

Sphygmomanometer



Instructions And Warranty

REF MDS9407

REF MDS9407LF

General Instructions for Assembly, Use, Storage And Maintenance

General

Blood pressure represents the force of blood flowing against the walls of the arteries. The pressure increases with each heart beat and decreases as the heart relaxes. The maximum pressure induced in the arteries when the heart pumps is called systolic pressure. When the heart is at rest, the decreased pressure is called diastolic pressure. Measurement of the blood pressure by indirect method is accomplished through the use of a sphygmomanometer. Although indirect measurement is considered imprecise when compared to intra-arterial measurement, it nevertheless can be an important indication of vascular disease. Both systolic and diastolic measurements should be properly taken for the physician to evaluate the status of the patient's blood pressure.

Preparing the unit for use

Assure that needle is in zero oval prior to use. Insert one end of the coil tubing into the manometer (gauge). Attach the other end of coil tubing to one of the rubber tubes of the inflation bladder. Insert the inflation bulb and valve in the other tube.

Use

1. The patient

Remember , many factors influence the blood pressure. Therefore, it is wise to have the patient rest quietly for about 15 minutes prior to taking a reading. Patients should not have been exposed to temperature changes, nor should they have eaten or smoked for at least 30 minutes prior to taking measurement. The patient should be as relaxed as possible , and in a supine or seated position, since there are differences in the pressure in some patients when they are in different positions.

On the initial examination, it is usually best to take the pressure in both arms. Subsequent readings should be taken in the arm found to have the highest pressure. The arm must be bare and there should be no constricting clothing or other interfering articles on the arm. The arm should be slightly flexed, abducted and, (if the patient is seated) supported by a smooth surface at heart level.

2. Application of Cuff

The deflated bag and cuff should be applied evenly and snugly, but not too tightly, around the arm. The lower edge should be about one inch above the antecubital space and the rubber bag

over the inner part of the arm directly over the brachial artery. If the veins of the forearm are prominently filled, or if there is evidence of congestion, the cuff should be applied while the arm is elevated to promote venous drainage.

Caution: Care must be taken to select the correct size cuff to constrict the required segment of artery.

3. The Stethoscope (not included)

The stethoscope should be applied firmly but lightly to the antecubital space over the previously palpated brachial artery. There should be as little pressure as possible, consistent with leaving no space between the skin and the stethoscope, since application of heavy pressure will distort the artery and produce sounds heard below the diastolic pressure.

4. Inflation of Cuff

With stethoscope in place, the pressure is raised approximately 30mmHg above the point at which the radial pulse disappears. It is then released at a rate of 2 to 3mmHg per second. Faster or slower deflation will cause systematic errors.

5. Systolic Determination

The systolic pressure is the point at which the initial tapping sound is heard for at least 2 consecutive beats. When the palpatory systolic pressure is higher, it should be recorded and noted as systolic pressure.

6. Diastolic Determination

Muffling occurs when the crisp Korotkoff sounds change and represents sudden diminution or disappearance of sound energy at frequencies greater than 60 cycles per second. The onset of muffling is the fourth phase and should be regarded as the best index of diastolic pressure. Numerous studies indicate that muffling occurs at pressures 7 to 10 mm Hg higher than direct intra-arterial diastolic pressure.

Storage

To remove, pull the loose end of the cuff with a smooth motion. Fold the cuff with the hook and loop closure inside to protect it from dust or lint. The MDS9407 series has ample room to store the entire inflation system in the bracket.

Maintenance

The blood pressure cuff is furnished with hook and loop closures to give it the close fit necessary for accurate readings. The cuff may be hand washed and ironed with a cool iron. Do not iron the velcro side since the application of heat will melt the loops and destroy their effectiveness. **INSTRUCTIONS FOR TESTING ACCURACY OF THE MDS9407 MDS9407LF**

General

Every possible precaution has been taken to deliver your instrument in an accurate condition ready for use. It has been tested for accuracy and inspected for defects prior to being delivered to you.

Testing

1. Purpose

Before placing this instrument in service it is important that you immediately verify that accuracy of this instrument by comparing it at a variety of different pressure levels to a calibrated mercurygravity unit. Verification should be repeated periodically to ensure the continued accuracy of the instrument.

2. Procedure

A Y-type connector is placed in line between the bladder and gauge of the unit to be tested. The calibrated mercury column unit is then introduced into the Y connector. The cuff is then placed around the dummy arm and securely fastened in the prescribed manner according to the type of closure. With the valve in the closed position, the bulb is pumped to inflate the cuff and bladder to approximately 260 mm of mercury pressure. At this time, the reading of both the mercury column and aneroid is to be recorded. The valve is then released slowly to a pressure of 220 mm. Again, a simultaneous reading is noted. The valve is then opened to achieve a level of 160 mm of mercury and a reading of both instruments is noted. Again the valve is to be opened to achieve two additional readings, one at 110 mm and one at 80 mm, each time noting the readings of both instruments. If simultaneous readings of both instruments are within a plus/minus of 3 mm of each other, the gauge will be deemed to be accurate.

3. Visual Check

The visible accuracy check at the bottom of the dial should show the needle within the oval, and the needle should return to this position when the cuff is deflated. The fact that the needle returns to this position, however, does not necessarily mean that the instrument is accurate in the entire pressure range. The instrument should be periodically tested for accuracy as described above.

WARNING: Calibration must be verified with the above procedure before using a recalibrated gauge.

LIST OF PARTS FOR MDS9407 OR MDS9407LF WALL-MOUNTED ANEROID SPHYGMANOMETER

- A. Mobile Stand and Manometer
- B. 8 foot coiled tubing

- C. Bulb with end valve
- D. Nylon cuff (adult) with bladder, velcro closing
- E. Mounting hardware

Warranty Information

Medline Industries, LP warrants this aneroid sphygmomanometer gauge against any defects in material and workmanship for a period of one (1) year after the date of purchase or for thirty thousand (30,000) inflations, whichever ever comes first. The associated parts, specifically, the cuff, bladder, bulb, and valve are warranted for a period of six (6) months after the date purchase or for ten thousand (10,000) uses, whichever ever comes first. These uses include, but are not limited to, inflation of the bladder and bulb and attachment of the cuff hook-and-loop closure. Excluding cases of freight damage, tampering, clear abuse, misuse, or accidents, Medline Industries, LP will, at its discretion, repair or replace this sphygmomanometer and/or its parts during the warranty period without charge. No representative or person is authorized to assume for us any liability in connection with the sale of the products of Medline Industries, LP. This warranty gives you specific legal rights, and you may also have other rights that may vary from state to state. Prior to shipping any product, please contact either Medline Industries, LP at 1-800-Medline or an authorized Medline sales representative with any warranty concerns.



© 2022 Medline Industries, LP. All rights reserved.
Medline is a registered trademark of Medline Industries, LP.
www.medline.com Manufactured for: Medline Industries, LP, Three Lakes
Drive, Northfield, IL 60093 USA. Made in China **1-800-MEDLINE**
V1 RF22CMN

