



# GemOro AuRACLE™

ELECTRONIC GOLD  
& PLATINUM TESTER  
Model AGT1 Deluxe Kit  
*EASY OPERATION GUIDE  
& OWNERS MANUAL*



Congratulations on your purchase of the AuRACLE AGT1 gold and platinum tester by GemOro Superior Instruments, the most trusted name in testing instrumentation for the jewelry industry.

**PLEASE BE CERTAIN TO READ THE ENTIRE EASY OPERATION GUIDE AND OWNERS MANUAL BELOW BEFORE USING YOUR GEMORO AURACLE AGT1.**

## GemOro AuRACLE™ AGT1 Gold & Platinum Tester **EASY OPERATION GUIDE**

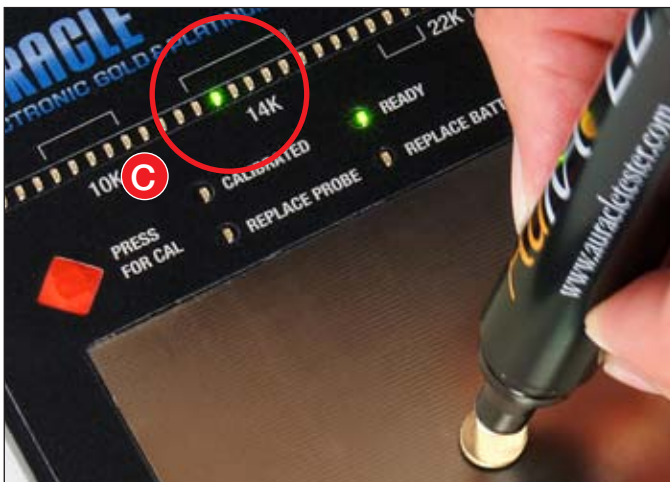
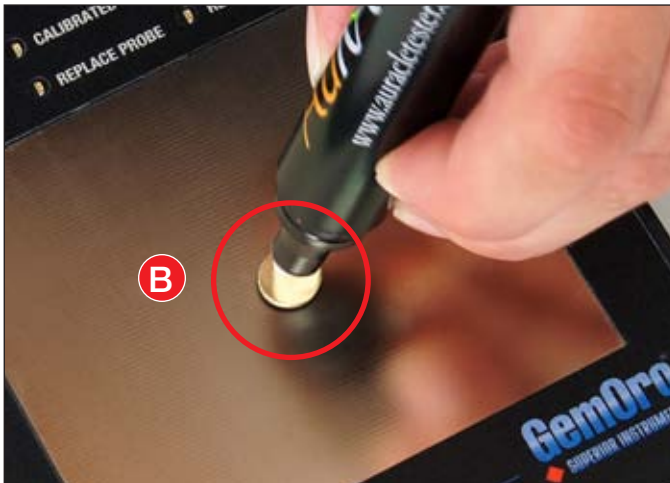
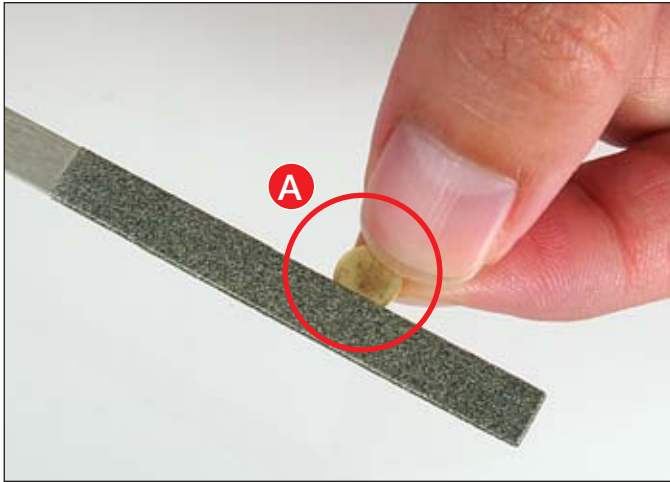
*The AGT1 **MUST** be used while following the below easy steps and recommendations to get accurate test results.*

### **STEP 1: AGT1 POWER UP**

After the batteries are installed and the pen probe is fully plugged into the unit, turn on the AGT1 by pushing the switch to BAT if batteries are installed or AC if the AC adaptor is installed, depending on which power option you wish to use. The AGT1 will then go through its self-check boot up sequence (flashing LED bar graph and indicators). Once the lights stop flashing the READY light and NA light at the far right of the bar graph will remain on.

### **STEP 2: CHECK PEN PROBE & ELECTRICALLY CHARGE IT FOR USE**

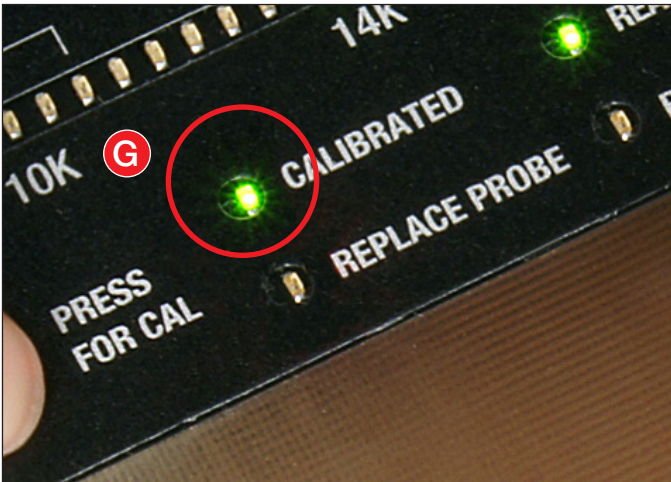
Remove the pen probe cap, then dab the pen probe's felt tip on a clean, dry paper towel to clean it and absorb any excess pen probe solution, leaving the pen probe's felt tip the consistency of a normal felt tip pen or marker. Note that if the solution drips from the pen probe's felt tip and simultaneously touches both the gold or platinum and the testing plate it will not work. File a small area on the surface of the 14K yellow gold calibration piece **A** and rest it on the testing plate with the filed area facing up. Check that the pen probe is working by holding it upright at an approximate 90° angle and gently touching the very end of the pen probe's felt tip to the filed area of the 14K yellow gold calibration piece **B**. Repeat this process 3 times and wait for the reading to settle each time. By repeatedly touching the 14K yellow gold calibration piece it is electrically charging the pen probe for use, which is a vital part of the start up process. The LEDs on the bar graph will react by climbing upward or downward. At this point the pen probe is charging and note that it is not important where the LED indicator settles **C**. A distinct calibration point on the LED bar graph will be found only in the very center of the 14K range in the calibration process as outlined in STEP 3 below.



### STEP 3: CALIBRATION PROCESS

- Always charge the pen probe as described in STEP 2 and calibrate it after each time it is turned on. Recalibrate it as necessary while in use. It is recommended to use the AC adaptor and keep the AGT1 turned on throughout the day.
- **Use only common .583 to .585 14K YELLOW GOLD that is non-plated/non-flashed to calibrate the AGT1.** Be aware that 14K yellow gold with a high silver content above 7% will not provide a proper calibration. Also, 14K yellow gold with an uncommon mixture of alloys may not provide a proper calibration. Using the optional AGT1 14K Yellow Gold Calibration Disc is recommended.
- Lightly yet firmly always only touch the very end of the pen probe's felt tip to the filed area on the calibration piece at an approximate 90° angle to the gold **D** and wait until the reading settles **E**.
- Press the CALIBRATION button once **F** until the indicator light labeled CALIBRATED lights up **G**, and the LED light in the very center of the 14K range simultaneously lights up **H**. Then wait an additional 2 to 3 seconds after the CALIBRATED light turns off before removing the pen probe's felt tip to make certain the LED in the very center of the 14K range remains lit up and the reading does not drift by even one LED within its range. This may require 2 to 3 calibration attempts before the calibration locks into place in the very center of the 14K range and remains there. If the very center LED light in the 14K range doesn't light up and remain that way or if it drifts to another position within the 14K range, it is not calibrated and will not test correctly.
- Once the calibration process has been successfully completed, remove the pen probe's felt tip from the calibration piece.





#### STEP 4: RE-CHECK READINESS

- Touch the pen probe's felt tip to the gold again **I** to make sure that your calibration piece now tests correctly in the very center of the 14K range **J**. The AGT1 is now calibrated and ready to use.
- If it does not test correctly when rechecking, dab the pen probe's felt tip on a clean, dry paper towel and repeat STEP 3. Trying an alternate piece of filed 14K yellow gold may also resolve the problem.

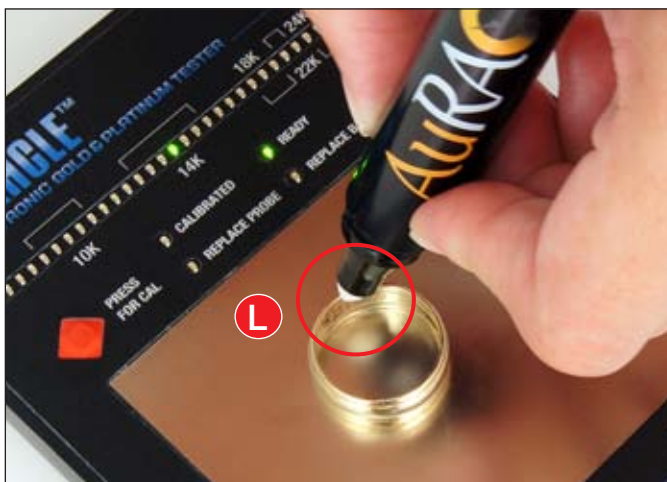
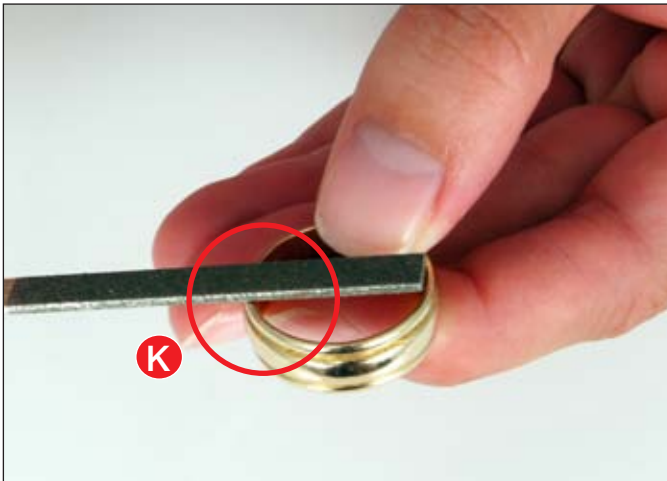


#### STEP 5: TESTING GOLD AND PLATINUM

- To test gold and platinum, always first file a small area on the surface of the metal **K** and rest it on the testing plate with the filed area facing up and be prepared to test that area.
- Touch and hold the very end of the pen probe's felt tip to the filed area on the metal **L** until the reading settles. Only touch the very end of the pen probe's felt tip to the gold or platinum being tested. BE CERTAIN NOT TOUCH THE

SIDE OF THE PEN PROBE'S FELT TIP WHEN TESTING GOLD OR THE TEST RESULTS WILL RISE TO A HIGHER KARAT THAN IT IS. Due to the various shapes of jewelry it may be beneficial to hold the jewelry on the testing plate with your fingers to stabilize it and make certain you are making good contact with the pen probe's felt tip and the metal during the test. Once it settles, check the reading for the test results and then wait no more than 2 to 3 seconds before removing the pen probe's felt tip from the metal. By waiting longer than 2 to 3 seconds the LEDs may continue to rise to an incorrect reading. Depending on the alloys and percentages of each used to make the specific karat gold, the test results will vary within the range of that karat. Be aware that platinum will test as PT or alternate between PT and the NA on the far right of the LED bar graph.

- If inconsistent test results are experienced always dab the pen probe's felt tip on a clean, dry paper towel and as needed recalibrate the AGT1 while in use.
- Always replace the pen probe's cap until it snaps on when not in use to avoid contamination and keep the pen probe's felt tip from drying out.



The PATENTED AGT1 is an accurate testing device meant for the purposes of quickly and easily purchasing standard karat gold as well as platinum. It has been designed with the needs of a gold and platinum buyer in mind. Although it is considered the most accurate electronic tester in its class, it is not meant to be used as a tool for rigorous scientific assay. There are many alloys used to create gold jewelry of the various colors (white, yellow, green and red). As the vast majority of gold being purchased is 10K, 14K and 18K, your AGT1 has been designed to primarily focus on these ranges, while still providing reasonably good, yet at times inconsistent testing results in the 22K and to a lesser degree in the 24K ranges.

As the gold content of a piece of gold moves closer to pure, the presence of other metals becomes smaller and the electro-chemical reaction has less contaminants to detect. As such, gold higher than 18K may test inconsistently among the higher karat ranges. It is important to note that over 99% of all gold stamped or cast of this quality is marked or stamped or backed by the mint that has produced it. Coins made of high karat gold are almost exclusively produced by government mints and there are many reference sources that one can turn to for their identification. From a practical perspective the gold of this purity is easy to identify by its rich color and you will observe that it is very heavy in the hand. All high karat gold will test with reasonable accuracy above the 18K+ ranges of your AGT1, but it is best to rely on the visual karat marks, reference sources and common sense.

## ***TROUBLESHOOTING & HELPFUL TIPS***

**ELECTRICALLY CHARGE THE PEN PROBE, CORRECT FOR INCONSISTENT READINGS AND RECALIBRATE:** Each time the AGT1 is turned on **YOU MUST ELECTRICALLY CHARGE THE PEN PROBE (STEP 2) PRIOR TO CALIBRATING.** The AGT1 must then always be calibrated before using (STEP 3). It is also necessary to recalibrate the AGT1 as needed and dab the pen probe's felt tip on a clean, dry paper towel if inconsistent results are experienced. Recognize that the chemistry inside the pen probe is constantly changing over time as it is exposed to gold and other metals, contaminants, the environment and dirt. By recalibrating the AGT1 periodically and cleaning the pen probe's felt tip as needed, this allows the AGT1 to adjust itself to the chemistry in the pen probe at that time. Since the AGT1 can be calibrated in only a matter of seconds or the pen probe's felt tip may be quickly and easily cleaned if needed, these simple steps should be a regular part of problem solving and your testing process.

**REPLACE PROBE LIGHT ON?: RECALIBRATION WILL TYPICALLY FIX THIS PROBLEM SINCE THIS INDICATORS DUAL FUNCTION IS TO ALERT YOU THAT THE AGT1 IS OUT OF CALIBRATION.** Make sure the pen probe's



felt tip is clean by dabbing it with a clean, dry paper towel and then follow the calibration STEP 3 of the Easy Operation Guide. If the AGT1 will not calibrate, the pen probe may be defective, spent or in need of replacement. Please note that it is recommended that for best results that you should consider replacing the pen probe if it is worn or it becomes excessively dirty from repeated exposure to costume jewelry, fake gold or other contaminants. A pen probe in this condition will begin to deliver erratic readings and these are good indicators that it should be replaced even without the REPLACE PROBE light illuminating.

### **REGULAR CLEANING OF THE PEN PROBE'S FELT TIP AND TESTING**

**PLATE:** Always wipe off the gold particles and other metal particles coming from costume, gold-plated or gold-filled jewelry that may remain on the pen probe's felt tip to avoid contamination. The metal particles remaining on the pen probe's felt tip that are naturally rubbed off during the testing process, and especially metal filings from other karat gold, copper, brass or other base metals that have been filed and remain on the pen probe's felt tip could potentially cause incorrect test results. Therefore, regular cleaning when needed is important.

The pen probe contains a special saline solution that is safe, non-acidic, and non-toxic. Remove salt crystal buildup by dabbing the pen probe's felt tip with a clean and dry paper towel. Salt crystal buildup is a natural occurrence with this device. Using a warm, moist (from water only) paper towel, wipe off any salt crystal buildup from the 14K yellow gold calibration piece and the AGT1 testing plate area only. **Be aware that the pen probe solution will leave a stain or in some instances it may ultimately over time produce corrosion on the testing plate if not wiped off immediately after it makes contact, so cleaning it right after this occurs is advised.** While this staining or corrosion may occur, it will affect the testing plates cosmetic appearance only and not impact the accuracy of the AGT1. Remember to dry both the 14K yellow gold calibration piece and AGT1 testing plate thoroughly. **Never expose the pen probe's felt tip to water or other chemicals.** Always replace the pen probe cap until it snaps on when not in use.

**FILE ALL METAL BEFORE TESTING AND CLEAN THE FILE:** Gold, platinum, gold-plated, gold-filled, tungsten and stainless steel must be filed below the surface before testing to produce accurate results. Do not file the metal over the AGT1 testing plate, as particles of the metal being filed will fall on it and potentially have an effect on the test results. This is a surface tester and the tester will read gold-plated and gold-filled as solid gold if not filed to the base metal. **Always wipe off the file.** Be aware that gold and other metal particles on the file that came from other karat gold, gold-plated or gold-filled jewelry that has also been filed with it could cause contamination from the metal to spread to the next piece you are testing if it is not regularly cleaned off.

**NO MOVEMENT OF LEDs WHEN TESTING:** This is an indication that either the pen probe isn't plugged into the AGT1 all the way or that the material you are testing is non-conductive (example - plastic).

**TEST RESULTS ARE TOO HIGH:** This is an indication that the AGT1 is out of calibration, or perhaps there is a presence of a high silver content, palladium or rhodium or possibly the side of the pen probe's felt tip is touching the gold while being used incorrectly by mistake.

**IMPORTANT NOTE:** If the LED does not light up in the very center of the 14K range, this indicates that the calibration was not successful and the AGT1 will not provide accurate test results. If repeated attempts to calibrate the AGT1 are unsuccessful, it is likely that your calibration piece may have a higher karat flashing on it or something unusual about its composition that makes the reading inconsistent. If this occurs, an alternate calibration piece should be tried. Please never hesitate to call the GemOro AGT1 helpline if needed and we will gladly assist you to quickly troubleshoot and fix any problems you may encounter.

## ***OTHER PRECIOUS METALS***

**TUNGSTEN AND STAINLESS STEEL:** Be aware that if tungsten or stainless steel isn't filed first it may test in the high karat range or even as platinum, but if it is filed it will then test as NA. **ALWAYS FILE IT FIRST!**

**RHODIUM:** Be aware that rhodium will react as platinum on the AGT1. It is rarely used as solid finished jewelry, but instead is commonly used as a plating material to make white gold or platinum appear brighter or whiter. If white gold is plated with rhodium and filed, it will then test accurately or possibly as a higher karat than marked since it is taking an average reading of the two metals. **ALWAYS FILE IT FIRST!** If white gold tests higher than marked, it is probably rhodium plated.

**PALLADIUM:** Be aware that pure palladium will test somewhere between 18K and 24K on the AGT1. In the case of palladium being mixed with white gold it will drive the reading up to a higher karat than it is. If you see a reading on white gold that is higher than marked, it may very well be mixed with palladium.

**WHITE GOLD WITH HIGH NICKEL OR HIGH SILVER CONTENT:** Be aware that white gold with high nickel content may test as a lower karat than marked. While it could be under karat gold in this instance, it is likely the karat marked. White gold commonly has 4% to 7% silver content. If white gold has high silver content above 7% it may test as a slightly higher karat than marked, while reacting with a slow and consistent rise in the reading as a telltale sign.

# GemOro AuRACLE™ AGT1

## Owners Manual

### **CONDITIONS FOR IDEAL OPERATION:**

The AuRACLE AGT1 should ideally be used in the following environmental conditions. By not following these instructions you could possibly risk compromising the accuracy of the test.

- Use at Room Temperature: The AGT1 is a workhorse and is capable of performing well in most any normal or professional environment, with a room temperature of approximately 65-75F being the best. While it has proven to work just fine in temperatures as high as 100F, ideally it is suggested to avoid using the AGT1 in extreme temperatures so you may always obtain the best results.
- Test Dry Metal: The metal being tested must be dry. If the surface of the metal is wet or has any type of surface moisture or chemical contaminates it may not test correctly.
- Test Clean Metal: The metal being tested must be clean of any obvious dirt or chemical contaminants that might interfere with the electro-chemical reaction between the pen probe and the metal. The tester may be used otherwise with minimal concern for normal or light surface dirt.

### **AuRACLE AGT1 ADVANCED FEATURES:**

- Assists to identify the karat of 6K-24K yellow, white, green and pink gold with a non destructive test.
- If simple steps are followed, also assists to identify non-gold, gold plate and gold-filled material as NA.
- Assists to identify platinum.
- Test results are indicated by an LED bar graph.
- Tests most any size piece of gold and platinum jewelry that has a larger surface area than the end of the pen probe's felt tip.
- Immediate test results may be achieved with no waiting between tests.
- Replaceable pen probe provides up to approximately 5000 tests if used properly.
- Pen probe uses no messy gel, no staining chemicals and no dangerous acid.
- LED indicator for battery and pen probe replacement/out of calibration warning.
- Easy and fast push button calibration. Common 14K yellow gold that is .583 to .585 is required to perform the AGT1 calibration.
- Portable with both AC and battery powered capability.
- Includes: AGT1, pen probe, file, 9V alkaline battery, AC adaptor, rubberized carrying case with handle and built-in storage compartments for 10K, 14K, and 18K gold samples (not included).
- Made in Singapore
- One year limited factory warranty - ☺☺



**AuRACLE AGT1 Diagram:**

1. LED karat value, platinum & not gold “NA” indicator.
2. Calibration button.
3. Replace battery indicator.
4. Replace probe / Out of calibration indicator.
5. Calibrated indicator.
6. System ready indicator.
7. Power switch - Battery & external AC.
8. AC receptacle.
9. Testing plate.
10. Pen probe.
11. Pen probe protective cap.
12. Pen probe male connection jack.
13. Battery compartment.
14. AC Adaptor
15. File

## **SPECIFICATIONS:**

- Working Voltage: DC 9V (1) × 9V alkaline battery (approximately 11.5 hours of continuous use).
- Warm-Up Stabilization Time: Approximately 3 seconds.
- Ideal Working Temperature: Room temperature of 65F to 75F is best, although at higher and lower temperatures it may work very well.
- Ideal Air Relative Humidity: 25% to 50%. As with any electronics, do not use the AGT1 in or around water.

## **CAUTION:**

Disassembling the AGT1 other than opening the battery compartment door for battery replacement will void the warranty.

## **VIDEO OPERATIONAL INSTRUCTIONS:**

Please go to [www.auracletester.com](http://www.auracletester.com) or [www.gemoroproducts.com](http://www.gemoroproducts.com)

## **BASIC OPERATION INSTRUCTIONS:**

1. Install the 9V alkaline battery as follows. First, always be mindful that the exposed LEDs on the AGT1 are fragile and can be broken if it is not handled with care. Open the battery compartment door located on the bottom side of the AGT1 by pressing the locking mechanism on the battery compartment door with your index finger and then pry the door off. With the AGT1 in the OFF power position, insert the supplied 9V alkaline battery into the battery compartment as indicated with the direction of the positive (+) and negative (-) polarity correctly positioned in the battery holder. Properly insert the wiring for the battery holder back into the compartment so that the door can be placed back on without it bulging. Replace the battery compartment door. To conserve the battery life, be certain to move the power switch to the OFF position when not in use. **Please be aware that by incorrectly inserting the battery by force into the battery holder the wrong way with the polarity reversed, while the power switch is in the BAT position, you will potentially damage the AGT1 and void its warranty.**
2. To turn on the AGT1, move the power switch located on the right side of the tester to BAT if using batteries or to AC if using the AC adaptor. The LED labeled READY will then become illuminated when the tester is ready to be calibrated and then used.
3. Take the pen probe and plug its male jack into its corresponding female receptacle located on the right side of the AGT1. Now remove the pen probe's cap. With fresh pen probes, they are typically slightly overfilled to provide maximum usage and consequently, excess solution could come out when the pen probe is used. If this occurs, simply dab the pen probe's felt tip on a clean, dry paper towel a few times leaving the pen probe's felt tip the consistency of a normal felt tip pen or marker. Always reinstall the cap until it snaps closed when not in use.
4. Before initially using the AGT1 and each time it is turned on the pen probe must be charged and the AGT1 must be calibrated. To calibrate the AGT1

you must only use yellow gold that is precisely 14K and that has first been filed.

5. Always file the metal you are testing on a clean file before testing it and place it on the AGT1 testing plate with the filed area facing up.
6. Only touch the very end of the pen probe's felt tip to the metal being tested while holding it upright at an approximate 90° angle. Wait until the reading settles and then hold it there for no more than 2-3 seconds to confirm the testing results. NEVER touch the side of the pen probe's felt tip to the metal and be aware that if this is done it will produce a higher karat reading than it actually is. Also by holding the pen probe's felt tip on the metal being tested for longer than 2-3 seconds it could eventually raise the reading to a higher karat than it actually is.

### **USE COMMON SENSE BEFORE INTERPRETING THE TEST RESULTS.**

You should always follow some common sense guidelines before making your final determination of the karat or authenticity of the precious metal being tested. Please keep in mind that those misrepresenting fake jewelry as real can be extremely clever and will use many tricks to make you think it is real. Be aware that scam artists may allow you to test a real piece of gold jewelry and then while distracting you they will switch the piece for a fake.

### **SOME COMMON SENSE GUIDELINES:**

**GUIDELINE A.** Check the markings on the piece for a karat stamp (10K or .417, 14K or .585, 18K or .750, 22K or .916, 24K or .999, GF or gold-filled, GEP or gold electroplated, YGF or yellow gold-filled, RGP or rolled gold plated, etc.) and then if when tested the results indicate anything to the contrary, the metal should be suspect. Test results below the 10K range must be interpreted by the user and estimated whether it is 6K-9K. In the UK while 9K gold may be found, gold below this karat range is extremely rare, and the gold content is minimal. If the metal you are testing tests in a lower karat than you estimate as 9K or in a lower karat than is marked, it is advised to simply not buy it to avoid the risk.

**GUIDELINE B.** Be aware that any piece that tests as NA is not gold.

**GUIDELINE C.** Check the weight of the metal you are about to test and if it seems too light, while it could be hollow gold, it should be suspect as it is likely costume jewelry, gold-plated or gold-filled. Gold is a dense metal and has an associated greater weight than most other non-precious metals. Platinum is an even denser metal than gold, while weighing approximately 1/3 more than 18K gold.

**GUIDELINE D.** Check the color of the gold, and be aware that non-gold base metals are often flashed or gold-plated with 24K gold to enhance its color and consequently the gold color will look too yellow. Since 24K gold is a rich yellow color and this pure gold is very uncommon in jewelry, any rich yellow gold color

should be suspect. Look for tarnishing or variations in the color and finish of the jewelry as a sign of it being a fake.

**GUIDELINE E.** Check the clasp used on the jewelry. Costume jewelry often has a spring ring style clasp and this should be suspect. Karat jewelry more often than not will have a lobster style clasp. Do not test the clasp only as it is common for a karat gold clasp to be attached to a fake gold necklace or bracelet in an attempt to fool you.

**While these facts and common sense guidelines will prove to be very helpful when buying gold and platinum, they should not be your only tools to determine the authenticity of the jewelry in question.**

**WARRANTY:**

Your AGT1 features a **ONE YEAR LIMITED WARRANTY** against defects in materials and workmanship as determined by the factory. The pen probe is covered by a 30 day limited warranty against defects in materials and workmanship as determined by the factory. The pen probe is not covered against overuse, misuse and drying out due to the user not replacing the protective cap after use. The battery is not covered by this warranty. These warranties become effective from the date of original purchase after the purchaser fills out the **WARRANTY REGISTRATION FORM** at [www.gemoroproducts.com/warrantyregistration](http://www.gemoroproducts.com/warrantyregistration) within 30 days of its purchase. If this criteria is not followed, the AGT1 will automatically be covered by a **90 DAY LIMITED WARRANTY** from the date of your AGT1 purchase, as noted on the bill of sale (if supplied) or through the AGT1 serial number tracking system as interpreted by the factory. The purchaser shall incur the cost for return postage, insurance and handling for all warranty and non-warranty repairs and/or replacements. Warranty repairs and/or replacements will be shipped back to the customer FOB Destination to the location of the customer's choosing if located within the Continental United States (U.S.). Non-warranty repairs will be shipped back to the customer FOB Factory. Should the customer require the repair and/or replacement unit(s) to be shipped outside the Continental U.S., the customer will be required to pay any related shipping charges and any related taxes/duties for the respective destination country regardless of whether it is a warranty or non-warranty claim.



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