Temperature Circuit

The PGM includes an electronic circuit for measuring the temperature of the deadweight gauge. This circuit must be calibrated periodically to ensure continued accuracy of the temperature data. The temperature circuit is calibrated using precision external resistors. Refer to Chapter 9, Temperature, of the WinPrompt User's Manual for details on the calibration operations.

Precision external resistors are available as an option from Ruska to facilitate calibration of the PGM temperature circuit. These precision external calibration resistors are supplied with the mating connector to that on the rear panel of the instrument. The part numbers for the external resistors are 2455-11-007 (107 ohm) and 2455-11-008 (111 ohm). These resistors must be calibrated periodically to ensure continued accuracy of the temperature circuit calibrations. The resistors are calibrated using traditional resistance calibration methods suitable for determination of the resistance values to 0.001 ohms. The connections to the resistance standard are the same as for calibration of the PRT, these connections are shown in Figure 3. It is recommended that the temperature circuits be recalibrated on a yearly cycle.
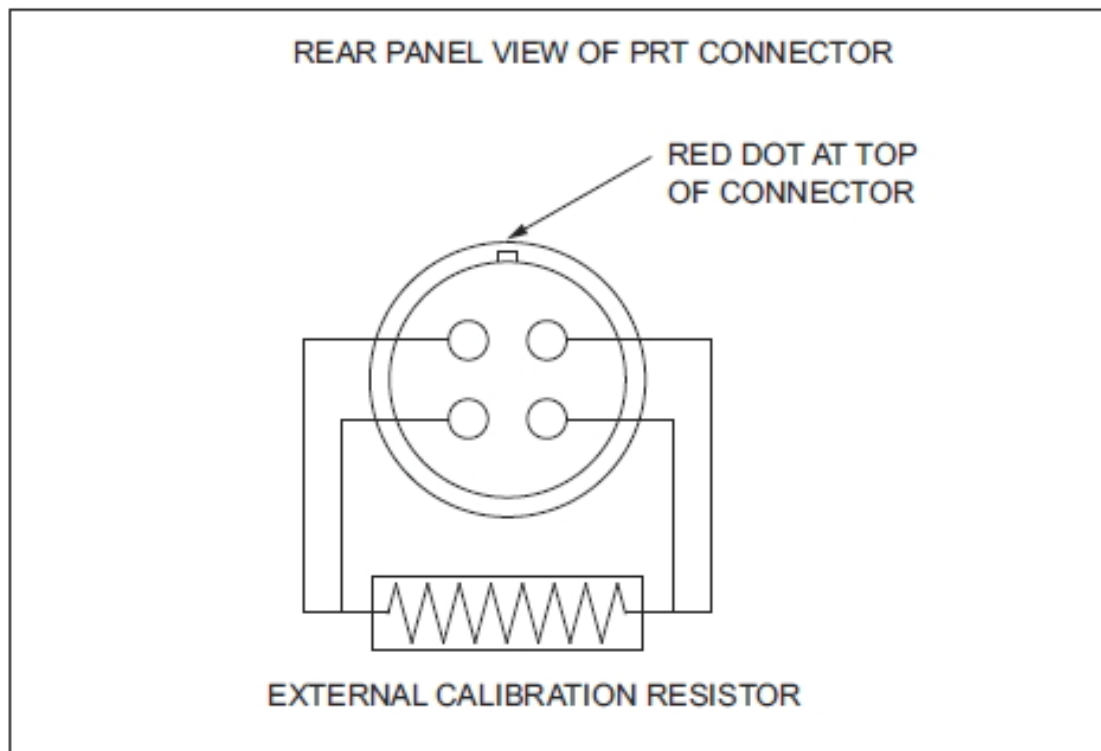

REAR PANEL VIEW OF PRT CONNECTOR

RED DOT AT TOP OF CONNECTOR

EXTERNAL CALIBRATION RESISTOR

gmc03.eps

Figure 3. Connections to Rear Panel PRT Connector