or twice. Precise adjustment is possible be-

50

51

52

cause there are 256 steps on the manual ground balance of the GTI 2000 as reflected in the movement of segments on the Upper and Lower Scales. Don't hesitate to hold either touchpad to make large adjustments.

Press the proper + and — pads until audio does not change or changes only slightly when the searchcoil is lowered to operating height. The Ground Balance value that you have set for the detector will not change as long as *Auto Track* remains turned off. Whenever *Auto Track* (see below) is operating, it will govern the ground balancing function of the GTI 2000.

When searching over extremely mineralized soil, it is recommended that you hold the searchcoil at least two inches or more above the ground. You will not lose depth, but will actually detect deeper because ground mineral influence will be greatly reduced.

### Auto Track

This *Search Aid* of the GTI 2000 permits the circuitry of the detector to maintain optimum ground balance automatically, regardless of how mineralization beneath the searchcoil or other conditions might change. There are

three tracking speeds: slow, medium and fast. Use slow tracking when scanning over ground with consistent mineral conditions or those that change only slightly as you move along. Increase the tracking speed as necessary to cope with varying ground mineralization. Fast tracking speed allows operation over severe ground conditions, such as heavily mineralized rock slides.

To use *Auto Track*, scroll through *All-Metal* menu selections until *Auto Track* appears on the screen and you are informed by *TreasureTalk* "Auto Track, Medium," which indicates that is in its factory setting. You can then use the + pad to increase the tracking speed which will be indicated on the Upper Scale. When all segments on this scale are lit, *Auto Track* is working at its maximum speed; when no segments are lit and the word is blinking, it is turned off. Use the — touchpad to decrease tracking speed or to turn off *Auto Track*.

### Additional Information

All of the personal preference adjustments you have just set in the GTI 2000 with the

various operating functions will be retained by the detector when you press **POWER** to turn the detector **Off**. These personal alterations are held in a non-volatile memory circuit and retained even when the batteries are removed. The detector must be turned off when batteries are being changed, as discussed in the Battery section, Pages 74-77.

Changes in discrimination settings, however, will be retained *only* in the *Custom* mode.

Because ground conditions can vary from place to place, it may be necessary for you to adjust *Sensitivity (Depth)* occasionally.

### Reminder on Settings

If you are ever unsure about the settings of the GTI 2000, you can instantly restore the precise factory-set levels of *all* settings and controls. Just press and hold down the **POWER** touchpad for five seconds or until a "beep" and *TreasureTalk* let you know that factory settings have been restored.

---

## TREASURE IMAGING

---

When you are hunting with the *Search Image* aid turned off, you will be given size and depth information only when you press and hold the **TREASURE IMAGING (Pinpoint)** pad. The relative size and depth of targets will then be indicated on the Imaging Grid.

While this pad is being held, the Scorchers searchcoil can remain stationary over your target. Move the coil slightly to make certain that it is directly over the target. Targets must pass **beneath** the searchcoil, not above it.

**IMPORTANT:** The searchcoil must be centered directly over the target to produce accurate size and depth information about that target.

Please note that both size and depth indications of a target can be expected to change on the grid as the target is being centered. This is especially evident while the *Search Image* aid is being used. Size and depth indications of targets may then seem to change erratically, especially as the searchcoil is being scanned.



For most effective normal automatic pinpointing (when *Search Image* is not being used), place the searchcoil just above the ground approximately 12 inches away from the target in an area where there are no other targets. Press the **TREASURE IMAGING** touchpad and scan back and forth across the target, maintaining a constant height. Read the following sections to learn how size and depth indications will change as you pinpoint.

### Depth Reading on GTA Scales

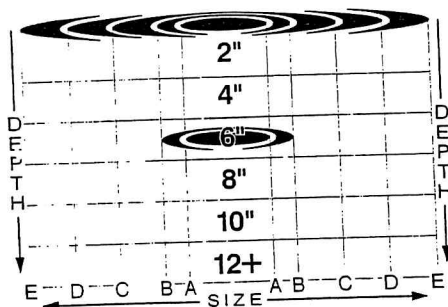
This function is exactly like that normally encountered on a Garrett GTA-style detector.

When you press and hold the **TREASURE IMAGING** touchpad, target depth will be indicated on the Lower Scale. Illumination of Upper Scale segments, from left to right, indicates strength of the target signal. The maximum reading attained will indicate exact target location.

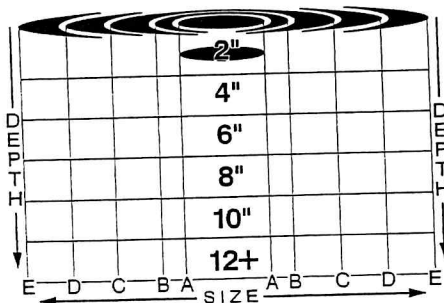
While still pressing the **TREASURE IMAGING** touchpad, check the Lower Scale to determine target depth in 1" increments. The Imaging Grid will also indicate depth, but in 2" increments.

57

Four typical examples:



Imaging Grid showing coin 6" DEEP



An object smaller than a coin at 2"

59

increments. Thus, depth of a target shown at 5" on the Lower Scale, for example, will be rounded to 6" on the Imaging Grid.

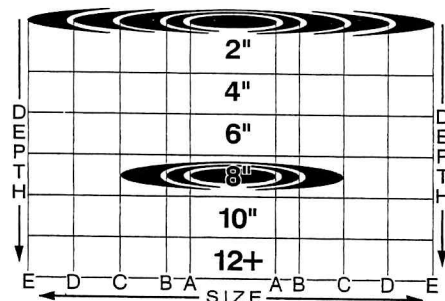
*TreasureTalk* will give size and Lower Scale depth after you release the **TREASURE IMAGING** touchpad when the *Image* or *Search* options of *TreasureTalk* are activated.

### Size/Depth on the Imaging Grid

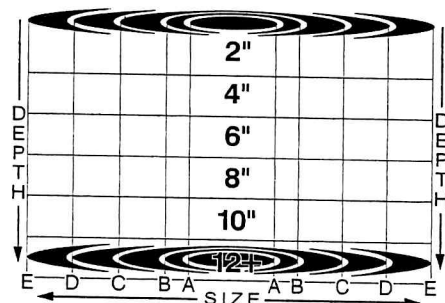
As you are locating your target precisely by moving the searchcoil while pressing and holding the **TREASURE IMAGING** touchpad, you will observe size and depth changing on *TreasureVision's* Imaging Grid. The coil must be centered directly over the target to produce accurate size and depth information. As you approach the target, therefore, its indicated depth on the Imaging Grid will become shallower and its size smaller. As you move away from a target, it will appear to increase in size and become deeper.

Thus, the **correct** reading on the Imaging Grid will always be the shallowest and smallest. This can be achieved when the coil is positioned directly over the target.

58

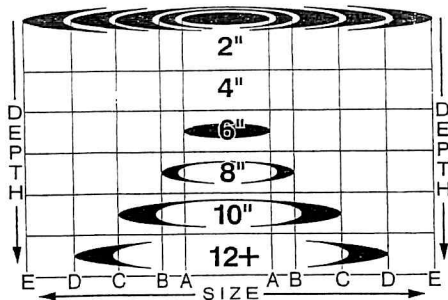


This object is larger than a coin, yet smaller than a 12-oz. can. It is buried at a depth of approximately 8"



An object larger than a 12-oz. can that is buried at a depth of approximately 12"

60



**'Cone' Effect:** You may occasionally observe a size and depth reading like that shown above which Garrett engineers call the "Cone." Such a reading with multiple indications of size and depth indicates the target is too deep and/or too small to determine an exact size and depth.

It is likely, however, that the target is within the size and depth region defined by the Cone. In other words, the target shown above is likely to be a Size A at 6"; a Size B at 8"; a Size C at 10"; or a Size D at 12".

The Cone may also appear when the target is significantly off-center from the coil. Study Pages 56-58.

61

inches. Each target will cause the sound to increase, which represents true non-discriminating operation.

2. Press the **DISCRIMINATE** touchpad and use the **MENU**, **+** and **-** touchpads, as necessary, until *Coins* is no longer blinking. Then press **OPERATE**. Bring the same targets across the bottom of the searchcoil in this *Coins/Discriminate* mode (Page 31) and listen for the sound to increase only when certain items are scanned. Notice the specific segments in the Upper Scale that darken when various targets are scanned across the coil.

3. Perform the same tests with the *Jewelry* and *Relics* modes, observing sounds and the appearance of the *TreasureVision* display.

4. Experiment with the **ACCEPT/REJECT** touchpad as you identify various types of targets. Try to imagine how this will affect your search for coins or jewelry.

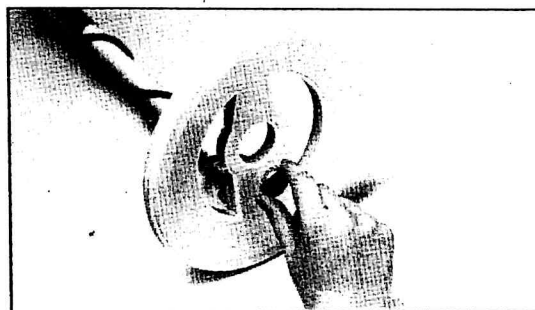
**Be methodical:** Keep written records of results and use them when hunting in the field.

63

## BENCH TESTING

This will enable you to test typical treasure and trash items and to learn about your GTI 2000 before taking it into the field or trying to set discrimination. Tests should be performed as shown with the searchcoil perpendicular to a bench, floor or other non-metallic surface and several feet away from any large metallic object:

1. Select the *All-Metal* mode of operation. Bring various metallic targets across the bottom of the searchcoil at a distance of about two



62

## FIELD OPERATING RECOMMENDATIONS

As you walk, scan the searchcoil from side to side in a straight line in front of you. (See photo on Page 25.) Keep the coil level and move it at a rate of about one to two feet per second, an inch or two above the ground.

When scanning, *do not hurry*. Be methodical. Do not skip any areas. Overlap each scan sweep at least 25% of the searchcoil's width. Wear headphones for greater sound perception and concentrate on your scanning.

When you are searching in the *All-Metal* or the *Discriminate/Zero* modes, detection of any metal target will be indicated by an increase in sound.

### Target Identification

Conductivity classification of every target over which the searchcoil passes will always be indicated by a target cursor on the Upper Scale. Until you gain experience with the GTI 2000 it is recommended that you hunt with the *Search Image* aid turned off and make your initial target decisions based on the conduc-

64

tivity indications of the cursor as they relate to the Target ID Guide. When you decide a target is worthwhile, press and hold the **TARGET IMAGING** touchpad and what you have just discovered can often be determined by relating the size of your discovery as shown on the Imaging Grid with the Target ID Guide.

As explained on Page 56, the searchcoil *must be centered* over your target to produce accurate size and depth information.

Always remember that as you center the target, its size and depth on the Imaging Grid will appear to grow smaller and shallower.

As explained on Page 58, the correct reading on the Imaging Grid will always be the shallowest and smallest that will be achieved when the coil is positioned directly over the target.

Before hunting with the *Search Image* aid turned on which will give you size and depth information constantly, read carefully the Target Imaging section (Pages 56-61) to make certain that you understand why the sizes and depths of your targets may seem to change as the searchcoil is moved around..

Now watch the Imaging Grid as you continue to move the searchcoil to locate your target more precisely. Target indication on the Grid will become smaller and shallower until your coil is centered precisely over the target. If you move away from it, the indication will get deeper and larger.

Always remember that the correct size and depth reading on the Imaging Grid will be the shallowest and smallest achieved when the coil is positioned directly over the target. Only then should you decide whether or not to dig the target.

### Recovery/Pinpointing

Locating your target precisely will enable you to recover it by digging the smallest hole possible. This is accomplished first by *pinpointing* which also enables you to utilize another function of the GTI 2000 for *measuring size and depth*.

Begin to locate targets by first drawing an imaginary "X" on the ground with the searchcoil at the place where maximum sound occurs.

Highly mineralized soil can occasionally result in improper target size/depth information. Raising the coil an inch or two as you scan over such soil is sometimes helpful. Encrustation or patina may also affect conductivity of the target, resulting in improper classification.

### Using Search Image

Experienced treasure hunters prefer to use the GTI 2000 with the *Search Image* aid turned on, providing a constant display of size and depth information. Because sizes and depths of targets may seem to change erratically as the searchcoil is scanned, the following recommendations are offered:

Always remember that you have two basic information sources concerning your target — the Upper Scale cursor, which reports conductivity, and the size and depth information that is shown on the Imaging Grid. These reports should be considered independently.

When a target is encountered, consider it initially based *solely* on its conductivity as indicated by the Upper Scale cursor which you will relate to the Target ID Guide above.

You can then utilize the "magic" of the *Treasure Imaging* mode by following instructions on Pages 56-61.

### Digging

Since the final step in recovery usually entails digging, always make as small a hole as possible. It is quicker, requires less work and makes refilling easier. And, you should always *fill your holes*.

### Discriminate (Last Mode)

Use of this touchpad can be particularly helpful while scanning because it effectively converts your GTI 2000 into an instantaneous dual- or triple-mode detector. Pressing and releasing this touchpad returns detector operations to the *Discriminate* mode that has just *previously* been used. Thus, it is easy to alternate between any two *Discriminate* operating modes, such as *Coins* and *Zero* or *Custom*. Using the **ALL-METAL** touchpad, as well, converts the instrument into a triple-mode detector.

## More On Target Audio

It is important to remember that the GTI's audio causes weaker targets to be detected with shorter "beeps" than stronger targets.

*Surface Elimination* can simplify audio detection by eliminating virtually all targets as deep as the first four inches of the surface, where most trash metal will be found.

When a metallic object is accepted, the detector's sound will, of course, increase from your threshold level. Some rejected targets, however, may cause the audio to "break up" or sound erratic. This is generally a response to shallow trash targets and can be remedied by raising the height of your searchcoil when scanning or by using *Surface Elimination*. Another indication of a reject target is an audio signal as you scan one way, and no response when scanning from the other direction.

If you encounter a large target and scan too close to it, the detector will give an audible overload indication, which sounds like a buzzing alarm.

69

## Test Plot Construction

As you search and use your GTI 2000, you will quickly grow more proficient in its use. Building and using your own test plot will sharply increase this proficiency. Bury several items, including a nail, a piece of foil, a pulltab, a bottlecap and several coins at varying depths of 1-4" about 18" apart. Clearly mark where each article is buried. Scan over them while carefully listening to and studying the different detection signals.

Remember that newly buried objects, especially coins, will be somewhat more difficult to detect than items buried for some time. This is primarily a metallurgical phenomenon. Experiment with various detection modes, and pay close attention to both audio and GTI 2000 signals as you scan. Note your detector's response at the various settings.

*Practice* pinpointing and imaging to locate targets precisely.

## With Experience...

After you have hunted with the GTI 2000 for only a short time, you will be surprised at how

71

## Setting Sensitivity (Depth)

Garrett engineers designed your GTI 2000 for *maximum* detection depth power, but you may not always be able to search at 100% depth...just as you rarely can (or, even *want* to) operate your automobile at 100% of its speed capacity. Outside electromagnetic interference and irregular ground mineralization may sometimes require that you search at reduced detection depth.

Don't worry about losing "deep targets!" You won't ever be *losing* anything because you'll always be able to search as deeply as ground and atmospheric conditions permit. Attempting to operate at gains above a level that permits a quiet and stable audio threshold may actually cause you to *miss* deep targets that you would have found had you not "pushed" the detector.

Another point to remember is that when you are searching with *SENSITIVITY* set below the maximum under "less-than- perfect" conditions, you will always have additional detection power when you are able to use it.

70

proficient you have become with it. Do not expect to achieve the greatest accuracy and success, however, until you have used this detector for at least 100 hours or more. Don't forget to take Charles Garrett's advice to press only one touchpad and search in the factory preset *Discriminate/Coins* detection mode for at least 10 hours during your "learning" phase.

Remember, the more you use your detector in the correct manner...the more treasure you will discover.

- *Good Hunting!*

72

## HEADPHONE JACK

The headphone jack is located at the rear of the battery pack under the armrest. Headphones are a valuable accessory for any metal detector to mask interference from outside noise. They permit you to hear small and deep targets that might be missed when using only audio from the detector speaker. Headphones are particularly essential when you are hunting where noise (running water, people, surf, traffic, etc.) is excessive.

## SEARCHCOILS

Your GTI 2000 is equipped with a 9-inch Scorch® imaging searchcoil suitable for searching for almost any kind of target in any terrain.

Also available are 4 1/2" and 12 1/2" coils and a 5x10" elliptical coil. The larger coil is helpful in seeking large and deep targets, while the smaller and elliptical coils are designed for use in especially trashy locations or places where a larger searchcoil just won't reach or can't fit. These optional coils do not have the imaging capability.

73



charged batteries are being used. When only one square remains, *TreasureTalk* will announce that the batteries are low. Although it is not necessary to change batteries until you hear this warning or only one square is visible, you should always carry spares so that you will be ready.

### NiCad Batteries

When NiCad batteries are being used, the *NiCad* battery option must be turned on for the battery level indicator to be accurate. To turn on this option press the **MENU** touchpad until *NiCad* is displayed and *TreasureTalk* informs you of the status of this option. The option is turned off at the factory setting, and the word will be blinking. Press + to turn the option on

75

## BATTERIES

The GTI 2000 is equipped with two battery packs, each holding four (4) standard AA batteries. The detector is also designed to utilize nickel cadmium (NiCad) rechargeable batteries. It is recommended that top quality heavy duty or alkaline batteries be used. It is advisable to remove the battery packs when the detector is not in use, particularly for a period of several weeks.

Although standard battery packs and optional NiCad packs can be used interchangeably in the detector, it is recommended that both packs being used at the same time always be the same type. The GTI 2000 should search 20 to 25 hours with carbon or alkaline batteries, NiCads should power the detector from 6 to 8 hours on a full charge. These estimates are for speaker operation. Operating with headphones will extend battery life.

### Checking Condition

Battery condition is reported continuously by the vertical row of squares on the lower right side of the screen. Five are visible when fully

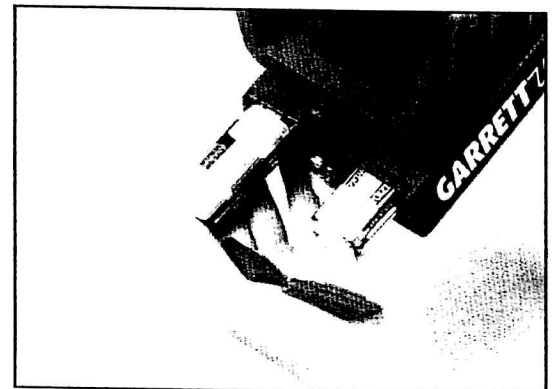
74

and the word will become constant. Press — to turn it off when standard carbon or alkaline batteries are being used.

### Replacement

1. Turn off the GTI 2000 by pressing the **POWER** touchpad.

2. Slide battery case back slightly from its normal position beneath the armrest. Place both thumbs on the back of the cuff with your fingers on the case. Firm pressure will disengage the case from below the armrest.



76



3. Slip up the two covers on the battery panel and remove them completely (shown above).

4. Take out the two battery holders (which are not connected by wire) by tilting the pack (removed holders shown at right).

5. Press out the old batteries.

6. Install new batteries. Carefully observe polarity of the batteries and make certain the new batteries are aligned properly.

7. Replace holders in detector as shown at right. It is important that the "eyelets" be toward the center. If an effort is made to install holders incorrectly, closure will be difficult. If it is forced, however, damage to the detector can result. Battery packs must be replaced in their proper orientation.

8. Press down firmly and slide each battery cover back in place.

**Remember:** The detector *must* be turned off when batteries are being changed.

**Caution:** Use only high quality NiCad, carbon, alkaline or heavy duty batteries.

77

---

## MAINTENANCE

---

- Always remember that your GTI 2000 is a sensitive electronic instrument. It is built to withstand rugged treatment in the outdoors. Use your Garrett detector to the fullest extent possible, and never feel that you have to *baby* it. Yet, always protect the detector and handle it with reasonable care.

- Try to avoid temperature extremes as much as possible, such as storing the detector in an automobile trunk during hot summer months or outdoors in sub-freezing weather.

- Keep your detector clean. Always wipe the housing and LCD after use, and wash the coil when necessary.

- Your Scorcher searchcoil is submersible. The control housing is not! *Never* submerge the control housing, and always *protect* it from heavy mist, rain or blowing surf.

- Disassemble the stem and wipe it clean after use in sandy areas.

- When storing longer than about one month, remove batteries from the detector and from their holders as well.

79

---

## RECOMMENDED ACCESSORIES

---

Your Garrett Master Deepseeker GTI 2000 represents the highest quality in metal detector manufacturing. Complement it with quality accessories such as these from Garrett:

- Headphones that will enable you to hear signals from the GTI more distinctly because they will mask other conflicting sounds from the environment.

- Additional searchcoils (See Page 73).

- NiCad Battery Pack and Recharger that cuts down on the cost of batteries.

- Coin Hunter Kit (pouch, probe, digger) that is all you need for recovering coins.

- Coil Cover to protect your 9 1/2" Scorcher searchcoil and lengthen its lifespan.

78

---

## SPECIALIZED HUNTING

---

### Coins

Because of its unique discrimination and imaging capabilities, the GTI 2000 functions as an outstanding coin hunting detector, especially in its *Discriminate/Coins* mode. Deep-seeking capability and the depth, size and conductivity information available from Digital Signal Processor (DSP) circuitry combined with *TreasureVision*, *TreasureTalk* and the GTI 2000's ease of handling make this a superb instrument for finding coins.

In addition, target sizing presents a second dimension in discrimination. When you discover a target whose conductivity as shown on the Upper Scale indicates that it might be a coin, check its size. If it's not a B-size target, it can't be a U. S. coin!

Whether you choose to hunt for them in a park or on a beach, Garrett's factory-set *Discriminate/Coins* mode offers discrimination that responds ideally to conditions normally encountered. You may occasionally discover quantities of specific trash targets that are not

80

being eliminated from detection by factory-set discrimination. You can then use the **ACCEPT/REJECT** touchpad to eliminate these pesky pieces of junk, no matter which *Discriminate* mode you are using. Just move your searchcoil across one of them, watch your Upper Scale for its response and push the **ACCEPT/REJECT** touchpad. The Lower Scale notch vanishes, and you'll have no more trouble from that type of trash metal. With the GTI 2000 you spend less time digging trash and more time digging coins!

*Custom* discrimination enables you to design your own coin-hunting mode. Any *Custom* discrimination selections you make will be retained in the detector's memory...even after the instrument has been turned off.

It is possible to find even more coins by combining the deepseeking capabilities of the GTI 2000's *All-Metal* mode with the discrimination of the *Discriminate/Coins* mode. Seek out even the deepest targets in the *All-Metal* mode. When you discover one, examine the target indicator on the display panel and/or switch to the *Coins* mode to double check the

81

balancing can be used to find this gold or any other precious metal.

It must be emphasized, however, that even the GTI 2000 or any quality detector is usually operated only in the *All-Metal* mode and very precisely ground balanced if gold is to be found. The new *Fast Track* and *Auto Track* are quite satisfactory, even in extremely mineralized soil, but manual ground balancing is always possible. (See Pages 50-51.)

All of this is particularly important when searching for tiny gold nuggets. Furthermore, when prospecting, *all* signaling targets must be located and carefully inspected. It is only in this manner that you can be successful in using a metal detector to discover valuable metal nuggets and ore samples.

Although some hobbyists have experienced success in using the *Discriminate* mode to locate nuggets, the detector responds more effectively to tiny nuggets in the *All-Metal* mode. Heavy ground mineralization could also limit detection depth when searching in the *Discriminate* mode.

There is a way, however, to let the precise

83

target. Some hobbyists even set up a discrimination notch by blanking out all segments on the left half of the scale.

For literature explaining more about coin hunting see the **Recommended Reading** section on Page 84 of this Owner's Manual. *The New Successful Coin Hunting* is especially recommended. An Order Blank is included in the Manual, or you can call Garrett direct at 1-800-527-4011 to purchase by credit card.

## Gold Hunting

Gold and other precious metals can be found in various forms with this detector. You will most likely be searching for nuggets, but gold can also be found as lode or hard rock deposits in a vein, usually mixed with other minerals. The GTI 2000 can be used to locate placer deposits in streams or dry sand, with such gold then recovered by panning.

Gold is generally found in rock formations with a great many other conductive minerals. A high quality detector such as the GTI 2000 with intricate circuitry that cancels out mineralization to permit sophisticated ground

82

discrimination possible with the GTI 2000 help you find gold even though discrimination usually limits the amount of small nuggets found. There are some highly productive areas, however, that contain so much iron trash that a small amount of discrimination becomes highly desirable, even necessary.

**Here's a suggestion:** Occasionally you continually encounter one particularly troublesome trash target in an area where you're hunting for gold. The GTI 2000 offers you an easy solution. Just switch to the *Discriminate/Zero* mode and "notch out" that single pesky target. Then, when you encounter suspicious targets in the *All-Metal* mode, you can quickly and easily check them with your "notched" *Zero* mode. Or, you can hunt in the *Zero* mode itself. You may lose some depth on an occasional nugget; but, the time you save could enable you to find more nuggets that you might have missed!

*Hot rocks* are a problem for any electronic prospector, whether veteran or weekend adventurer. A "hot rock" can be described as a concentration of non-conductive iron mineral

84

that causes a detector to recognize it as metal when operating in the All Metal mode.

When you suspect that you have a signal from a hot rock, locate the target precisely by pinpointing. Then, move your searchcoil away and press the **DISCRIMINATE** touchpad. You should use the *Discriminate/Zero* setting which offers no discrimination. Now, scan the target again, trying to keep the exact same distance. If the sound does not change, your target is probably a hot rock. When this happens, ignore the target, switch back to the *All-Metal* mode and continue searching.

If the signal increases at all in the *Discriminate* mode, you should investigate this target more closely and identify the metal causing your audio to increase.

Hard work, patience and research are three of the keys to success in electronic prospecting. Research is important because it is vital that gold always be sought in areas where it is known to exist.

85

- You have checked with your dealer.
- You have tried to restore factory settings.
- You have carefully packed the detector in its original shipping carton or other suitable box. Make certain that proper insulation or packing material is used to keep all parts secure. Do *not* ship stems, headphones or armrests unless they are part of the problem. Return any coil that you believe may be causing a problem.

- Ship to Garrett Metal Detectors, 1881 West State Street, Garland, TX 75042. Foreign shipments must be authorized by a local agent or representative..

- You can call Garrett's Customer Service Department (972) 494-6151, if you have further questions.

Please allow approximately one week for Garrett technicians to examine and service your detector after receiving it, plus another week for return shipping. All equipment will be returned UPS or parcel post unless you give written authorization to ship collect by air parcel post, UPS Blue (air) or air freight.

87

---

## REPAIR SERVICE

---

In case of difficulty, read this Owner's Manual again thoroughly to make certain your Garrett GTI 2000 Deepseeker is not inoperable because of wrong adjustments or improper operating methods. Your dealer may also be able to offer advice. Remember that computerized circuitry of this detector permits you to restore instantly all of its precise factory settings. Simply hold down the **POWER** touchpad for five (5) seconds.

When your detector must be returned to the factory for service, always include a letter with the instrument that describes its problem as fully as possible. Include your name, address and a phone number where you can be contacted between 8:30 a.m. and 4 p.m., Central time.

Before you return your detector to the Garrett factory, make certain:

- You have checked batteries and connectors. (Check batteries especially closely. They are the most common cause of detector "failure.")

86

---

## RECOMMENDED READING

---

Since your Garrett Master Deepseeker GTI 2000 is a truly universal detector, all of the RAM books will be pertinent to its use. Of particular interest, however, will be *Lets Talk Treasure Hunting* by Charles Garrett, THE complete 21st century guide to searching for treasure with a modern metal detector such as the GTI 2000. This new book, beautifully illustrated with dozens of color pictures, truly obsoletes most other books in the field.

Thers will also appreciate the revised version of Garrett's popular *Modern Metal Detectors*, a basic text that will help you to understand all types of metal detection equipment and how to use them. A special section of the revised edition is devoted to the use of OneTouch computerized detectors.

For beginners, however, the new edition of *Treasure Hunting for Fun and Profit* will prove especially interesting and helpful.

Where can you hunt? How about ghost towns and deserted structures. You will read about them in Charles Garrett's *Ghost Town*

88

## BOOK ORDER FORM

Please send the following books:

**PLEASE SEE ENCLOSED BUYER'S GUIDE**

<input type="checkbox"/>	Hunting/Fun & Profit ..	\$ 9.95
<input type="checkbox"/>	Treasures .....	\$ 9.95
<input type="checkbox"/>	Metal Detector ..	\$ 9.95
<input type="checkbox"/>	Hunting ....	\$14.95
<input type="checkbox"/>	Golden Years ..	\$ 9.95
<input type="checkbox"/>	Can Find ..	\$14.95
<input type="checkbox"/>	Ne ..	\$12.95
<input type="checkbox"/>	Gold .....	\$12.95
<input type="checkbox"/>	Sunkers ..	\$ 9.95
<input type="checkbox"/>	New Won ..	\$16.95
<input type="checkbox"/>	Treasure Re ..	\$14.95
<input type="checkbox"/>	New Modern H ..	1.95
<input type="checkbox"/>	Gold Panning Is ..	5
<input type="checkbox"/>	Introduction to Me ..	..00

(No shipping charge when another book is ordered)

89

*Treasures*. Bob Marx' new *Buried Treasures You Can Find* locates thousands of sites where treasure is known to have existed. This fine book also includes much good information about OneTouch detectors such as the GTI 2000.

You will also be interested in *The New Successful Coin Hunting*, filled with "how to" tips and success stories about coin hunting. Also recommended is *Treasure Recovery from Sand and Sea*, the accepted "text" on searching for treasure on beaches, in surf and under the water.

Hobbyists of all ages will want to read *Real Gold in Those Golden Years*, but it is especially applicable to older treasure hunters.

Since the GTI 2000 is such an excellent detector for hunting for gold nuggets and ore veins, you will be interested in *Find Gold with a Metal Detector*. All hobbyists are urged to familiarize themselves with this most interesting and exciting aspect of metal detecting.

91

Ram Publishing Company  
1881 W STATE ST  
GARLAND TX 75042-6797

Please add \$1 for each book ordered (maximum of \$3) for handling charges.

Total for items \$ \_\_\_\_\_  
8.25% Tax (Texas residents) \$ \_\_\_\_\_  
Handling Charge \$ \_\_\_\_\_  
**TOTAL** \$ \_\_\_\_\_

☐ Enclosed check or money order

**I prefer to order through**

☐ MasterCard

☐ Visa

Credit Card Number \_\_\_\_\_

Expiration Date \_\_\_\_\_

Phone Number (8 a.m. to 4 p.m.) \_\_\_\_\_

Signature (Credit Card orders must be signed.) \_\_\_\_\_

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

90

## SPECIFICATIONS

**Detector Type:** Very low frequency, transmitter/receiver, *TreasureVision* Graphic Target Analyzer and Imaging Grid for precise target identification, multiple notch discrimination

**Controls:** Easy access touchpads

**Display:** High visibility LCD adjacent to touchpads; data accessible at any angle

**Detection Frequency:** 7.0 kHz, adjustable

**Circuitry:**

Linear transmitter/receiver/filter front end  
16-bit data acquisition

16-bit Digital Signal Processor (DSP) with  
32 Kbyte memory

Microcomputer with 8 Kbyte memory  
Crystal controlled 10 MHz operation  
High reliability *surface-mount* printed circuit board construction

**TreasureTalk:** Voice synthesizer

**Audio Frequency:** 275 to 710 Hz

**Batteries:** Eight (8) AA

92

**Battery Life:**

(Approximate)

Alkaline: 25 hrs.

Carbon Zinc: 18 hrs.

NiCad: 7 hrs.

**Humidity:** 0 to 95% Non-condensing**Temperatures:**

Operating: 0 to 130°F.

Storage: -20 to 150°F.

**Construction:**

High strength glass-filled nylon with handle-mounted control/display panel.

**Weight:** (With 9 1/2-inch searchcoil) 4 lbs., 8 ozs.

- I will not destroy property, buildings or the remains of ghost towns and other deserted structures.

- I will not leave litter or uncovered items lying around. I will carry all trash and dug targets with me when I leave each search area.

- I will observe the Golden Rule, using good outdoor manners and conducting myself at all times in a manner which will add to the stature and public image of all people engaged in the field of metal detection.

**Trademarks:** GTI 2000, Master Deepseeker, TreasureVision, TreasureTalk, Graphic Target Analyzer, OneTouch and Scorchers are **TM** of Garrett Electronics, Inc.

**Patent Protection:** Garrett's high tech instruments are protected by one or more of the following United States Patents and other Patents Pending: 4,398,104, 4,423,377, 4,303,879, 4,334,191, 3,662,225, 4,162,969, 4,334,192, 4,488,115, 4,700,139, 4,709,213, Design 274,704 and 297,221; G. B. Design 2,011,852, Australia Design 111,674. Other patents pending.

**All Garrett detectors are manufactured in the United States of America.**

---

**MIND YOUR MANNERS**

---

Filling holes and obeying *no trespassing* signs are but two requirements of a dedicated metal detector hobbyist. A sincere request that Charles Garrett makes to every user of one of his detectors is that each place searched be left in a *better* condition than it was found. Thousands of individuals and organizations have adopted this formal Metal Detector Operators Code of Ethics:

- I will respect private and public property, all historical and archaeological sites and will do no metal detecting on these lands without proper permission.

- I will keep informed on and obey all laws, regulations and rules governing federal, state and local public lands.

- I will aid law enforcement officials whenever possible.

- I will cause no willful damage to property of any kind, including fences, signs and buildings and will always fill holes I dig.

**WARNING!**

Any metal detector may discover underground power lines, explosives or other items which when struck could cause personal injury. When searching for treasure with your Garrett Master Deepseeker GTI 2000, observe these precautions:

- Do not hunt in an area where you believe there may be shallowly buried underground electric lines or pipes.

- Do not hunt in a military zone where bombs or other explosives may be buried.

- Avoid striking any line known to be or suspected to be carrying electrical power.

- Do not disturb any pipeline, particularly if it could be carrying flammable gas or liquid.

- Use reasonable caution in digging toward any target, particularly in areas where you are uncertain of underground conditions.

© 1997 Garrett Metal Detectors  
All rights reserved

**Garrett Metal Detectors**  
1881 W. State Street  
Garland, TX 75042 U.S.A.  
(972) 494-6151

1524200/598