

Manual Pneumatic Tourniquet System with Hand Pump

Instructions for Use

Surgical Instrument

Intended use

Manual hand-pumped pneumatic tourniquet for temporary limb occlusion to provide a bloodless surgical field during extremity procedures.

Intended users

Trained surgical personnel under the direction of the operating surgeon. For use by trained healthcare professionals. Follow your facility's protocols and applicable regulations.

Read this manual completely before first use and keep it with the product. This document provides general operating, care and safety guidance. Where the product is supplied with manufacturer labeling or instructions, those take precedence. For questions, a replacement copy, or a digital copy of this manual, email sales@scimedstore.com.

1. Safety

Safety warnings and cautions

- For use by trained healthcare professionals. Follow your facility's protocols and applicable regulations.
- Inflation pressure and tourniquet time must be set according to clinical protocol and the physician's judgment. This manual does not give pressure or time values.
- Patient suitability and contraindications must be assessed by the operating surgeon before use.
- Monitor cuff pressure on the gauge continuously and record inflation and deflation times per facility protocol.
- Use a cuff of the correct size for the limb and apply over suitable padding to protect the skin.
- Prevent skin preparation solutions from pooling under the cuff.
- Inspect the cuff, tubing, bulb and gauge for leaks or damage before every use. Do not use damaged components.
- Do not leave an inflated tourniquet unattended.

2. Specifications

Type	Manual pneumatic tourniquet, hand-pump inflation
Pressure indication	Pressure gauge
Power	None required (mechanical)
Cuff	Reusable surgical cuff

3. Unpacking and setup

- 1 Inspect the cuff, tubing, hand pump and gauge for wear, cracks or leaks.
- 2 Connect the cuff tubing to the pump and gauge assembly securely.
- 3 Check the system for leaks by inflating the cuff off the patient and watching the gauge for pressure loss.
- 4 Deflate the cuff fully and confirm the gauge returns to zero.
- 5 Select a cuff size suitable for the patient's limb.

4. Operation

Applying the cuff

- 1 Place protective padding smoothly around the limb at the cuff site.
- 2 Wrap the deflated cuff over the padding, snug and without wrinkles, at the site chosen by the surgeon.
- 3 Secure the cuff fastening and make sure the tubing is not kinked.
- 4 Position the gauge where the surgical team can read it easily.

Inflation and monitoring

- 1 Prepare the limb before inflation per surgical protocol.
- 2 Close the release valve and inflate the cuff with the hand pump to the pressure set according to clinical protocol and the physician's judgment.

- 3 Record the inflation time.
- 4 Watch the gauge throughout the procedure. Pump to restore pressure if it falls, as directed by the surgeon.
- 5 Inform the surgeon of elapsed tourniquet time at intervals set by facility protocol.

Deflation and removal

- 1 Deflate only when directed by the surgeon.
- 2 Open the release valve to deflate the cuff fully and record the deflation time.
- 3 Remove the cuff and padding promptly after deflation.
- 4 Inspect the skin under the cuff and document per facility protocol.

5. Cleaning and disinfection

- Disconnect the cuff from the pump and gauge after use.
- Wipe the cuff, tubing, pump and gauge with a disinfectant compatible with the materials, per facility protocol.
- Clean and disinfect per facility protocol. Do not autoclave unless labeled as autoclavable.
- Do not allow liquid to enter the tubing, pump valve or gauge.
- Allow all parts to dry fully before storage.

6. Maintenance and storage

- Store with the cuff fully deflated in a clean, dry place.
- Avoid sharp bends in the tubing during storage.
- Check the gauge for zero and test the system for leaks before every use.
- Have the gauge accuracy verified periodically per your facility's biomedical maintenance schedule.
- Replace worn cuffs, bulbs, valves, tubing or gauges.

7. Troubleshooting

Problem	Likely cause	What to do
Cuff will not inflate	Release valve open or tubing disconnected	Close the valve and check all connections.
Pressure falls during use	Leak in cuff, tubing or valve	Re-inflate as directed by the surgeon; replace the leaking part before the next use.
Gauge does not return to zero	Gauge damaged or out of calibration	Take the gauge out of service and have it checked.
Cuff slips on the limb	Wrong cuff size or loose application	Use the correct cuff size and reapply snugly over padding.
Cuff will not deflate	Release valve blocked	Disconnect the tubing from the cuff to release pressure; replace the valve.

8. Disposal

- Clean and disinfect all components before disposal.
- Dispose of the device in accordance with local regulations for medical device and plastic waste.

9. Warranty and support

Products are covered by SciMed's standard warranty (12 months from purchase unless a different period is stated on your invoice). Warranty terms: scimedstore.com/pages/warranty.

Support, spare parts and additional copies of this manual: sales@scimedstore.com. Please include your order number and a photo of the product or issue.

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