

Treasuremaster

P.I. 2000

Underwater Metal Detector

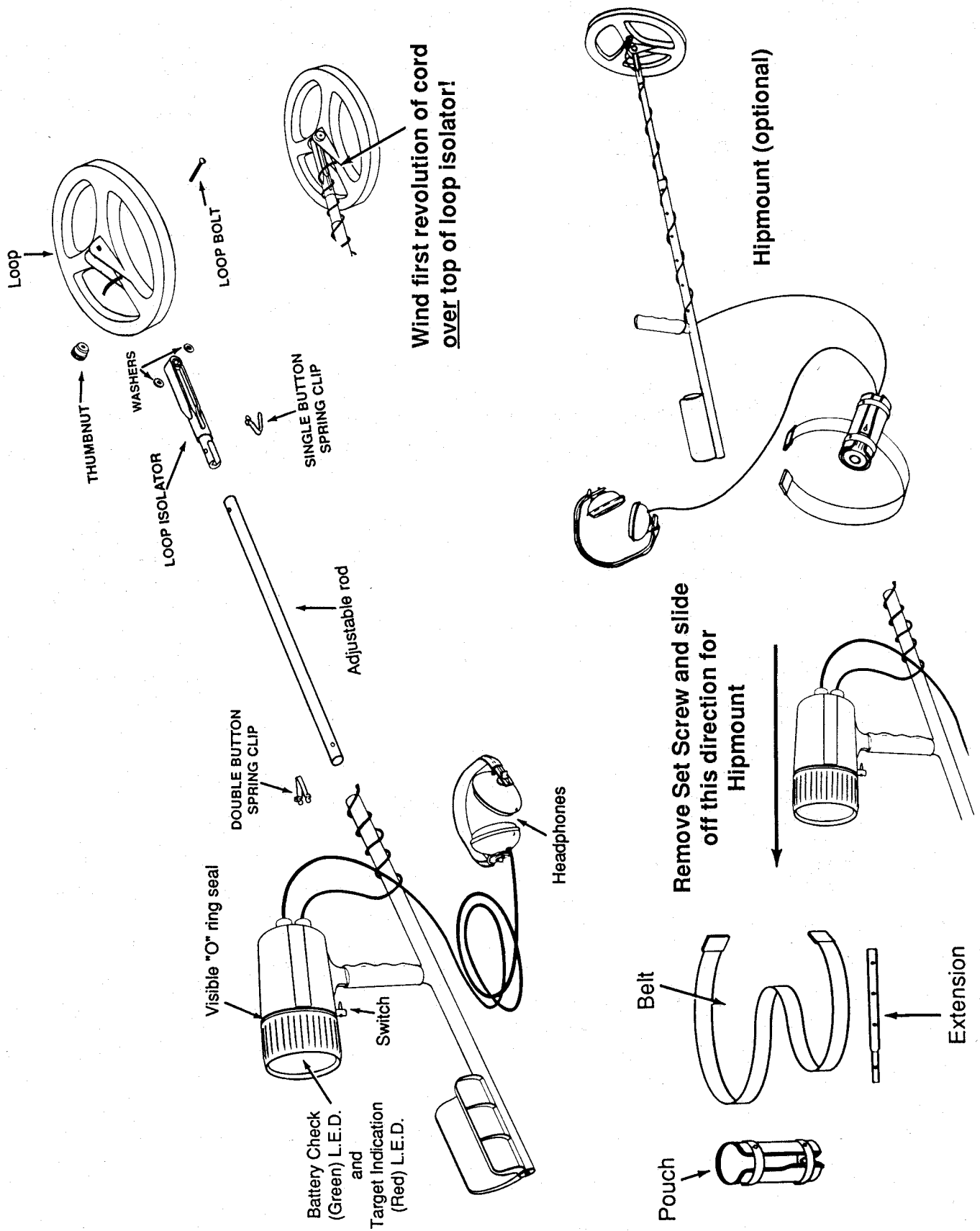
Operating Instructions



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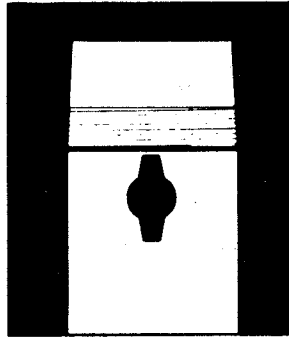
PARTS IDENTIFICATION AND ASSEMBLY



TUNING INSTRUCTIONS

1. Assemble P.I. 2000 as shown under PARTS IDENTIFICATION AND ASSEMBLY. This instrument may be used as a handheld or hipmount based on your personal preference.
2. Remove the clear plastic cover of the control box by rotating it counterclockwise.
3. Connect the battery lead to the battery pack and replace the clear cover, rotating it clockwise until it is firmly secure.
4. Set the adjustable rod to the length you find most convenient to use and wind excess cable around rod as shown under PARTS IDENTIFICATION AND ASSEMBLY.
5. Place the HEADPHONES on your head assuring that the cable is neither tangled nor in your way.
6. Place the loop flat on the ground or sand as it will be during normal searching and rotate the switch located under the control box slowly in the clockwise direction.
7. The first position tests battery strength. You should see a green light through the clear cover of the control box, if not, replace the batteries.
8. The second position tunes for the salt and/or mineralization of the area. Wait a few seconds before continuing.
9. The third position is operate and you are now ready to search.
10. You should hear a slight background hum or threshold.
11. Sweep the loop smoothly and evenly from side to side slightly overlapping each pass.
12. An increase in the background or threshold tone and a red light glowing inside the clear cover indicates a metal target.
13. To pinpoint a targets precise location "X" the loop over the target. The loudest sound indicates target center. If the target still seems large "X" the target with the loop held slightly higher from the ground/sand.
14. For more information please read the following explanations.

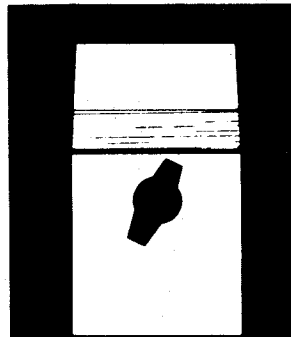
EXPLANATION OF CONTROL POSITIONS



OFF

Both L.E.D.'s off. Unit turned off.

1. The **OFF** position, control fully counterclockwise, when the P.I. 2000 is not in use.
 - a. It is advisable to disconnect and remove the batteries from the instrument during storage.
 - b. Store instrument in a cool dry place with clear plastic case cover loose.
 - c. Make sure control is in OFF position when not in use.

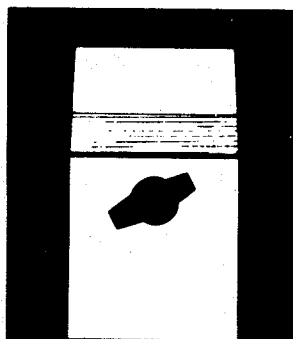


BATTERY CHECK

Red L.E.D. will flash. Green L.E.D. will illuminate if batteries are in good condition.

2. The second position tests the battery strength.
 - a. The Red L.E.D. light will flash momentarily then fade.
 - b. The Green L.E.D. light should continue to shine brightly if the batteries are good.
 - c. If the Green L.E.D. light doesn't shine, replace batteries.

EXPLANATION OF CONTROL POSITIONS continued. . .

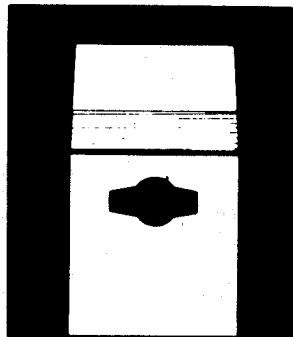


AUTO TUNE

In this position the detector will automatically retune so that the audio is at a level which lets the detector operate at its maximum sensitivity.

3. The third position **TUNE** is used in four different ways:
 - a. When the loop is held stationary, flat on the ground/sand, the TUNE position compensates for mineralization and/or salt content of the area to be searched.
 1. Switch to TUNE position momentarily with loop on ground then switch to OPERATE.
 - b. Once in OPERATE, as the loop is swept, changes in mineralization and/or salt can cause the threshold (background tone) to steadily increase or decrease in which case the operator should switch back to the TUNE position holding loop flat on the ground/sand then back to operate.
 - c. Some areas are very inconsistent in the content of mineralization/salt. For such areas rather than continually switching back to TUNE, just leave the control in the TUNE position and search as normal. The loop must always be in motion when searching in this manner. A slow sweep from side to side will ensure that no targets will be tuned out.
 - d. This TUNE position may also be used to aid pinpointing. Once a target is detected switch to TUNE and slowly "X" target several times. Loudest volume indicates target center.

EXPLANATION OF CONTROL POSITIONS continued . . .



OPERATE POSITION

The detector is ready for use.

4. The fourth and final position is **OPERATE**.
 - a. You should hear a faint continuous hum, (threshold).
 - b. Sweep the loop from side to side slightly overlapping each pass.
 - c. Increases in the threshold in most cases indicate a metal target. "X" the loop over the target to determine its center (pinpoint). The loudest volume indicates target center. If the center isn't obvious raise the loop slightly higher and again "X" the target listening for the loudest volume.
 - d. Decreases or increases in threshold that seem to blanket the ground/sand continuously indicate changing mineralization. If decrease or increase persists switch back to the TUNE position momentarily, holding the loop flat on the ground then switch back to operate and continue searching.
 - e. If decreases or increases in threshold make searching difficult, switch and leave control in TUNE position and continue searching. When operating in this manner the loop must always be in motion. A slow sweep from side to side will ensure that no targets will be tuned out.

SEARCHING

1. DETECTION

- a. The P.I. 2000 is designed to respond to all types of metals which includes, but is not limited to, iron, tin, aluminum, lead, zinc, copper, nickel, silver, gold, platinum, and their alloys.
- b. The P.I. 2000 will not detect non-metallic substances such as uranium, diamonds or other such gem stones.
- c. Depth of detection will vary with the type of metal, its alloy, size, shape, and how long its been in the ground which causes a chemical reaction (halo effect) between it and the surrounding soil.
- d. The P.I. 2000 is designed to respond to coin size and larger targets.

2. DIGGING

- a. Underwater it is advisable to wear extra weights, as the easiest method of digging is to use a rapid fanning motion with your hand to remove sand and silt.
- b. Shallow water and beach digging is best completed with a sand scoop which acts like a sieve to separate the sand and silt from the target. Check with your dealer regarding sand scoops.
- c. There are many digging tools available from your dealer made for rocky hard ground or clay.

3. MINERALIZATION

- a. If when searching an area your instrument detects one particular rock, we would suggest you examine it carefully as it could have a valuable ring or coin encrusted inside or be a valuable meteorite.
- b. If your instrument detects many rocks in an area you are searching, the rocks probably have a very high mineral content, either:
 1. Sweep the loop slightly higher.
 2. Switch to TUNE with the loop held over one of these rocks then back to OPERATE.
 3. Switch to TUNE and leave the control in that position.

4. SECURING THE DETECTOR

- a. The P.I. 2000 is slightly buoyant, so it is advisable to secure the detector with a lanyard (small rope) to the diver, so that the diver can leave his hands free for digging up targets.

ADVANCED TECHNIQUES

1. A nail or length of wire will sometimes produce a double or single reading, depending upon whether the loop is passed across it lengthwise or across its width. Therefore, it is worthwhile to sweep targets from several directions. Coins will always produce one reading, regardless of sweep direction.
2. Whether working the surf, an old swim hole on a river, or any other body of water it is important to consider the incredibly powerful force the water action has over the sand, silt, gravel and valuables.
 - a. Many of the characteristics that apply to prospecting for natural gold apply to beach and surf hunting as well.
 - b. As an example, rings and coins are heavier than sand. The tide washing back and forth over the beach acts like a big gold pan circulating the sand and accumulating the heavier material together.
 - c. The results of this action is a narrow band of coins and rings at a certain spot in the surf. The trouble is this band is constantly changing.
 - d. Experienced operators will attempt to locate this band and once several rings or coins are located will continue searching parallel to the shore in order to take advantage of the waters sluicing action.
 - e. As the water circulates the sand, coins and rings often become trapped by natural obstructions like logs, boulders and other material. Just like gold gets trapped behind boulders and rock formations in a river. Check around all visible obstructions.
 - f. After a big storm is the best time to search the ocean beaches, as much sand has circulated and many rings and coins that were previously too deep come near the surface.

CARE OF YOUR DETECTOR

1. Like all diving equipment, the detector should be rinsed with freshwater after use in saltwater.
 - a. Saltwater is very corrosive.
2. Whenever removing the clear plastic cover to change the batteries make sure the "O" ring is free of dirt , sand etc. and that it is covered with a light coating of silicon grease.
 - a. Recoat "O" ring with silicon grease often.
 - b. Inspect "O" ring and replace it if damaged.
3. Protect your instrument from extreme temperatures.
 - a. If left in the car on a hot day cover it to protect it from prolonged exposure to direct sunlight and crack the window slightly.
 - b. Avoid prolonged exposure to sub-zero temperatures.
4. Make sure the instrument is OFF when not in use.
5. During periods of prolonged storage remove the batteries and leave the clear plastic cover loose. Store in a cool, dry place.
6. If traveling and expecting large variations in altitude such as on an airplane or traveling through mountain passes make sure clear plastic cover is loose so as to allow equalization of pressure.
7. **SILICA GEL BAG**

The detector contains a silica gel bag to protect the circuit from moisture which may enter the instrument through condensation or when changing the batteries.

 - a. Periodically dry out this bag in a warm oven in which the maximum temperature must not exceed 120° C 248° F.
 - b. This bag is located in the battery compartment, behind the first foam pad.

CARE OF YOUR DETECTOR continued . . .

8. If the worst happens and your control box fills with saltwater, the following steps will avoid further problems.
 - a. Immediately disconnect and remove the battery pack, all foam layers, and silica gel bag.
 - b. Flush the inside of your control box, including the circuit board repeatedly with fresh tap water to remove all traces of saltwater.
 - c. Rinse the foam layers and gel bag and allow to dry.
 - d. Remove the batteries from the battery pack and rinse the pack. Discard the batteries.
 - e. Allow all components to completely dry.
 - f. Inspect the "O" ring to see if it was the cause of the leak, if so replace and regrease.
 - g. Re-assemble the instrument with new batteries, often it will work fine.
 - h. If no obvious reason is found for the leak or if the unit is not operating, at this point, return the instrument for servicing.
 - i. These steps will avoid extensive saltwater corrosion. Extensive saltwater corrosion is considered neglect and is not covered by the warranty.

AUTHORIZED WHITE'S SERVICE CENTERS



1. White's Electronics, Inc.
 1011 Pleasant Valley Rd.
 Sweet Home, OR 97386
 (503) 367-6121
 FAX (503) 367-2968

2. KOCI Detector Sales/Service
 426 W. 2nd St.
 Hastings, NE 68901
 (402) 463-4705

3. Electronic Exploration
 575 W. Harrison Rd.
 Lombard, IL 60148
 (708) 620-0618
 FAX (708) 620-1005

4. Geo-Quest
 106 U.S. Hwy. 46
 Saddlebrook, NJ 07662
 (201) 772-7443

5. Centreville Electronics
 13860B Braddock Rd.
 Centreville, VA 22020
 (703) 631-0202

6. OVERSEAS
 White's Electronics (UK) LTD
 13 Harbour Road
 Inverness IV1 1RY Scotland
 Phone: 0463-223456
 FAX: 0114-463-224048

A NATIONAL SERVICE PROGRAM

THE SERIAL NUMBER IS ON THE SILVER TAG INSIDE THE BATTERY COMPARTMENT.

THE CODE NUMBER IS ON THE WHITE TAG.

White's Electronics has always been concerned with the absolute quality of its mineral/metal detectors. Service after-the-sale is also of equal importance. In an effort to further the quality of service to our customers, White's reorganized its warranty service program significantly. Since January 1982, there have been ten factory authorized National Warranty Service Centers located regionally around the continental U.S.. These Service Centers are identical to the Factory Service Center in Sweet Home, Oregon. In order to ensure you will get the finest service possible for your detector, the technicians in each National Warranty Service Center are Factory trained and given on-going training for new products and improved service techniques. They can also repair your out of warranty instruments with efficiency and timeliness.

Simply return the detector to the dealer where you purchased the unit. The unit must be accompanied by a completed service coupon provided by your dealer. You must provide proof of date of purchase before the unit is shipped.

If the unit has failed within the first 90 days of purchase, shipping will be prepaid.

If the unit fails after the first 90-day period, the customer is responsible for shipping costs. Please also include \$5.00 for return postage, handling and insurance.

Any repair work performed by other than a White's National Warranty Service Center will automatically void the warranty.

If a problem occurs with your metal detector, first contact the White's dealer who sold it to you. In many cases your dealer can solve the problem. If not, the dealer will have your detector repaired under the Warranty Program. All of White's National Service Centers, located throughout the country, are owned and operated by factory trained technicians. These centers are fully equipped and the personnel fully trained with on-going programs at White's in order to service your mineral/metal detector. With this program, the average repair time has actually been reduced from weeks to days!

**For the Name and Location of Your Nearest White's Dealer,
CALL: TOLL-FREE 1-800-547-6911**

WHITE'S ELECTRONICS LIMITED WARRANTY

If within one year (12 months) from the original date of purchase your White's detector fails 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 to the dealer where you purchased it. The unit must be accompanied by a completed service coupon provided by your dealer. You must provide proof of date of purchase before the unit is shipped.

If the unit has failed within the first 90 days of purchase, shipping will be prepaid.

If the unit fails after the first 90-day period, the customer is responsible for shipping costs. Please also include \$5.00 for return postage, handling and insurance.

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

The warranty is not transferable. Nor is it valid unless the Warranty Registration Card 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 caused by accident, misuse, neglect, alterations, modifications, 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 manufacture nor the retailer shall be liable for any incidental or consequential damages resulting from defects or failures 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.

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