Mobile Height-Adjustable Aneroid Sphygmomanometer
Model 223B
Model V223
User Manual

Read this manual before operating the Labtron Mobile Height-Adjustable Aneroid Sphygmomanometer. Save this manual for future reference.
Tools needed for assembly: Phillips screwdriver, 9/16" wrench

Note: A stethoscope is necessary to perform the auditory component of blood pressure readings.

SAFETY GUIDELINES - PLEASE READ BEFORE USE

⚠️ Important! Read and understand these instructions before installing or using the Labtron® Mobile Height-Adjustable Aneroid Sphygmomanometer. If you do not understand any part of these instructions, contact your medical professional or Graham-Field dealer for direction in the use of this product.

⚠️ Note that Sphygmomanometer Model 223B contains latex, which may cause allergic reactions. Sphygmomanometer Model V223 is latex-free.

⚠️ If components are damaged or missing, contact your Graham-Field dealer immediately. DO NOT use substitute parts.

⚠️ GF Health Products, Inc. assumes no responsibility for any damage or injury caused by improper installation or use of this product.

INTENDED USE

The Labtron Aneroid Sphygmomanometer, shown on the front cover, is intended to measure arterial blood pressure.
**ASSEMBLY**

Refer to the picture above to assemble the Mobile Height-Adjustable Aneroid Sphygmomanometer.

1. Assemble casters and base.
2. Insert pole base into base.
3. Insert lower pole into pole base.

4. Assemble M8 screw, small washer, and large washer as shown on previous page. Install from the bottom through base into pole base. Use 9/16” wrench to tighten.

5. Insert spring into lower pole.

6. Insert upper pole into lower pole.

7. Install height adjustment knob in upper pole. Adjust upper pole to desired height. Turn knob clockwise to tighten.

8. Install basket on upper pole; insert two M4 screws to secure it as shown on previous page. Use Phillips screwdriver to tighten screws.

9. Install lower bracket on upper pole; insert two M6 screws and washers to secure it as shown on previous page. Use Phillips screwdriver to tighten screws.

10. Slide sphygmomanometer’s upper bracket into lower bracket.

⚠ Ensure that sphygmomanometer is assembled as described, and that all components are securely fastened, before use.

Adjust height: Turn the height adjustment knob counterclockwise to loosen it, move upper pole to desired height, then turn knob clockwise to tighten.

**BLOOD PRESSURE**

Blood Pressure is a measure of the blood’s pressure in the circulatory system, which changes constantly during the course of the cardiac cycle. Blood pressure readings report two values. The higher reading (systolic pressure) shows the highest pressure in the arteries occurring when the heart contracts. The lower reading (diastolic pressure) shows the lowest pressure in the arteries, which occurs right before the heart contracts. Blood pressure readings
are written with the highest value first, then the lowest value. Readings of 120/80 are considered to be normal, with high blood pressure being defined as a systolic pressure which is 140mmHg or more at rest and a diastolic pressure which is 90mmHg or more at rest. Only a patient’s physician is qualified to determine whether the readings obtained are normal for that person.

**Measuring blood pressure:** Have the patient, while relaxed and in a sitting position, extend the arm from which the blood pressure will be taken to the front or laterally with the palm of the hand up.

**Attach the cuff and diaphragm:** Hold the end of the cuff containing the inflation bag firmly against the inside of the bare upper arm with the artery symbol positioned over the brachial artery. **Never place the cuff over clothing.** Pull the opposite end of the cuff snugly around the arm and secure the Velcro® strips. The range lines, indicated by the arrows, show the correct cuff size when the cuff is placed on the arm. If the index line on the end of the cuff falls between the two range lines, the cuff is the proper size. If the index line falls outside the range lines, a larger or smaller cuff should be used. The cuff should be snug, but not too tight. If one or two fingers can fit between the cuff and the arm, the cuff is properly secured. Place the diaphragm of the stethoscope over the brachial artery inferior to the cuff.

**Inflating the cuff:** Close the bulb’s air valve by turning the air release valve clockwise. Squeeze the inflation bulb at a steady rate until the gauge’s needle points at approximately 30mmHg above the individual’s normal systolic pressure value. If the individual’s normal blood pressure is not known, it is recommended to inflate to 200mmHg.

**Systolic blood pressure reading:** Open the air release valve slowly by turning it counter-clockwise while holding the diaphragm of the stethoscope over the brachial artery.
Proper deflation rate is vital for an accurate reading. The recommended deflation rate is 2-3mmHg per second, or a drop of one to two marks on the pressure gauge with each heartbeat. **Do not keep the cuff inflated any longer than necessary.** As the cuff begins to deflate, listen carefully with the stethoscope. Note the reading on the gauge as soon as a faint, rhythmic tapping or thumping sound is heard. The first sound is the systolic pressure reading. Always check with your health care provider to ensure readings are performed correctly.

**Diastolic blood pressure reading:** Allow the pressure to continue dropping at the same deflation rate. Note the reading on the gauge when the last audible thumping, swishing, or blowing sound is heard; this is the diastolic blood pressure reading. After a few seconds have passed and no audible thumping, swishing, or blowing sounds are heard, deflate the cuff using the air release valve completely. Remove the cuff and stethoscope from the arm.

Record the systolic and diastolic readings. Repeat the measurement two or more times to ensure accuracy. Only a patient’s physician is qualified to analyze blood pressure.
MAINTENANCE

Recommended care and maintenance:

<table>
<thead>
<tr>
<th>Do not drop or pull excessively on the sphygmomanometer components.</th>
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<tbody>
<tr>
<td>Never inflate beyond 300mmHg.</td>
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<tr>
<td>Do not expose the cuff to direct sunlight.</td>
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<tr>
<td>Do not put the sphygmomanometer in contact with sharp objects which could pierce the material and cause damage.</td>
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<tr>
<td>Do not dismantle or disassemble sphygmomanometer component.</td>
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</table>

**Cleaning**
- Wipe off the manometer, bulb, poles, basket and base with a clean, damp cloth. Wash the cuff with soap and cold water, rinse and air dry. Do not press cuff with a hot iron.

**Sterilization**
- Do not use steam, heat or liquid disinfectants to sterilize the cuff, inflation system or manometer. Gas sterilization may be used on the cuff only, if necessary.

**Storage**
- Always deflate the cuff completely before storage.

WARRANTY

GF Health Products, Inc. warrants the Labtron Mobile Height-Adjustable Aneroid Sphygmomanometer Model 223B / V223 for a period of one year for defects in workmanship and materials. During the warranty period, defective items will be repaired or replaced at manufacturer’s option at no charge.
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