This is a sterile, single-use product and is not designed for re-sterilisation. Do not reuse, reprocess or re-sterilise.

Indications:
- Cardiac catheterisation.
- Radiology special procedure.

Contraindications:
Monitoring where continuous flush is indicated.

I. Installation of Transducer Cables
Connect the transducer cables to the monitor.

II. Manifold Kit Set Up
A. Set up the manifold kit using aseptic technique
1. Open package and remove kit. Check all fittings to ensure tight connections
2. Attach pressure line to desired transducer system (transducer/dome, disposable transducer, stopcock etc.).
Caution: All electrical connectors must be kept dry or erratic readings may result.
3. Prepare a collapsible flush solution bag. Heparinise as desired and remove air from the bag by using a sterile needle and syringe or by inverting bag during initial filling of administration set.
Caution: If an air-free solution source is not used (i.e., air is not extracted from the bag) air may be forced into the line when solution is exhausted.
4. Close the CAIR® clamp on the administration set. Remove the protective cover from the administration set spike and insert the spike into the solution bag.

Caution: to prevent inadvertent puncture of the solution bag, invert and insert the spike carefully, using a downward twisting motion.
5. With the bag inverted, open CAIR clamp halfway, open 'flush' stopcock and fill drip chamber to halfway mark. Close CAIR clamp.
6. Insert the solution bag into the pressure cuff then hang the cuff from the IV pole. Close 'flush' stopcock to the administration line and open CAIR clamp.
7. Remove the protective cover from the contrast spike and insert spike into contrast bottle. Hang bottle from IV pole.

B. Purging air from the system.
Caution: the manifold system must be thoroughly flushed prior to patient usage.
1. Remove any caps on manifold or transducer system.
2. Turn 'contrast' or 'proximal' stopcock "off" to the 'distal' end of the manifold (toward the rotator). Flush the contrast line, contrast port and injection port of manifold with contrast fluid using gravity flow. Clear all air and bubbles from the system (tap as needed to dislodge bubbles).
3. Cap 'proximal' (injection) port or attach syringe. Turn 'contrast' stopcock "off" to proximal port and flush with contrast fluid toward 'distal' (rotator) end of manifold until fluid column passes the 'flush' (centre) stopcock. Close contrast stopcock "off" to contrast administration set.
4. Close 'flush' stopcock "off" to proximal end of manifold and flush administration line and manifold through the 'distal' (rotator) port, clearing all air and bubbles from the system.
5. Close 'pressure' stopcock to the distal (rotator) port and flush pressure line, transducer dome, and stopcocks clearing all air and bubbles from the system. Close 'flush' stopcock to administration line and close 'pressure' stopcock to pressure line. Close and cap transducer stopcock(s).

**Note:** take special care to ensure no air is trapped in the fluid pathway. The monitoring system must be totally air-free for maximum performance, i.e., optimal dynamic response.

6. Pressure cuff to 300 mmHg. Pressurise contrast bottle if desired.

### III. Balancing and calibrating

#### A. After the system has been flushed and mounted, zero balance the transducer.
1. Turn 'pressure' stopcock of the manifold "off" to the transducer.
2. Remove cap of stopcock on the transducer and open to air.

**Note:** the air-fluid interface of the zero reference or 'balancing' stopcock should be at or near the right atrial (mid-axillary) level.

3. Zero balance transducer according to monitor manufacturer's instructions.

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1. Attach desired catheter to manifold and flush, purging all air bubbles from catheter.
2. Open pressure stopcock on the manifold to the catheter. (The catheter tip is now the system air-fluid interface.)

#### B. Calibrate each transducer to the monitor. Follow monitor manufacturer's printed calibration procedures.

**Note:** An accurate calibration can only be achieved by using a known pressure source, e.g., mercury manometer.

**Note:** The above procedure should be used for periodic balancing and calibration checks.

### IV. Checking for Leaks

The system should be checked periodically for proper fluid source pressure and leaks.

### V. Connection to Patient

#### A. Before connecting manifold rotator to catheter, make certain system is free of air and that all air is back-flushed from catheter.

#### B. Connect rotator to catheter and proceed as needed.

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**Storage and Use:**

**Storage:** Store in a cool, dry place away from direct sunlight, preferably in original box.

**Shelf Life:** Refer to the Expiry Date printed on each pack label.

Sterile unless package is opened or damaged. If damage is found call your local Bard Australia Pty Ltd representative.

Pack is a single use device. Dispose of all unused components immediately after pack use.

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**STERILE**

Sterilised by Ethylene Oxide

**MANUFACTURER:**

**Bard Australia Pty Ltd**

ABN 50 001 468 935

22 Lambs Road, Artarmon, NSW 2064 Australia

Ph +61 2 8875 4000

Fax +61 2 8875 4050

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