

Gem Eye I Calibration

Tester calibration is one of the most important procedures to make sure that the tester can work properly. But before we calibrate, perform these steps to confirm if it is necessary to calibrate the device :

Step 1. Clean the probe tip (**Fig. 1.1**) as stated in the User's Manual page 18-19 cleaning the probe tip.

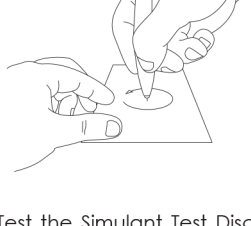


Fig. 1.1

Step 2. Test the Simulant Test Disc by pressing the probe pen onto it (**Fig. 2.1**). The indicator should rise and maintain in the "CAL" label. See User's manual page 16.

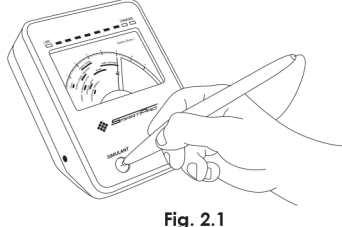


Fig. 2.1

Note: Make 3-5 tests or until the Simulant Test Disc has reached its normal temperature. Too hot or too cool may affect the test. The recommended testing temperature is 18°C - 27°C.

In pressing the probe pen onto the test disc, the pen should be at the right angle or perpendicular to the disc being tested.

Step 3. Get a piece of clear glass and place it on the flat area then check with the probe pen (**Fig. 3.1**) and see if the needle of Analog panel display has reached within the "Glass" bar.



Fig. 3.1

Step 4. Test the Diamond Test Disc by pressing the probe pen onto it (**Fig. 4.1**). The indicator should reach its highest point well within the Blue band of the panel display. See User's manual page 17. If one of the Steps 2-4 is failed, you can start to perform the proper calibration.

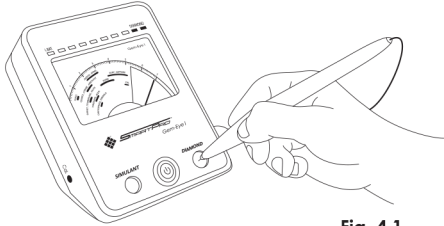


Fig. 4.1

Step 5. Remove the cover of the Cal. in the left side of the tester (**Fig. 5.1**).

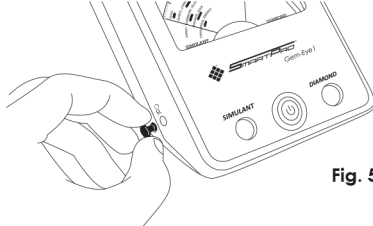


Fig. 5.1

Step 6. Press gently the probe pen onto the clear glass while adjusting the P1 potentiometer carefully using a small screwdriver until the needle of the panel display reached the center of the "Glass" bar (**Fig. 6.1**). Check this 3-5 times before proceeding to next step.

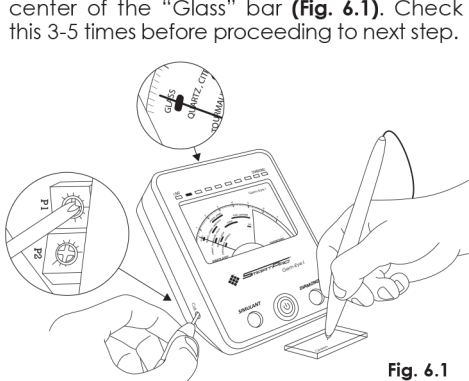


Fig. 6.1

Step 7. Press the probe pen onto the Simulant Test Disc while adjusting the P2 potentiometer carefully using a small screwdriver until the needle of the panel display reached the center of the "CAL" bar (**Fig. 7.1**). Check this 3-5 times before proceeding to next step.

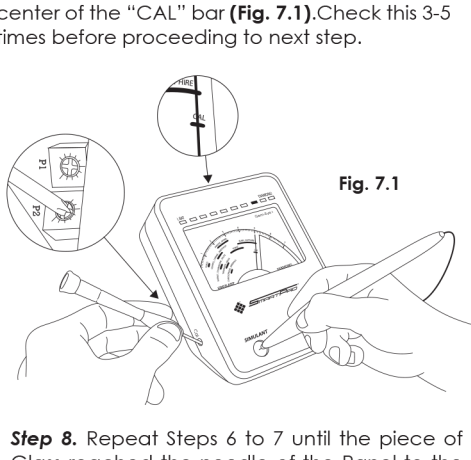


Fig. 7.1

Step 8. Repeat Steps 6 to 7 until the piece of Glass reached the needle of the Panel to the "Glass" bar and the Simulant Test Disc reached the "CAL" bar.

Do not try to open the tester so your warranty will not be voided. If you are still experience problem in testing after doing these steps of calibration, you may send an email to us to customer@smartproinstrument.com. Keep reading the User manual to check the steps on how to perform and read tests correctly as well as taking care of the Gem-Eye I tester. Thank you.

Calibration can be required if the device is transported or moved from table to table.