

****Updated calibration procedure for AGT-1 Plus (v1.01) only***

ADDENDUM TO INSTRUCTION MANUAL

Please replace the calibration instructions in your manual (STEP 3) with the new instructions 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.
- Press the Calibration button once. The CALIBRATED light will begin to flash. Lightly yet firmly, touch only 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. This must be done within fifteen seconds or the calibration sequence will abort and the meter will return to normal operation. During calibration try to remain as steady as possible. Once calibration is complete the CALIBRATED light will stop flashing and remain on for three seconds.
- Once calibrated, the LED light in the center of the 14K range should be illuminated. If it drifts slightly either up or down repeat the process until the center LED remains lit.
- 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.

GemOro AuRACLE™

AGT1 GOLD & PLATINUM TESTER

FAQ & Helpful Gold Testing Tips

(See Owner's Manual for comprehensive instructions)

TESTER START-UP

Warm-Up Time – For best results, allow a 2 minute warm-up time PRIOR to performing the initial calibration of the tester. If using the optional AC adaptor, after the AGT1 has warmed-up and been calibrated, you may keep the unit turned on with no fear of damaging the electronics and this will allow you to avoid the need for ongoing warm up time delays.

Excess Solution – Fresh pen probes may be slightly overfilled when first used and excess solution could come out during the testing process. Simply dab the pen probe tip on a dry paper towel a few times to remedy this.

Test Pen Probe – Prior to calibrating, touch and hold the probe pen tip to the gold testing area. If the LED's do not climb from right to left there may be a problem with the pen probe. If there is a problem with the pen probe replace it and repeat start-up process.

Calibration Requirement – Failure to use plumb 14K yellow gold to calibrate the AGT1 may illuminate the REPLACE PROBE light and consequently impact the accuracy of the tester. Always file the calibration gold and touch the pen probe to the filed spot. The 14K yellow gold calibration piece must be large enough so that the pen probe tip and solution inside it does not make contact with the testing plate or it will not calibrate properly. The recommended minimum size for the calibration piece is 10mm round. An approved GemOro 14K yellow gold calibration piece is available as an accessory (Item #2002).



TESTING METAL

Pen Probe To Gold Contact Pressure – It is sufficient to merely make contact with the metal and NOT necessary to apply much pressure.

Quickly Touch Gold And Then Remove Pen Probe – When testing gold, once the LED has stabilized and settled on a specific karat, remove the pen probe. If you hold the pen probe on the gold for more than a couple of seconds after it has settled on a karat it can then climb to a higher karat, especially in the higher karat ranges above 18K.

Only Touch Pen Probe Tip To Gold – When testing, only touch the pen probe tip to the metal in question. You may obtain a different karat reading if the side of the pen probe is touched.

Metal Must Be Clean And Dry – If the surface of the metal is wet or has visible dirt that could create a barrier between the pen probe and the metal, you should clean and dry the surface prior to testing for best results. Generally speaking most surface dirt will not interfere with the AGT1's ability to test properly.

Platinum Indication – While platinum will typically register at the LED's labeled PT, often times it will register next to it at the far right end of the spectrum. This is a normal reading for platinum, especially if the platinum has not been filed first before testing.

Always File Gold Before Testing – When buying unknown metals, always file it first to avoid being fooled. Remember, the AGT1 is a surface tester. For best results, and to avoid being fooled by plating, etc. it is critical that you first file down to the underlying metal in every sample being tested, and then test this area. Be aware that stainless steel will sometimes react as karat gold or platinum if not filed first.

Periodic Pen Probe Tip Cleaning – If the "replace probe" light illuminates or if the pen probe tip appears dirty or encrusted with a white residue, clean the pen probe tip by gently wiping it with a paper towel. It is normal for the pen probe tip to appear dirty after being used and for it to take on a slight grey color. Avoid testing pieces known to be gold plated to minimize buildup of contaminants on tip and to prolong useful life of the probe tip.

Periodic Re-Calibration – Always use plumb 14K YELLOW gold to calibrate the AGT1 and make sure you file the area of the calibration piece prior to performing this function and touch the pen probe tip to the filed area. Testing gold and gold-filled or base metals will cause slight chemical changes in the pen probe. To adjust for this chemical change, the calibration process is needed. To ensure accurate readings, recalibrate the unit from time to time and wipe the pen probe tip to clean it with a dry paper towel each time prior to recalibrating.

Effects of Alloys – When alloyed with gold, COPPER and NICKEL will drive readings downwards while PALLADIUM, PLATINUM and SILVER will drive readings upwards.

