



USE, CARE &  
MAINTENANCE

**DIAGNOSTIX™**  
**972**  
**MERCURIAL**  
**BLOOD**  
**PRESSURE**  
**INSTRUMENT**



# A Special Thank You...

Thank you for choosing an ADC blood pressure instrument. We're proud of the care and quality that goes into the manufacture of each and every sphygmomanometer that bears our name.

Only the finest materials are used to assure you of a timeless instrument designed for optimum performance.

You'll quickly appreciate the results for you now own the finest sphygmomanometer that money can buy.

With proper care and maintenance your ADC blood pressure instrument is sure to provide you with many years of dependable service. Please read the following instructions and general information which will prove helpful in allowing you to enjoy your ADC product.

Thank you for your patronage. It is indeed our pleasure to serve you.

Sincerely,  
American Diagnostic Corp.




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## **Device Description and Intended Use**

ADC mercury sphygmomanometers are used by professional healthcare providers and individuals trained in auscultatory blood pressure technique to determine systolic and diastolic blood pressure in humans and animals.

## Symbol

Symbol	Definition
	Important Warning/Caution
	Not made with natural rubber latex
	Circumference Size

Symbol	Definition
	Manufacturer's Information
	Temperature Limit
	Humidity Limitation

## Warnings and Precautions

**Warning** - A warning statement in this manual identifies a condition or practice which, if not corrected or discontinued immediately could lead to patient injury, illness, or death.

**Caution** - Do not allow a blood pressure cuff to remain on patient for more than 10 minutes when inflated above 10 mmHg. This may cause patient distress, disturb blood circulation, and contribute to the injury of peripheral nerves.

**Warning** - If luer lock connectors are used in the construction of tubing, there is a possibility that they might be inadvertently connected to intravascular fluid systems, allowing air to be pumped into a blood vessel.

**Warning** - Safety and effectiveness with neonate cuff sizes 1 through 5 is not established.

**Warning** - Do not twist connectors when joining the blood pressure cuff to the tubing - this may cause the connector to stick and make changing BP cuffs difficult.

**Warning** - When using with an infant or child cuff, extra care must be taken to prevent over-inflation. With smaller cuffs (infant or child) the cuff can inflate to over 300mmHg with just two full compressions of the bulb. To prevent discomfort or injury to the patient and damage to the instrument, bulb should only be partially squeezed, so that each "stroke" inflates the cuff in 40mmHg to 60mmHg increments until inflated to the desired level.

**Warning** - This product may contain a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.

**Caution** - Federal law restricts this device to sale by or on the order of a physician or licensed healthcare practitioner.

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## Parts and Assembly

This booklet contains operating and maintenance information for the DIAGNOS-TIX™ 972 series mobile mercurial blood pressure instrument. Please read and retain.

Your DIAGNOSTIX™ 972 consists of main unit with 5mm calibrated unbreakable plastic cartridge tube, inflation system (which includes the ADCUFF™ nylon cuff with Size Guide™ marking system, latex-free inflation bladder, bulb, and the AD-FLOW™ valve), 8 ft. length of coiled tubing, luer connectors, assembly tools, and operating instructions.

To assemble inflation system to main unit, connect free end of coiled tubing to air inlet nipple at rear of mercury column above integral cuff storage compartment. Insert male luer adaptor on opposite end of coiled tubing into female luer connector on bladder. Store folded inflation system in cuff storage compartment behind mercury column of main unit.

For assembly of the mobile stand, consult booklet entitled “Diagnostix™ 972 Assembly Instructions.”

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## Operating Instructions

Your DIAGNOSTIX™ 972 Mobile Mercury Sphygmomanometer incorporates a special safety feature that locks the mercury within the reservoir during maintenance.

**To Operate the DIAGNOSTIX™ 972:** To release the mercury from the reservoir, move the locking lever (located in front of unit below mercury column), left to the position marked “ON.” Mercury will flow up into the plastic cartridge tube and rest at the “0” mark. If the mercury doesn’t rise within the tube, tilt the top of the unit towards you. If the mercury fails to rise, or doesn’t reach the “0” level have the unit serviced.

**To Lock Mercury within the Reservoir:** Tilt the top of the unit away from you to permit mercury to flow out of cartridge tube and into reservoir. When cartridge tube is completely emptied of ALL mercury (and while it is still tilted), move locking lever right to the “OFF” position.

*PLEASE NOTE: MERCURY SHOULD BE SECURED WITHIN THE RESERVOIR DURING TRANSPORT, OR WHEN SERVICING THE CARTRIDGE TUBE, DIAPHRAGMS, OR FILTERS. NEVER DISASSEMBLE UNIT UNLESS MERCURY IS FIRST LOCKED WITHIN RESERVOIR. CONSULT SEPARATE INSTRUCTIONS FOR ASSEMBLY OF MAIN UNIT (ENCLOSED).*

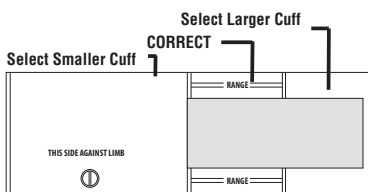
# MEASUREMENT PROCEDURE

## 1. Patient Position

The patient should sit or lie comfortably. The arm should be fully supported on a flat surface at heart level. (If the arm's position varies, or is not level with the heart, measurement values obtained will not be consistent with the patient's true blood pressure.) Observer should view manometer in a direct line and at eye level to avoid "parallax error."

## 2. Apply the cuff

ADCUFF™ nylon cuffs, with proprietary Size Guide™ marking system, are specially designed to promote the precise, accurate determination of blood pressure. Index and range markings ensure use of the correct cuff size. The artery mark indicates proper cuff positioning.



Place the cuff over the bare upper arm with "artery" mark positioned *directly* over the brachial artery. The bottom edge of the cuff should be positioned approximately one inch above the antecubital fold. Wrap the end of the cuff, not containing the bladder, around arm snugly and smoothly and engage adhesive strips. To verify a correct fit, check that the INDEX line falls between the two RANGE lines.

## 3. Inflate the cuff

Close the ADFLOW™ valve by turning thumbscrew clockwise.

Palpate the radial artery while inflating the cuff. Be sure to inflate cuff quickly by squeezing bulb rapidly.

Inflate cuff 20-30mmHg above the point at which the radial pulse disappears.

## 4. Position the Stethoscope

Position the chestpiece in the antecubital space below the cuff, distal to the brachium. Do not place chestpiece underneath the cuff, as this impedes accurate measurement. Use the bell side of a combination stethoscope for clearest detection of the low pitched Korotkoff (pulse) sounds.

## 5. Deflate the cuff

Open the valve to deflate the cuff gradually at the AHA recommended rate of 2-3mmHg per second.

## 6. Measurement

Record the onset of Korotkoff sounds (Phase 1) as the systolic pressure, and the disappearance of these sounds (Phase 5) diastolic pressure. (Some healthcare professionals prefer recording diastolic 1 and diastolic 2. Diastolic one occurs at phase 4). After measurement is completed, open valve fully to release any remaining air in the cuff. Remove cuff.

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## Care and Maintenance

**Storage** - After measurement, wrap cuff around bulb and store behind main unit in the integral cuff basket.

**Manometer** - Periodically replace the filter plug and diaphragm, and clean the inside of the plastic cartridge tube using alcohol and a lint free pipe brush. Units should be cleaned and serviced periodically depending on frequency of use, or whenever inside of cartridge tube appears dirty. Proper servicing of your mercury unit according to a strict maintenance schedule will assure maximum measurement accuracy and extend the life of your instrument.

For directions on disassembling the unit refer to the enclosed schematic diagram and accompanying instructions.

**PLEASE NOTE:** Mercury is toxic. Secure mercury within the reservoir before servicing unit. Always wear protective clothing (gloves and goggles) when cleaning the unit. Clean any spilled mercury promptly using approved mercury containment kits. Consult the enclosed manual entitled “*Just in Case*” for procedures on dealing with a mercury spill.

## Limited Warranty

American Diagnostic Corporation (ADC) warrants its products against defects in materials and workmanship under normal use and service as follows:

1. Warranty service extends to the original retail purchaser only and commences with the date of delivery.
2. The entire sphygmomanometer is warranted for one year.
3. The inflation system is warranted for three years.
4. The calibrated plastic cartridge tube is warranted for life and will be replaced FREE OF CHARGE when returned freight prepaid.

**What Is Covered:** Calibration, repair or replacement of parts, and labor.

**What is Not Covered:** Transportation charges to and from ADC. Damages caused by abuse, misuse, accident, or negligence. Incidental, special, or consequential damages. Some states do not allow the exclusion of incidental, special, or consequential damages, so this limitation may not apply to you.

**To Obtain Warranty Service:** Send item(s) postage paid to ADC, Attn: Repair Dept., 55 Commerce Drive, Hauppauge, NY 11788. Please include your name and address, phone no., proof of purchase, a brief note explaining the problem, and \$2.00 to cover the cost of return shipping and handling.

**Implied Warranty:** Any implied warranty shall be limited in duration to the terms of this warranty and in no case beyond the original selling price (except where prohibited by law). **This warranty gives you specific legal rights and you may have other rights which vary from state to state.**

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To register your product visit us at  
**[www.adctoday.com/register](http://www.adctoday.com/register)**

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FOR QUESTIONS, COMMENTS, OR SUGGESTIONS CALL TOLL FREE:

**1-800-ADC-2670**

OR VISIT **[www.adctoday.com/feedback](http://www.adctoday.com/feedback)**

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This manual is available online in a variety of languages,  
follow the links for language options.

**[www.adctoday.com/care](http://www.adctoday.com/care)**

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