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Description - Procedure to ensure that the Peripheral Pulse Probe is functioning correctly.

1- PROCEDURE FOR STANDARD PERIPHERAL PULSE PROBE

1. Connect the Peripheral Pulse Probe to the Physical Acquisition Controller (PAC) Assembly. The PAC is located on the lower-left side on the front of the magnet enclosure.
2. To perform this test place the probe on your finger tip.
3. The Peripheral Pulse bar graph on PAC should display your pulse; if not, check whether the probe is making contact with your finger. If the bar graph does not display your pulse, either the probe or PAC hardware is failing.

2- PROCEDURE FOR FIBER OPTIC PERIPHERAL PULSE PROBE

Tools Required

- Fiber Optic Light Meter Kit with Interface Cables And Couplers, 46-317830G1

Procedure

1. Attach plastic adapter, 46-320033G1, and the fiber optic cable to the fiber optic power meter to interface the meter to the fiber optic connectors on the PAC. See Illustration L2171A.

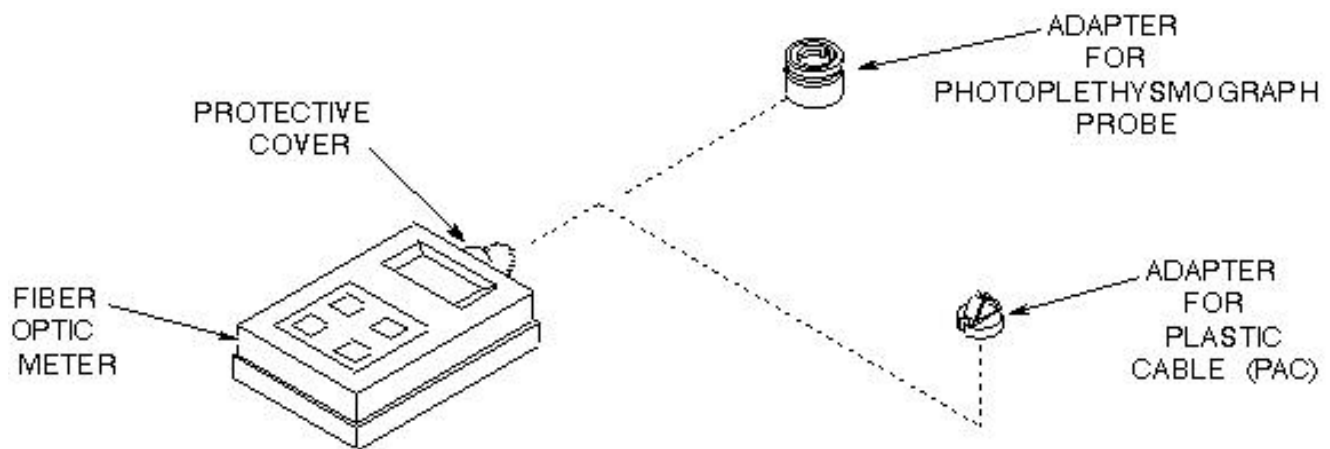


ILLUSTRATION L2171A
FIBER OPTIC MEASUREMENT CONFIGURATION

2. Set the meter to measure in $\mu\text{W}/\text{cm}^2$ and adjust the wave length to 820nm.
3. Measure and record the light power output (measurement A) from the PAC. The power should be equal to or greater than $300 \mu\text{W}/\text{cm}^2$.
4. Attach the photoplethysmograph adapter, 46-320710G1, to fiber optic power meter to interface the meter to the fiber optic photoplethysmograph probe. See Illustration L2171A.

5. Attach the fiber optic photoplethysmograph probe to the PAC and attach the probe to the meter. Measure and record the light power output (measurement B) from the probe. Reverse the fiber optic photoplethysmograph probe connections to the PAC so the second fiber optic bundle is now transmitting light. Measure and record the light power output (measurement C) from the probe.

6. Calculate the loss of each of the fiber optic bundles by using the following equations:

Loss Bundle 1 _____ = Measurement B _____ / Measurement A _____

Loss Bundle 2 _____ = Measurement C _____ / Measurement A _____

7. The loss in either of the bundles should not exceed 50%. If the loss does exceed 50%, but Measurement A is greater than $400 \mu\text{W}/\text{cm}^2$, then there is a problem with the fiber optic photoplethysmograph probe cable.

8. Finally, attach the probe to your finger tip and verify that the bar graph display on the PAC is pulsing. The PAC may require up to 45 seconds to auto-gain the signal to a usable level.

REVISION HISTORY

| REV | DATE | AUTHOR | PRIMARY REASONS FOR CHANGE |
|-----|---------------|------------|---|
| 0 | July 28, 1998 | M. Whitlow | Initial conversion from Toolbook to Word. |
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