



# CBP LPU-40 Flotation Collar

## User's Manual



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SAFETY—ABOVE AND BEYOND

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The following symbols are used throughout this manual:



**WARNINGS** indicate a procedure or situation that may result in serious injury or death if instructions are not followed correctly.



**CAUTIONS** indicate any situation or technique that will result in potential damage to the product, or render the product unsafe if instructions are not followed correctly.



**NOTES** are used to emphasize important points, tips, and reminders.

## 1. Introduction

The LPU-40 Flotation Collar is a flotation device designed to support air crewmen stranded in water. The collar is attached to the air crewman's flight vest. It provides a minimum of 65 pounds of flotation buoyancy and is designed to keep the user's head above the water for an extended period of time.

The LPU-40 is packed in a low profile casing made of fire resistant Nomex<sup>®</sup> that is designed to open when the dual-chambered bladder inflates. A single-pull beaded handle, when manually pulled, activates two 30-gram CO<sub>2</sub> gas cartridges for inflation. Two oral inflation tubes allow the user to manually increase, decrease, or maintain the air pressure in the bladder chambers.



The capacity of the CO<sub>2</sub> cartridges can range from 29 to 33 grams.

Your LPU-40 Flotation Collar is an important piece of survival equipment. Proper care and maintenance will ensure your vest will accomplish the level of safety performance it is designed for. It is important that you become familiar with these instructions to safely use this flotation collar.



### **WARNING**

KEEP YOUR FLOTATION COLLAR IN USABLE CONDITION. IMPROPER WEAR MAY RESULT IN DAMAGE TO THE COLLAR. DO NOT WEAR ANY GARMENT OR PIECE OF EQUIPMENT OVER THE COLLAR. IMPROPER USE OR NEGLIGENT CARE OF THIS EQUIPMENT CAN CAUSE SERIOUS INJURY OR DEATH.

## 2. Attaching the Collar to the Vest

### 2.1

The collar attaches to the vest with a MOLLE Strap system and has four attachment straps: two on the top of the collar, and two on the bottom.

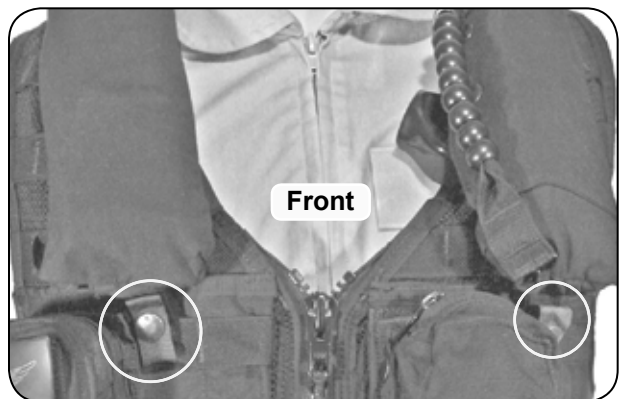
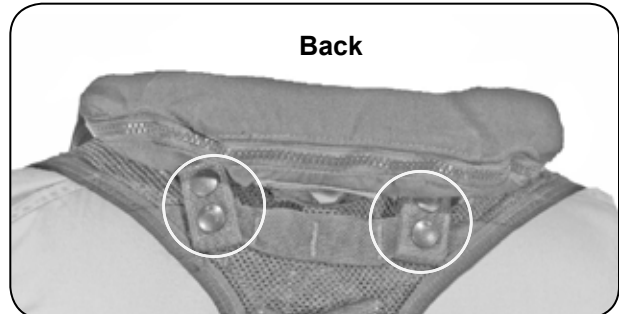


2.1 Attachment points.

### 2.2

The attachment points for the top of the collar are on the back of the vest.

The attachment points for the bottom of the collar are on the front of the vest at chest level.



2.2 Attachment points.

### 2.3

Attach the top of the collar to the vest first.

Thread the MOLLE straps on the collar through the channeled webbing on the vest and secure the Pull-the-Dot fasteners.

Each strap has two Pull-the-Dot fasteners. Ensure that all four Pull-the-Dot fasteners are fastened.

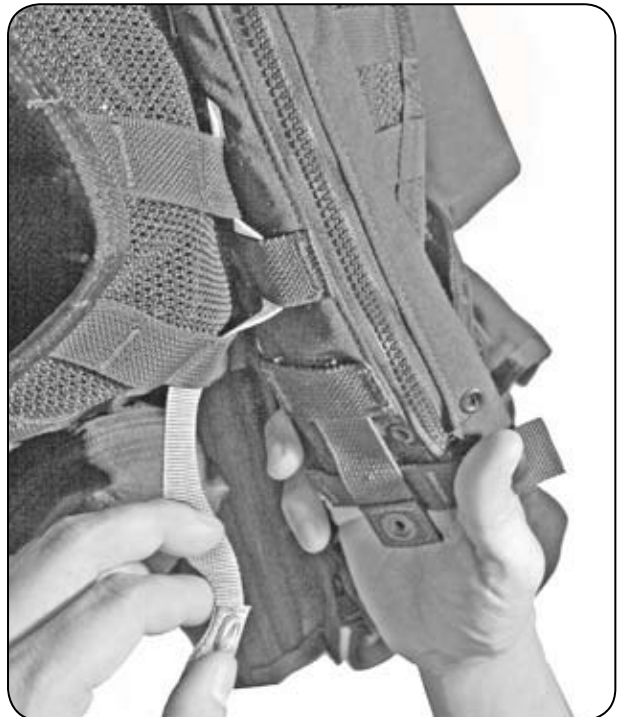


2.3 Attaching the top.

### 2.4

The bottom attachment is threaded through four webbing straps on each side of the vest.

On each side of the vest, weave the MOLLE strap through the first two channels on the vest and collar.



2.4 Attaching the bottom.

2.5

Thread both the collar strap and the closing tab with the snap stud through the third channel on the vest, then through the last channel on the collar.



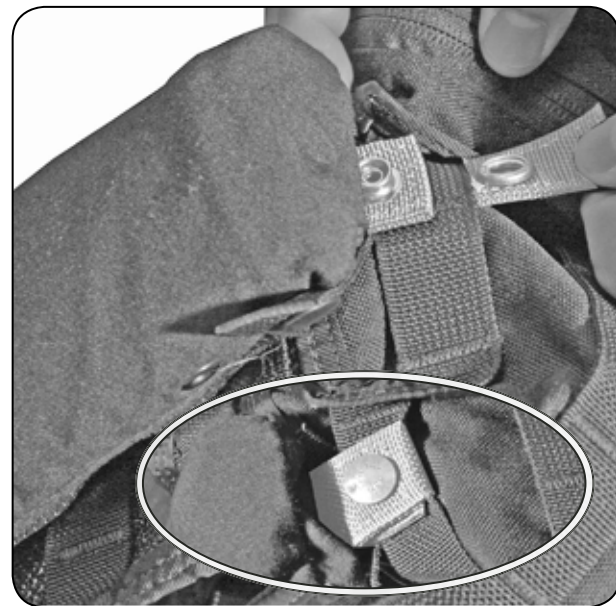
2.5 Threading the bottom channels.

2.6

Thread only the collar strap through the last vest channel.

Wrap the strap around the vest channel and secure the Pull-the-Dot fastener.

Tuck the end of the closing tab underneath the collar casing.



2.6 Closing the snap.

### 3. Inflating the Bladder

#### 3.1

Grab the beaded handle with either hand and forcefully pull down to release it from the cover flap.



3.1 Grabbing the beaded handle.

#### 3.2

Continue to pull the handle forcefully in the down-and-out direction; apply constant pressure on the handle until the bladders begin to inflate.

Repeat this step if the bladder does not begin to inflate or, if only one lobe inflates.



3.2 Activating the CO<sub>2</sub> gas.

### 3.3

The two lobes may be attached and anchored to your vest using the cinch ring located on the left-inside-bottom area of the vest. Anchoring the lobes to the vest improves the angle of flotation.



#### CAUTION

**Release the cinch ring prior to over-water missions.**



#### WARNING

**IF YOU MUST DROP THE CINCH RING WHILE YOU ARE SUBMERGED IN WATER, DO NOT UNZIP YOUR VEST TO DO SO.**

**DROP THE CINCH RING BY REACHING UNDER YOUR VEST WHILE IT IS FULLY DONNED WITH THE SLIDE FASTENER UP.**



3.3 Exposing the cinch ring.

### 3.4

The right lobe has a cinch strap with a snap hook.

Remove the cover from the snap hook.



3.4 Anchor strap.

3.5

Route the cinch strap through the loop on the left lobe and attach the snap hook to the cinch ring.



3.5 Routing the strap.

3.6

Tighten the cinch strap by pulling on the free end until the flotation lobes are brought close together



3.6 Adjusting the cinch strap.

3.7

The oral inflation tubes are on the right lobe. The valve has a rubber mouth piece and a knurled locking nut.

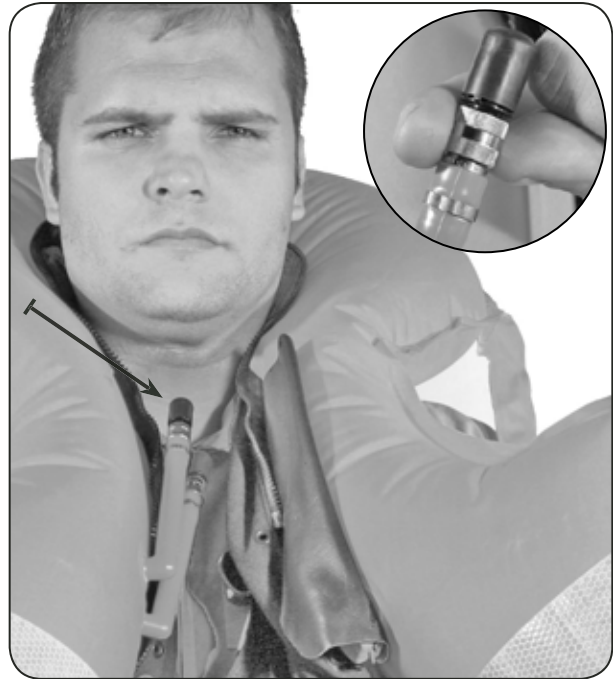
Temperature changes may effect the pressure in the bladder. Use oral inflation to increase or relieve pressure from the bladder.

Turn the knurled locking nut counter-clockwise until it stops.

Push the valve in with your mouth and blow air into the bladder to increase the pressure.

Depress the valve to release pressure from the bladder.

Tighten the knurled locking nut against the mouthpiece when you are finished.



3.7 Oral inflation.

3.8

For improved angle of flotation, put your arms through the straps that run down the sides of the bladder until the lobes are tight against your body.



3.8 Arm placement.



**REMEMBER:**

**Panic and fatigue cause drowning.  
Stay calm and conserve your energy.**

## 4. Inspection

It is the responsibility of the air crewman to inspect the LPU-40 flotation collar before flight operations. Perform a preflight inspection prior to each flight and at intervals not to exceed 30 days. If damage is found during an inspection, the vest must be grounded until repaired.

1. Inspect the outside of the collar for:
  - Cuts, tears, and abrasion damage
  - Open seams and loose or broken stitching
  - Contamination damage
2. Ensure that the entire length of the slide fastener is closed and there are no missing teeth.



**CAUTION:** DO NOT OPEN THE FLOTATION COLLAR SLIDE FASTENER FOR ROUTINE INSPECTION.

3. Ensure that the beaded inflation handle is attached with 3 snaps fastened.
4. Ensure that the flotation collar is attached to the vest and all of the attachment snaps are fastened.

## 5. Maintenance

Maintenance of the LPU-40 flotation collar consists of cleaning, service, and repair. The air crewman's responsibility for maintenance is limited to inspecting the outside components of the collar. Service and repairs shall be completed only by an authorized service station or the manufacturer. Remove the collar from the vest to wash the vest.

## 6. Storage

Store your LPU-40 Flotation Collar on a clothes hanger away from direct sunlight in a dry, well ventilated place. Do not store your collar near sources of heat such as a radiator, or in a warm, humid environment where mold or mildew can contaminate the vest.