

TOMMANIKIN[®]

TACTICAL OPERATION MEDICAL MANIKIN

Salient Characteristics

USAGE AND DISCLOSURE OF DATA

This document includes data that shall not be duplicated, used or disclosed in whole or in part – for any purpose other than to evaluate the products/services found herein.



NORTH AMERICAN RESCUE[®]

Simulation

35 Tedwall Court
Greer, SC 29650-4791
(866) 839-3455

www.nar-simulation.com

Tactical Operation Medical Manikin (TOMManikin)

TOMManikin is developed, and manufactured, by North American Rescue Simulation and enhances Tactical Combat Casualty Care (TCCC) instruction from Point of Injury to transfer of higher care. This all-in-one system allows instructors to build multiple realistic traumatic casualty scenarios with reactive patients. A 1-year warranty is included with each TOMManikin.

TOMM is designed for classroom integration, trauma lanes and field training scenarios. Multiple appendage options present a variety of wounds including gunshot, blast and burns to provide full mission profiles in combat scenarios, disaster re-creations and mass casualty events.

Training scenarios where TOMManikin can be used:

- Military (Point of Injury through transfer of care)
- Tactical Combat Casualty Care (Levels 1 - 4)
- CASEVAC
- Extrication / Technical Rescue
- Structural collapse
- High Angle
- Confined Space
- HAZMAT (supports hasty & technical decontamination)
- EMS (BLS - ALS)
- Rescue Task Force
- Active Shooter

- ***Onsite New Equipment Training is highly recommended for new NAR Simulation customers.***
- ***We provide training around the world!***
- ***Please request training to be included in any product quotes.***

Tactical Operation Medical Manikin Features

- Industry-leading durability - withstands drops, falls, and drags
- No pinch points
- Easy set-up, rapid reset, and low maintenance
- Powder-coated, welded steel frame and solid steel joints – allows dragging by a single extremity.
- Weighs between 150-170 lbs. (depending on manikin configuration)
 - A lighter weight foam version is available upon request. Weight 130-140 lbs.
- Quick replacement of extremities for flexibility with multiple wound configurations. All TOMManikin extremities are interchangeable between platforms.
- Extremities can be crushed, and or immobilized, with up to 6000 lbs. (2720 kg)
- TOMM's upper extremities can be handcuffed behind his back with a single pair of handcuffs.
- Onboard compressor enables realistic breathing with exhaled breaths
- Realistic bilateral rise and fall of chest (with independent control of each lung)
- Remote controlled breathing rates: Slow, Normal, and Fast
- Radial pulses in uninjured upper extremities and bilateral carotid pulses.
- Variable pulse rate & pressure (Normal, bounding, thready)
- Skin is a proprietary silicone (Rugged Softech®), non-environmentally reactive/non-leaching. Industry-leading durability and temperature tolerance. Available in light or dark skin options
- Massive bleeding from multiple locations. Bleeding rate and location remotely controlled by wireless tablet.
- 1.2-gallon onboard blood reservoir
- Realistic sucking chest wound, with mid-axillary exit wound (standard on GSW platform). Blood mixes with air to create a bubbling effect at entry wound.
- Advanced Life Support airway (supports NPA, OPA, ET, supraglottic devices)
- Manikin Voice with the ability to upload multiple custom voice tracks in any language. Onboard SD card stores up to 16 GB of voices tracks. **NARS provides free software to create custom voice tracks on removable micro-SD card.

- Instructor-worn two-way Bluetooth headset allows instructor to become the voice of TOMM
- Voice tracks can be remotely changed on the fly via NARS tablet.
- Eyes are interchangeable to reflect changing pupil conditions. – Optional kit
- Eyes are non-illuminating - preserving light discipline & security during night operations
- Palpable pelvic crepitus (manually activated/deactivated)
- Onboard power via a 12v / 5-amp & 10-amp standard nickel metal hydride (NiMH) batteries
- Bends and rotates for realistic patient movement at the arms, legs, and waist.
- Mannequin charger voltage and frequency: 100-240VAC 2.0A 50-60Hz **International plugs available.

Proprietary Silicone Skin Formula Engineered for Extreme Environmental Use

- **Thermal Cycle** - 6 cycles, -32°C - +70°C - No Material degradation.
- **QUV Testing** (accelerated - 100 hours of continuous QUV)
 - Bulbs used: UVB-313
 - Chamber temperature set at 50°C
(The samples were photographed before and after exposure. They showed no visual changes in color and no signs of deterioration of the material. 500 hours of exposure produced some color fading, but with no material degradation.)
- **Fatigue Testing** (10,000 on/off cycles) - Hook & Loop fasteners. No degradation or failures.

Medical Procedures Supported

- Tourniquets (proximal, junctional, and abdominal tourniquets)
- Active bleeding controllable by direct pressure on anatomical pressure points
- Wound packing with realistic bleeding control.
- Nasopharyngeal and oral airways, supraglottic airway insertion and endotracheal intubation
- Surgical airway with realistic bleeding and tissue dissection. 35 operative sites included.
- Bilateral Needle decompression at either 2nd/3rd intercostal (mid-clavicular), or 5th/6th intercostal (mid-axillary) locations ** Both anterior and mid-axillary decompression sites available upon order request (additional charges apply)
- Realistic chest seal application & adhesion
- CPR chest compressions
- Pelvic binder application
- Chest Tube capable (bilateral, all models) ** Must be requested at time of order.
- IO (sternal & humoral) and antecubital IV access on uninjured upper extremities.
- Packable evisceration (Blast Manikin or as separate wearable moulage piece)

TOMManikin Wireless Control

The NARS tablet enables the operator to control all TOMManikin's features, to include, bleeding, breathing, multiple voice tracks, Bluetooth instructor-worn headset, pulse rates, pulse pressure and realistic responses to responder interventions.

The NARS tablet is a ruggedized tablet that communicates with multiple NARS devices via Bluetooth to ZigBee relay. Features trainee evaluation checklists, preset and scenario-builder software.

TOMManikin/TAMlkin Accessories & Options

Accessories Included

- NARS 5 Amp and 10 Amp NiMH batteries with smart chargers
- Extra fittings
- Surgical airway neck skins (35 op sites included)
- T-handle tool for upper extremity changing

- Onboard Fluid Fill unit assembly tank
- Simulated blood concentrate (8 oz.)
- Two 3-wheeled deployment bags for storage and shipping
- Velcro digital-pattern uniform (blouse and trousers)
- NAR IFAK

Available Options

- Additional TOMManikin injuries: complete & partial amputation of arms & legs,
- Burned head skin, open jaw fracture head skin, closed fracture arm, burned arms, shrapnel injury arms, GSW to inguinal area (packable), uninjured male or female pelvic skin.
- Velcro uniform in digital camouflage, includes blouse and trousers (1 uniform is included with TOMManikin/TAMIKin purchase)
- Deluxe moulage kit (designed for use with TOMM, or human role players)
- 1-gallon non-staining simulated blood concentrate
- Patient Monitoring Suite (PMS) with pulse oximetry, non-invasive blood pressure cuff and end-tidal waveform capnograph. ALS Kit with configurable cardiac rhythm display available.
- Wearable wounds (bleeding & non-bleeding) include, thigh laceration, GSW through hand, impaled object, abdominal evisceration, broken jaw with laceration, open scalp wound, compound fracture, avulsion to calf, neck wound, multiple GSW abdomen, axillary shrapnel wound, GSW bicep, GSW clavicle. Constructed of 100% silicone (same formula as TOMM/TAMI skins)

Popular TOMManikin Wound Configurations

TOMMANIKIN BASIC (P/N 93-0035)

Complete Arm Amputation

Features complete amputation above the elbow. Massive bleeding with dramatic soft tissue damage, exposed hard bone, discernible tissue layers. Responds to tourniquet application or brachial artery direct pressure application. **This wound is interchangeable with other TOMMs

Partial Leg Amputation

Features partial leg amputation below the knee. Massive soft tissue trauma with exposed hard bone, muscle and tissue layers. **This wound is interchangeable with other TOMMs

TOMMANIKIN BLAST (P/N 93-0036)

Open Jaw Fracture Head Skin

Features massive maxillofacial bone and soft tissue injuries, actively bleeds. Supports OP/NP/ET/Surgical airways. **interchangeable with other TOMManikins

Abdominal Evisceration

Features intricate handcrafted attention to anatomical detail with visible tissue layers, and 10" of eviscerated bowel with peripheral ecchymosis surrounding large open wound. Massive bleeding with 'clampable' vessel.

Shrapnel Wound Arm

Features active bleeding, multiple soft tissue wounds, responds to tourniquet application. **interchangeable with other TOMManikins

Full Amputation Leg

Features massive bleeding, extensive soft tissue damage, exposed hard bone, visible tissue layers). Responds to direct junctional pressure and tourniquet application. ** interchangeable with other TOMManikins

TOMMANIKIN GSW (P/N 93-0040)

Gunshot Wound To Chest

Features anterior GSW entry & mid-axillary exit. Actively bleeds from both locations. Anterior wound mixes with air from onboard compressor to create bubbling bleeding effect. Supports chest seal application and pleural needle decompression.

Packable GSW to Groin

Features GSW anterior entry/posterior exit with soft tissue trauma to penis and avulsed scrotum with prolapsed testicle. Wounds present with peripheral wound site ecchymosis, exposed sub-q fat layer and muscle striation. Entry wound is packable and responds to both peripheral and junctional tourniquet application and femoral pressure point application. **This wound is interchangeable with other TOMM platforms

GSW Leg

Features through-through GSW to leg above the knee. Entry wound presents with small entrance hole with circular powder burn. Exit wound has exposed fat and wound site ecchymosis. Variable bleeding rate. Responds to both peripheral and junctional tourniquet application and femoral pressure point application. **This wound is interchangeable with other TOMM platforms. Can be used as an impaled object using steel rebar, or wooden stake.

TOMMANIKIN GSW WITH FULL AMPUTATION LEG (P/N 93-0369)***Gunshot Wound To Chest***

Features anterior GSW entry & posterior exit. Actively bleeds from both locations. Anterior wound mixes with air from onboard compressor to create bubbling bleeding effect). Supports chest seal application and pleural needle decompression.

Packable GSW to Groin

Features GSW anterior entry/posterior exit with soft tissue trauma to penis and avulsed scrotum with prolapsed testicle. Wounds present with peripheral wound site ecchymosis, exposed sub-q fat layer and muscle striation. Entry wound is packable and responds to both peripheral and junctional tourniquet application and femoral pressure point application. **This wound is interchangeable with other TOMM platforms

GSW Leg

Features through-through GSW to leg above the knee. Entry wound presents with small entrance hole with circular powder burn. Exit wound has exposed fat and wound site ecchymosis. Variable bleeding rate. Responds to both peripheral and junctional tourniquet application and femoral pressure point application. **This wound is interchangeable with other TOMM platforms. Can be used as an impaled object using steel rebar, or wooden stake.

Full Amputation Leg

Features massive bleeding, extensive soft tissue damage, exposed hard bone, visible tissue layers). Responds to direct junctional pressure and tourniquet application. ** interchangeable with other TOMManikins

TOMMANIKIN WATER (P/N 93-0041)

Designed to be submerged up to 33 feet in either fresh or salt water.

Gunshot Wound To Chest

Features anterior GSW entry & posterior exit. Actively bleeds from both locations. Anterior wound mixes with air from onboard compressor to create bubbling bleeding effect). Supports chest seal application and pleural needle decompression.

(or)

Abdominal Evisceration

Features intricate handcrafted attention to anatomical detail with visible tissue layers, and 10" of eviscerated bowel with peripheral ecchymosis surrounding large open wound. Massive bleeding with 'clampable' vessel.

Closed Fracture Arm

Features ecchymosis and palpable crepitus. **This wound is interchangeable with other TOMMs

Partial Leg Amputation

Features partial leg amputation below the knee. Massive soft tissue trauma with exposed hard bone, muscle and tissue layers. **This wound is interchangeable with other TOMMs

TOMMANIKIN CONFINED SPACE (P/N 93-0110)***Gunshot Wound to Chest***

Features anterior GSW entry & posterior exit. Actively bleeds from both locations. Anterior wound mixes with air from onboard compressor to create bubbling bleeding effect). Supports chest seal application and pleural needle decompression.

Shrapnel Wound Arm

Features active bleeding, multiple soft tissue wounds, responds to tourniquet application.
**interchangeable with other TOMManikins

Partial Leg Amputation

Features partial leg amputation below the knee. Massive soft tissue trauma with exposed hard bone, muscle and tissue layers. **This wound is interchangeable with other TOMMs

TOMMANIKIN BURN (P/N 93-0037)***Burn Face***

1st, 2nd, 3rd degree burns to face (supports all airway adjuncts) **head skin is interchangeable with other TOMManikins

Burn Arms

Features 1st, 2nd, 3rd degree circumferential burns to both arms

TOMMANIKIN CBRNE (P/N 93-0038)***Burn Face***

1st, 2nd, 3rd degree burns to face (supports all airway adjuncts) **head skin is interchangeable with other TOMManikins

Gunshot Wound to Chest

Features anterior GSW entry & posterior exit. Actively bleeds from both locations. Anterior wound mixes with air from onboard compressor to create bubbling bleeding effect). Supports chest seal application and pleural needle decompression.

(or)

Abdominal Evisceration

Features intricate handcrafted attention to anatomical detail with visible tissue layers, and 10" of eviscerated bowel with peripheral ecchymosis surrounding large open wound. Massive bleeding with 'clampable' vessel.

Packable GSW to Groin

Features GSW anterior entry/posterior exit with soft tissue trauma to penis and avulsed scrotum with prolapsed testicle. Wounds present with peripheral wound site ecchymosis, exposed sub-q fat layer and muscle striation. Entry wound is packable and responds to both peripheral and junctional tourniquet application and femoral pressure point application. **This wound is interchangeable with other TOMM platforms

TAMIKIN GSW (P/N 93-0039)

Features female anatomy and voice. Wounds are in sensitive areas requiring providers to expose and treat life-threatening injuries.

Gunshot Wound to Chest

Features anterior GSW entry under left breast with mid-axillary exit. Actively bleeds from both locations. Anterior wound mixes with air from onboard compressor to create bubbling bleeding effect). Supports chest seal application and pleural needle decompression.

Packable GSW to Groin

Features GSW anterior entry lateral of vulva with gluteal exit. Wounds present with peripheral wound site ecchymosis, exposed sub-q fat layer and muscle striation. Entry wound is packable and responds to both peripheral and junctional tourniquet application and femoral pressure point application. **This wound is interchangeable with other TOMM platforms

GSW Leg

Features through-through GSW to leg above the knee. Entry wound presents with small entrance hole with circular powder burn. Exit wound has exposed fat and wound site ecchymosis. Variable bleeding rate. Responds to both peripheral and junctional tourniquet application and femoral pressure point application. **This wound is interchangeable with other TOMM platforms. Can be used as an impaled object using steel rebar, or wooden stake.

TAMIKIN GSW W/ COMPLETE LEG AMPUTATION (P/N 93-0381)

Features female anatomy and voice. Wounds are in sensitive areas requiring providers to expose and treat life-threatening injuries.

Gunshot Wound to Chest

Features anterior GSW entry under left breast with mid-axillary exit. Actively bleeds from both locations. Anterior wound mixes with air from onboard compressor to create bubbling bleeding effect). Supports chest seal application and pleural needle decompression.

Packable GSW to Groin

Features GSW anterior entry lateral of vulva with gluteal exit. Wounds present with peripheral wound site ecchymosis, exposed sub-q fat layer and muscle striation. Entry wound is packable and responds to both peripheral and junctional tourniquet application and femoral pressure point application. **This wound is interchangeable with other TOMM platforms

GSW Leg

Features through-through GSW to leg above the knee. Entry wound presents with small entrance hole with circular powder burn. Exit wound has exposed fat and wound site ecchymosis. Variable bleeding rate. Responds to both peripheral and junctional tourniquet application and femoral pressure point application. **This wound is interchangeable with other TOMM platforms. Can be used as an impaled object using steel rebar, or wooden stake.

Full Amputation Leg

Features massive bleeding, extensive soft tissue damage, exposed hard bone, visible tissue layers). Responds to direct junctional pressure and tourniquet application. ** interchangeable with other TOMManikins

CUSTOM TOMMANIKIN / TAMIKIN (P/N 93-0070)

Features all GEN 4+ TOMManikin capabilities with up to FOUR (4) injuries of your choice.

Thank you for your interest in our industry-leading products.

Respectfully,

Keary Miller

VP North American Rescue Simulation

North American Rescue, LLC

CAGE Code: 06ST7

SAM.gov UEI: JW8KVCGYPL9

DUNS: 83-2426782

TAX ID/EIN: 27-1024029