QUICKTEST: www.quicktest.co.uk

# PRESIDIUM GEM TESTERS, THERE ARE THREE MODELS AND THREE PROBES

Check these pages if you need to buy a new probe, or if the tester needs calibrating.

### PRESIDIUM STANDARD OLD VERSION. Our ref. gemtest-P. Presidium ref. PGT





- marked "Gem Tester"
- has just an analogue meter (on/off switch on front)
- the connector has six prongs (old-style probe)
- the two discs are marked Test Simulant and Test Diamond
- calibrating it is fiddly, scroll to bottom (online) or see last page (of printout) for an outline of what it involved, then see the manufacturer's <u>calibration instructions</u> (pdf).

## PRESIDIUM DUO OLD VERSION. Our ref. gemtest-duo. Presidium ref. PDT-S7





- marked "Duo Tester"
- looks very similar to the new model (see next page), check carefully to see which you have
- has an analogue meter and a digital meter (meter button on front as pictured)
- has the same 6-prong probe as the gemtest-P, above (old-style probe)
- the two discs are marked *Test Simulant* and *Test Diamond* calibrating it is fiddly, scroll to bottom (online) or see last page (of printout) for an idea of what's involved, *then* see the manufacturer's <u>calibration instructions</u> (pdf).

#### PRESIDIUM STANDARD NEW VERSION. Our ref. gemtest-P2. Presidium ref. PGT II





- new shape (if it looks like the one above, it's the new model)
- has just an analogue meter.
- the connector on the probe has five prongs inside a metal sleeve (new-style probe)

Presidium changed the electronics in this model to make it easier to calibrate:

- if the serial number is below 107180 (if you bought it from us, it was before 6 Oct 2020) calibrating it is fiddly, scroll to bottom (online) or see last page (on printout) for an idea of what's involved, see calibration instructions (video) they make it look so easy! or there is a poorly-written manufacturer's instruction sheet (pdf)
- if the serial number is above **107180**: (if you bought it from us, it was after 6 Oct 2020) calibrating it is easy, scroll to bottom (online) or see last page (of printout) for an idea of what's involved, or <u>see calibration instructions</u> (video).

## PRESIDIUM DUO NEW VERSION. Our ref. gemtest-duo-II. Presidium ref. PDT II





- looks very similar to the old model so check carefully to see if this is the model you have
- has an analogue meter and a digital meter (meter button on front as pictured)
- has "Duo Tester II" as the logo
- the two discs are marked Cal (1) and Glass (2)
- has the same 5-prong probe as the standard model, above (new-style probe)
  calibrating it is fiddly, scroll to bottom (online) or see last page (of printout) for an idea of
  what's involved,

#### PRESIDIUM PGI

Our ref. gemtest-pgi

Presidium ref. pgi



Just the one version, one probe and one method of calibration (easy). The only thing you need to know is that the 'calibration discs' are not built into the tester, they are packed separately in the box. If you lose them, you *will* have to <u>buy a replacement</u> (you *will* need this, all electronic measuring devices need calibrating every now and again). See <u>calibration instructions</u> (video).

## **BUYING A PROBE (all models)**

A new probe must be calibrated. If want us to do this for you, place your order, pay by card, don't forget to send us the tester. If all is successful we will take the money, if it not successful (i.e. the tester is faulty) either

- if you bought it from us and it's under guarantee we will send you a new tester
- if you bought it from us and it is not under guarantee, we will ask you what you want to do, if you want it returned as it is, we will not take the money from the card, we will not charge any postage.

or

• if you bought it from someone else, we will take just £6.50 from your card for return postage and we will send it back to you as it is. You must then sort it out with your supplier, we will not be able to give you any further advice or help (for full support please buy your testing equipment from us).

#### **CALIBRATION**

All electronic measuring devices need calibrating every now and again; all electronic devices will go out of calibration if bumped or dropped; all electronic devices are sensitive to temperature.

Presidium gem testers with the analogue meter *work* on 'thermal conductivity' - they are *especially* sensitive to temperature. They are calibrated in the factory at a room temperature of 22°C. From about 19°C downwards the readings gradually become too high, from about 26°C upwards, the readings gradually become too low. This is not a problem if you work indoors with heating in the winter and air conditioning in the summer – if not, you may wish to calibrate it in the winter if the temperature is generally below 18°C, and again in the summer if the temperature gets above 27°C.

You will also need to calibrate it if you get a new probe.

All models from late 2020 (see previous pages for details) are easy to calibrate, you can do it yourself. Earlier models (see previous pages) are very fiddly to calibrate, please read the following then decide if you want to do it yourself or send it back to us.

#### CALIBRATION, THE EASY METHOD

Place the probe on the "cal (1)" test-plate on the tester, in the hole marked "1" press the button with the tool provided, wait for it to beep. Then place the probe on the "glass" test-plate and wait for it to bleep.

#### CALIBRATION: THE FIDDLY METHOD

The manufacturers say that you should not attempt to calibrate it yourself. This is for two reasons. Firstly, very often it doesn't need calibrating, you will be calibrating it unnecessarily, and there is a high probability that you will get into a muddle and have to send it back to us in frustration. Secondly, calibrating it is very fiddly and you must be aware that if you damage the tester it cannot be repaired.

You must use a screwdriver of the correct size, 1mm to 1.5mm.

Place the probe on the "cal" test-plate on the tester and turn a very tiny screw (difficult to reach, very difficult see) a fraction of a millimetre at a time until the needle reads correctly; then place the probe on a 'stone' that is glass (not supplied) and turn a second screw (difficult to reach, very difficult to see) a fraction of a millimetre at a time until the needle reads correctly. This will make the first reading incorrect, so repeat the procedure with first screw...which will make the second reading incorrect. Repeat, adjusting each screw very finely each time, until both readings are correct.

If you turn the screw all the way round, as if trying to 'screw it' you will break it, please do not return the tester to us, you have broken it.

If you use the wrong screwdriver and damage the screw head, you won't be able to adjust it, please do not return it to us, you have broken it.

The manufacturer's instructions are beautifully illustrated but poorly written, it is not clear what you have to do.

Although fiddly, this really should not be a problem for a jeweller or watchmaker or engineer, but if you are not confident, don't risk it – send it back to us: the charge (2020) is £4.00 for the thermal meter (analogue meter). Return postage is £10.00 for *Special Delivery* or £5.00 for standard 48-hour delivery. These prices include VAT. There is no charge if the tester is under guarantee, however, we do not offer free calibration as the weather gets warmer or cooler, you will just have to remember which way (see above) the readings will be 'out' in extremes of temperature.