The Combat Application Tourniquet (C-A-T®) Generation 7 (Tactical Black)

The Fastest, Safest, Most Effective Prehospital Field Tourniquet



When we began work on the C-A-T® GEN 7 we considered every element that defines a tourniquet designed for combat use. We challenged ourselves to find the best, most forward-looking way possible to enhance performance and maximize application success. But we didn't do this alone. Leveraging input from after action reviews, researchers, material scientists and you, the end-user, we were able to create the most advanced C-A-T® to date. Every component of the C-A-T® GEN 7 is optimized for performance and reliability.

The C-A-T® GEN 7 has a single routing buckle system that (1) allows for extremely fast application and effective slack removal (2) Simplified training with single protocol directions for all applications.

The patented C-A-T® is a true one-handed tourniquet proven to be 100% effective by the U.S. Army's Institute of Surgical Research.

C-A-T® Gen 7 Requirements Driven Enhancements:

Single Routing Buckle

- ✓ Faster application and effective slack removal resulting in decreased blood loss and fewer windlass turns to achieve arterial occlusion
- ✓ Simplified training with single protocol directions for all applications

Windlass Rod

- ✓ Increased diameter for enhanced strength
- ✓ Aggressive ribbing for improved grip

Windlass Clip

- ✓ Bilateral beveled entry for rapid windlass lock
- ✓ Bilateral buttress for added strength

Windlass Strap

- ✓ Sonic welded to clip for constant contact
- ✓ Color changed to Gray for tactical considerations (Black C-A-T Only)

Stabilization Bar

✓ Reinforced, beveled contact bar maintains the plate's integrity and decreases skin pinching

Brief History

The Combat Application Tourniquet was initially fielded by USSOCOM in 2004 then fast followed by conventional forces in 2005. In the early years of the Global War on Terrorism (GWOT) and prior to the implementation of modern prefabricated tourniquets, the death rate from extremity exsanguination was 23.3 deaths annually. After full implementation, this number was reduced to 3.5 deaths per year, an 85% decrease in mortality. In 2005 the Combat Application Tourniquet was selected as one of the Army's top 10 greatest inventions and is recognized as one of the foremost advancements in pre-hospital care during the GWOT with an estimated 1,850 lives saved.

Relentless comprehensive analysis of all deaths from extremity hemorrhage has resulted in evidence-based tourniquet improvements. This approach has yielded critical device improvements to include five refinements in the design of the Combat Application Tourniquet over the last decade. These enhancements were focused on maximizing the effectiveness of the device while minimizing morbidity.

Continuous interface with end-users and researchers, literature review and tourniquet applications in both real world and simulated high stress tactical environments have made it clear, that despite tremendous success, tourniquet knowledge gaps exist in the following areas (1) single verses double routing of the band (2) Importance of slack removal prior to engaging the windlass. Closing these gaps will be accomplished through device enhancements, knowledge products and focused training.

The patented Combat Application Tourniquet® (C-A-T®) featuring the proprietary red tip design and the mechanical advantage of a band within a band has been the Official Tourniquet of the U.S. Army since 2005. The innovations in the C-A-T® are protected by U.S. Patent Nos. 7,842,067 and 7,892,253.

Product Information	
Item code:	30-0001

1 – Single Routing Buckle

- ✓ Decreased blood loss
- ✓ Effective slack removal
- ✓ Fewer windlass turns
- ✓ Simplified training with single protocol application standards

2 – Windlass Rod

- ✓ Increased diameter
- ✓ Enhanced strength
- ✓ Aggressive ribbing
- ✓ Improved grip

3 – Windlass Clip

- ✓ Bilateral beveled entry
- ✓ Rapid windlass lock
- ✓ Bilateral buttress
- ✓ Added strength

4 – Windlass Strap

- ✓ Sonic welded to clip for constant contact
- ✓ Color changed to Gray for tactical considerations (Black C-A-T Only)

5 – Stabilization Plate

- ✓ Reinforced, beveled contact bar
- ✓ Minimized skin pinching

6 - Red Tip Technology®

- ✓ Featuring NAR's Red Tip Technology® with a red elliptical tip
- ✓ Added visual clues for application

7 – Free-moving Internal Band

- ✓ Patented band within band
- ✓ True evenly distributed circumferential pressure

Special Features:

- ✓ Awarded as one of the "Top 10 Greatest Inventions" by the U.S. Army
- ✓ Official Tourniquet of the U.S. Army
- ✓ Used by both conventional and Special Operation forces
- ✓ Proven to be 100% effective in occluding blood flow in both upper & lower extremities by the U.S. Army's Institute of Surgical Research
- ✓ True, one-handed application tourniquet
- ✓ Quickly controls life-threatening extremity bleeding

- ✓ Recommended by the Committee on Tactical Combat Casualty Care
- ✓ Designed to perform in all weather conditions
- ✓ Cost-effective
- ✓ Standard Issue to U.S. ARMY, NAVY, Marines, Air Force, and Coast Guard
- ✓ Protected by U.S. Patent Nos. 7,842,067 and 7,892,253

Dimensions	
Packaged:	L 6.5 in. x W 2.4 in. x D 1.5 in.
Open Length:	37.5 in.
Weight:	2.9 oz

^{*}Specifications are subject to change without prior notice.