FIELD MANUAL

R&B AED Pannier

Right-Side Mount — Standard Operating Procedure

Sections	Intended Users	Classification
Mission Brief · Equipment · SOP · Warnings · Sustainment	EMS Bike Teams · Police Patrols · Event Medical · SAR Units	Operational Equipment SOP — Authorized Personnel Only

SECTION 1

Mission Brief & Intended Use

1.1 Primary Objective

This document establishes the Standard Operating Procedure (SOP) for the **R&B Fabrications AED Pannier, Right-Side Mount**. Its primary objective is to provide a secure, protected, and rapidly accessible transportation platform for an Automated External Defibrillator (AED) on a bicycle operated by authorized emergency response personnel.

1.2 Scope of Use

Intended for trained and equipped personnel operating in environments where traditional vehicle access is delayed or impossible. This system is a **force multiplier**, enabling early defibrillation in advance of motorized unit arrival.

- EMS Bicycle Response Teams
- Police Bike Patrols
- Event Medical Staff
- Search & Rescue (SAR) Bike Units

1.3 Operational Parameters

The pannier is specifically designed to protect sensitive AED electronics from **vibration, weather exposure, and minor impacts** inherent in bicycle operations.

> The **right-side-only configuration** is a deliberate design choice. When a bicycle is laid down on its non-drive (left) side — standard field practice — the pannier and its contents are shielded from ground impact. Its function is to ensure the AED arrives at the patient's side in a fully operational state.

SECTION 2

Equipment & Component Familiarization

2.1 Mounting & Stability System

Inverted J-Hooks

Located upper-rear of pannier. Engage the top rail of the rear cargo rack as the **primary load-bearing attachment points**. Confirm fully seated before every deployment.

Bungee S-Hook

Lower retention device. Stretch cord downward and attach to a low point on the rack or frame. Prevents pannier from swinging outward during aggressive maneuvering or on uneven terrain.

Reinforced Vinyl Back

Heavy-duty vinyl on the rack-facing side. Resists abrasion from the rack, blocks road spray, and its non-porous surface facilitates effective decontamination.

Stability Strap #1312

Nylon strap with quick-release buckles. Secure from pannier to a vertical rack support to provide a **third axis of stability**, preventing fore-and-aft shifting during acceleration and braking.

SECTION 2 (CONT.)

AED Compartment, Access & Identification

2.2 AED Compartment & Access

Padded Main Compartment

Sized to accommodate most commercially available AED models. Internal padding dampens road vibration and buffers minor impacts. House the primary AED unit here.

#10 YKK Zippers

Large, self-repairing zippers securing the main compartment lid. Robust construction designed for high-cycle use under field conditions.

Storm Flap

Fabric flap covering the exterior zipper line. **Always ensure this flap is correctly positioned** after closing — it provides a critical barrier against rain, dust, and environmental contaminants.

2.3 Ancillary Storage & Identification

Interior Clear Vinyl Pockets (×4)

Transparent pockets on the interior lid. Use for immediate visual identification of consumables: spare electrode pads, prep razors, nitrile gloves, CPR face shields.

3M™ Scotchlite™ Reflective Trim

High-visibility reflective material on the exterior. Enhances operator visibility to vehicle traffic and personnel during low-light, dawn, or dusk operations.

Star of Life Symbol

Embroidered emblem identifying contents as medical equipment. Provides universal recognition, allowing any first responder to immediately identify the bag's function.

SECTION 3

Standard Operating Procedure: Deployment

> **Scenario:** A bike medic unit is patrolling a crowded street festival. Dispatch issues a call for a 58-year-old male, unconscious and not breathing, inside a dense vendor area inaccessible to ambulances. The bike unit is the closest asset.

3.1 Pre-Deployment (Shift Start)

1 Inspect

Conduct a full readiness inspection of the pannier per Section 5.

2 Mount

Affix to the **RIGHT SIDE** of the bicycle's heavy-duty rear rack. Confirm J-hooks are fully seated on the top rail.

3 Secure

Attach the lower bungee S-hook under tension. Attach and tighten the detachable stability strap to prevent all movement.

4 Load

Place a fully inspected AED into the main compartment. Stock interior pockets with mission-essential supplies (pads, razor, gloves).

5 Close & Verify

Secure #10 YKK zippers, position storm flap. Perform a manual pull test from all directions to confirm rigid attachment.

3.2 On-Scene Arrival & Access

1 Dismount & Position

Lay the bicycle down on its **LEFT side** (kickstand side). The bicycle frame protects the pannier and its contents from ground impact.

2 Access

Move to the right side of the downed bicycle. Pull open the storm flap and operate the zippers to open the main compartment lid.

3 Extract

Remove the AED unit and required ancillary supplies (e.g., spare pads) from the pannier.

4 Engage

Move to the patient's side and deploy the AED per medical training, manufacturer's instructions, and jurisdictional protocols.

5 Tactical Option

If the patient is inaccessible by bicycle (e.g., up stairs), rapidly disengage all three attachment points and **carry the entire pannier** to the patient.

SECTION 4

Critical Warnings, Limits & Safety

⚕️ Scope of Practice

This SOP governs deployment of the *pannier*, not the medical device it contains. The operator is solely responsible for using an AED within their certified scope of practice and agency medical protocols. **Improper AED use can result in patient harm and legal liability.**

🚲 Right-Side Mount Only

This unit is **purpose-built for right-side mounting**. Installing it on the left side negates protective design features and may cause interference with the bicycle's drivetrain, creating a direct safety hazard.

⚠️ Mounting System Integrity

Failure to secure **all three attachment points** (J-hooks, bungee hook, stability strap) can cause the pannier to shift into the rear wheel spokes — resulting in catastrophic bicycle failure, operator injury, and equipment damage.

🛡️ Protection Limitations

The pannier is impact- and weather-*resistant*, not indestructible or waterproof. It is **not designed** to protect the AED from a major crash, a fall from height, or full submersion. Operators must ride within their ability to protect the equipment.

🔩 Rack Compatibility

Use only with **heavy-duty bicycle cargo racks** rated to support the combined weight of the pannier (5 lbs) and the AED (typically 4–7 lbs). Use on under-rated racks may lead to rack failure.

SECTION 5

Readiness, Inspection & Sustainment

5.1 Pre-Use Inspection Checklist

HARDWARE	Inspect J-hooks and S-hook for cracks or deformation. Test bungee for elasticity. Check all buckles and straps for integrity.
FABRIC	Examine 1000D Cordura® body for tears, punctures, or abrasion. Check all stitched seams for threadbare areas or separation.
CLOSURES	Operate zippers fully — ensure smooth travel without binding. Verify storm flap provides complete coverage of the zipper track.
INTERIOR	Confirm internal padding is intact. Inspect clear vinyl pockets for tears or cracks.
VISIBILITY	Ensure reflective material is clean, unobscured, and not delaminating from the fabric.

5.2 Post-Use & Decontamination

Routine Cleaning

Clean exterior and interior with a damp cloth and mild detergent. Wipe the reinforced vinyl back with agency-approved disinfectant. **Air dry completely before storing.** Do **NOT** machine wash or machine dry.

Decontamination

If exposed to bloodborne or other pathogens, remove from service and process per agency decontamination protocols. Note: harsh chemical agents (e.g., bleach) may degrade fabric and reflective material over time.

5.3 Long-Term Storage

- Store in a clean, dry environment away from direct UV light exposure.
- Unload all contents; the AED must be stored per its manufacturer's requirements.
- Do not stack heavy items on the pannier — this compresses and degrades the protective padding.