RELEASABLE BODY ARMOR VEST (RBAV)

USER Instructions

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1. OVERVIEW

The Releasable Body Armor Vest (RBAV) represents the latest design in Next Generation Body Armor available from BAE Systems Specialty Group, Inc. This system provides a number of features that improve wearer comfort and overall performance. The RBAV system is compatible with the Special Operation Forces Personal Equipment Advanced Requirements (SPEAR) Body Armor Load Carriage System (BALCS) soft armor inserts and hard armor plates. This vest is also capable of integrating the BALCS Modular Supplemental Armor Protection (MSAP) system and utilizes the Modular Lightweight Load-carrying Equipment (MOLLE) attachment system. Ancillary components, such as the BALCS groin protector and neck protector are also compatible with this design.

In addition, the RBAV incorporates a new “quick-release” mechanism that can be used in emergency situations. This functionality allows the soldier to remove the vest quickly in emergency situations, and may also be used by medics in the field that need to gain access to an injured soldier’s torso area without having to move them excessively. Once the Quick-Release mechanism has been used, the vest can be easily reassembled to provide ballistic protection.

2. DONNING AND DOFFING

2.1 DONNING THE RBAV

1. The following photo illustrates the donning of an assembled RBAV vest. The vest is first raised above the head, and lowered onto the shoulders. Refer to Figure 1.

2. Next, lift the Front Carrier and pull the two halves of the Elastic Waist Band forward. Connect the two halves by attaching the hook-and-loop patches as shown in Figure 2.

Figure 1. Donning the RBAV.
3. With the Front Carrier down, lift up the Front Flap as shown in Figure 3.

4. Pull one of the Side Panels around the body and attach the mating hook-and-loop panel. Repeat with the other half as shown in Figure 4.

5. Close Front Flap, attaching the mating hook-and-loop tape, and tuck bottom of Front Flap up into the Front Flap Pocket as shown in Figure 5.
Figure 5. Closing the Front Flap.

2.2 DOFFING THE RBAV - NORMAL
1. Lift the Front Flap and detach the Right- and Left-Side Panels by separating the hook-and-loop interfaces.
2. Lift the Front Carrier and separate the Elastic Waist Band at the hook-and-loop interface.
3. Lift the RBAV vest off the shoulders and over the head.

2.3 DOFFING THE RBAV - QUICK-RELEASE METHOD
1. Grasp the quick-release loop on the top center of the Front Carrier and pull as shown in Figure 6. The RBAV will separate into front and rear halves and fall off the wearer's torso.

Figure 6. RBAV Quick-Release process.
3. ADJUSTING THE RBAV FOR FIT

3.1 ADJUSTMENT OF THE ELASTIC WAIST STRAP AND SIDE PANELS

1. To wearer comfort, the elastic strap and side panels can be adjusted within the Rear Carrier by opening Back Flap and adjusting metal slides shown in Fig. 7. Close the Back Flap and tuck bottom flap into the Back Flap Pocket.

4. RBAV ASSEMBLY

4.1 INSTALLING BALLISTIC PLATES AND SOFT ARMOR

1. Undo the velcro closure for the front carrier and lift ballistic panel if installed.
2. Release webbing strap and pull fully outside of the vest
3. Slide ballistic plate into carrier and secure with webbing & velcro closure.
4. Release the velcro closure on the back carrier
5. Release the webbing straps from the velcro and extend fully outside of the carrier

6. Slide ballistic plate into carrier and secure with webbing & velcro closure.

7. Turn the Front Carrier over and open the velcro closure at the bottom of the vest.
8. Fold the wings on the soft panel and slide the vest into the carrier

![Figure 12]

9. Ensure the Ballistic Panel is seated below exterior of the carrier as pictured.

![Figure 13]

*NOTE: Tag on Soft Panel should be facing towards the wearers body when properly installed

10. Seal the Velcro closure to secure

![Figure 14]

11. Turn the Back Carrier over and Open the velcro Closure
12. Fold the wings of the Ballistic Panel and Slide into the carrier
13. Ensure the panel is located underneath the carrier and secure Velcro Closure.

4.2 INSTALLING THE QUICK-RELEASE PULL HANDLE

1. Route the coated cables into the Quick-Release handle pocket at the top of the Front Carrier, through one of the Shoulder Channels and into the Rear Panel of the vest.

2. Locate the Two Shoulder Pads

3. Undo the Velcro closure.
4. Place pad underneath the webbing and Cable channel and secure

![Figure 18](image1.png)

5. Wrap Velcro closure to secure

![Figure 19](image2.png)

6. Place the Front Carrier and Rear Carrier halves face-up on a flat surface, slide the two halves together at the shoulders, and route the shoulder straps into the Rear Carrier

![Figure 20](image3.png)
7. The shoulder straps with grommet attachment points should now be in the Rear Carrier. Select one of the grommets that provides the best fit for your specific torso length and route the looped cord through the grommet. Route “short” length of cable through Shoulder cord loop. (Note: The longer length of cable will be used to connect the side panels later.)

![Figure 21](image1.png)

8. Continue to route the cable to the other side of the vest by passing it though the cable guide at the top of the Rear Panel.

![Figure 22](image2.png)

9. On the opposite shoulder strap, select the grommet that provides the same shoulder strap length as selected in Step 4. Route the looped cord through this grommet, and slide the cable through the cord loop.
Figure 23

10. Route cable end into the cable channel provided at the side of Rear Panel pocket. The final assembly of Shoulder Connection is shown in Fig. 10.

Figure 24

4.3 INSTALLING THE ELASTIC WAIST BANDS AND SIDE PANELS

1. Insert the Right- and Left-Side Elastic Waist Bands and the Side Panels through the rear channels on the bottom side of the Rear Carrier.
2. Route one side of Elastic Band webbing through metal loop and lace through metal slide fastener.
3. Place center cord through grommet on second Elastic band.

Figure 25

4. Route cord through grommets on both the Left & Right side panels.

Figure 26

5. Route the “long” cable through all three cord loops as shown in Figure 10 and stow the end of the cable in the cable channel located at the bottom.
of the vest.

Fig. 10. Connecting Release Cable to the Elastic Band and Side Panels.

6. Close the back panel by securing each side with snaps.

Figure 28. Closing the Back Flap.
Compatibility with Existing Systems
The RBAV carrier has been designed to integrate with existing systems, including the Special Operation Forces Personal Equipment Advanced Requirements (SPEAR) Body Armor Load Carriage System (BALCS) soft armor inserts and hard armor plates. This vest is also capable of integrating the BALCS Modular Supplemental Armor Protection (MSAP) system and utilizes the Modular Lightweight Load-carrying Equipment (MOLLE) attachment system. Ancillary components, such as the BALCS groin protector and neck protector are also compatible with this design.

The following section provides an illustration for connecting the MSAP Bicep / Shoulder protector.

4.4 Installing the MSAP Bicep / Shoulder Protection

1. To attach the MSAP Bicep / Shoulder protector, open the shoulder strap cover as shown in Figure 11.

2. Insert the MSAP Bicep / Shoulder connection strap in between the open shoulder strap cover and press it together, sandwishing the hook and loop closure together.

Figure 29
3. Following the standard instructions to complete the attachment of the MSAP Bicep / Shoulder protector.