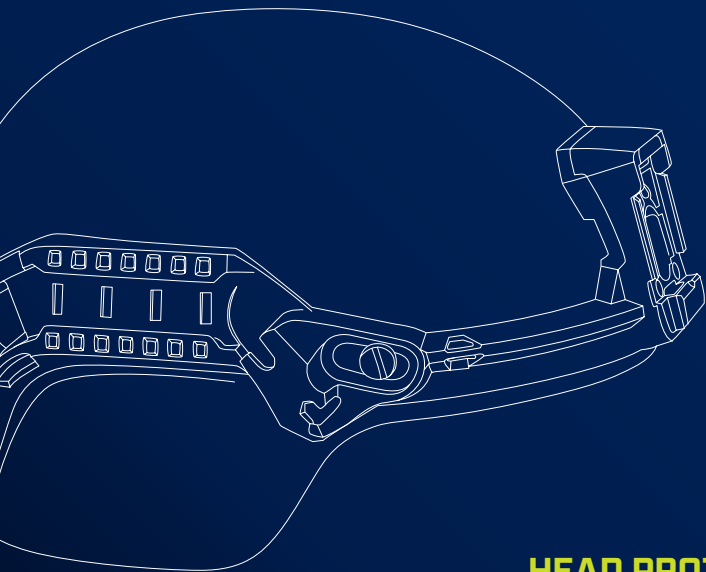


**BATSKIN**  
**viper**<sup>TM</sup>



**HEAD PROTECTION SYSTEM**  
**INSTRUCTION GUIDE**

# VIPER HEAD PROTECTION SYSTEM

**TO THE OPERATOR** – Duty calls and no matter the pace, obstacle or environment, your command wants you to be ready for whatever your mission throws at you. The Batlskin Viper® Head Protection System was manufactured to meet stringent quality standards and is the ideal balance between robust and reliable protection.

**GALVION. EMPOWER YOUR MISSION.**

---

**PLEASE BE SURE TO READ ALL INSTRUCTIONS AND FOLLOW ALL WARNINGS. POOR SET-UP AND ADJUSTMENT MAY COMPROMISE THE SYSTEMS ABILITY TO PROVIDE THE PROTECTION THAT IT IS DESIGNED TO DELIVER DURING A BLUNT FORCE OR BALLISTIC IMPACT. WARRANTY AND WARNING INFORMATION CAN BE FOUND BY SCANNING THE QR CODE.**



**HAVE QUESTIONS OR COMMENTS? CONTACT GALVION CUSTOMER SUPPORT**  
1-866-713-0406 | [CUSTOMERCARE@GALVION.COM](mailto:CUSTOMERCARE@GALVION.COM) | [GALVION.COM](http://GALVION.COM)

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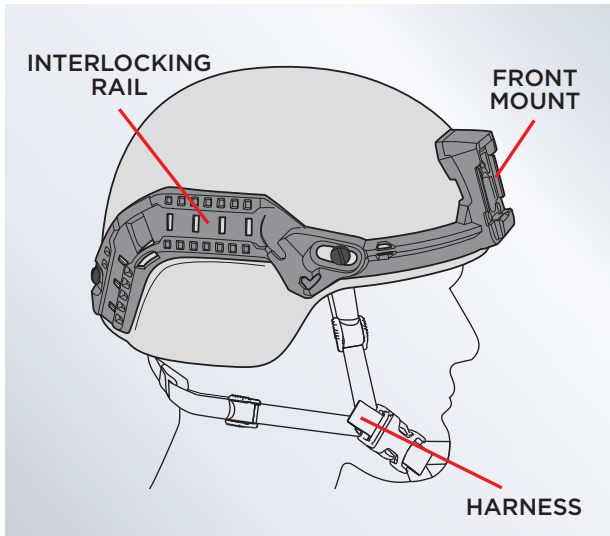
**NOTE:** Please note some accessories and liners are not compatible with every Viper helmet.

This manual provides information regarding the components of your Galvion Batlskin Viper® Head Protection System. Galvion has developed the Batlskin Viper® Head Protection System for blunt force and ballistic protection in a scalable lightweight package that's fully modular and fully integrated. It is important to follow the instructions on how to adjust your head protection system. Poor adjustment and over tightening of bolts may compromise the system's ability to provide the protection it is designed to deliver.

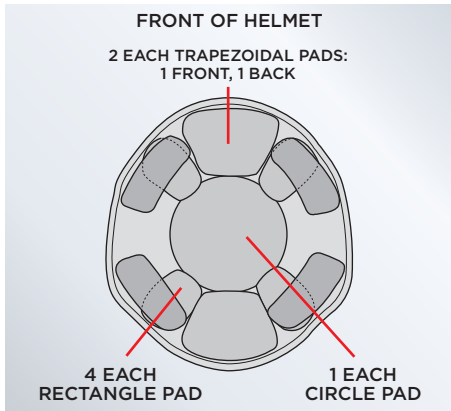
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**THE IMAGES USED IN THIS GUIDE ARE FOR REFERENCE ONLY AND MAY NOT REFLECT THE EXACT CONFIGURATION OF THE PRODUCT**

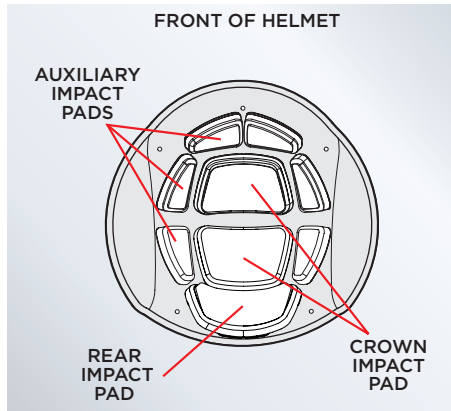
## VIPER HELMET



## LINER SYSTEMS

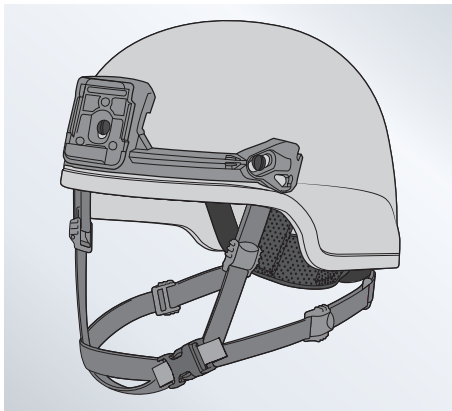


**STANDARD LINER (7-PAD)**

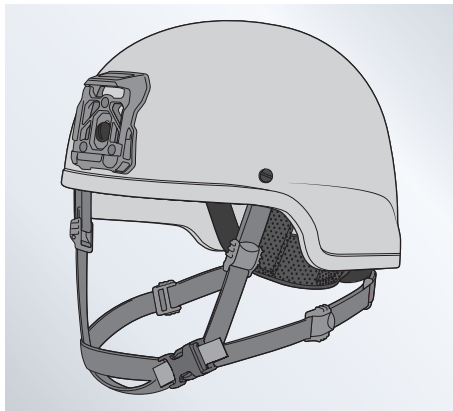


**MODULAR SUSPENSION SYSTEM (MSS)**

## SHROUDS

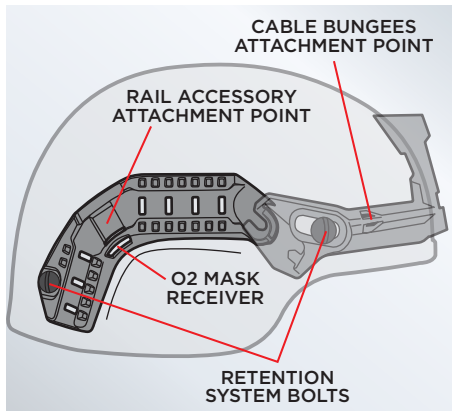


**FRONT MOUNT**

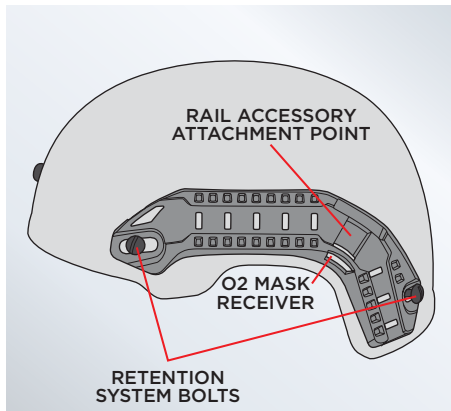


**ONE HOLE SHROUD**

## RAILS



**INTERLOCKING LONG RAILS**

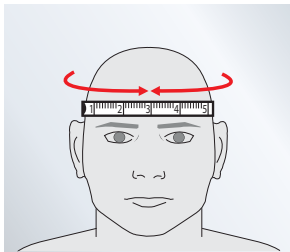


**STANDALONE RAILS**

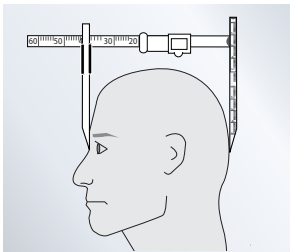
## SIZING - HOW TO MEASURE HEAD SIZE

User will obtain the most accurate head measurements using a tape measure for circumference and a caliper for length and width.

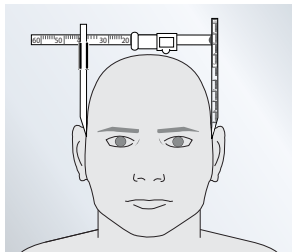
Evaluate size while wearing the typical, everyday headwear, hairstyle, head coverings, etc., worn with helmet.



Using a measuring tape at approximately 13mm ( $\frac{1}{2}$ " ) above eyebrows and ears, measure head **CIRCUMFERENCE**.



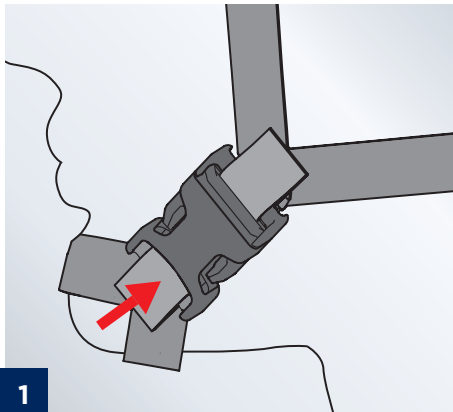
In the absence of a caliper, use 2 pencils. Hold one pencil between eyebrows and one at the back of head. An extra set of hands is important to ensure pencils are straight. Measure distance between pencils - this is the **LENGTH** measurement.



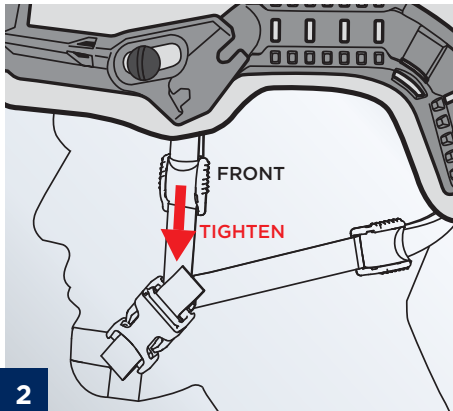
In the absence of a caliper, use 2 pencils. Hold one pencil at either side of head above ears. An extra set of hands is important to ensure pencils are straight. Measure distance between pencils - this is the **WIDTH** measurement.



## ADJUSTING RETENTION SYSTEM

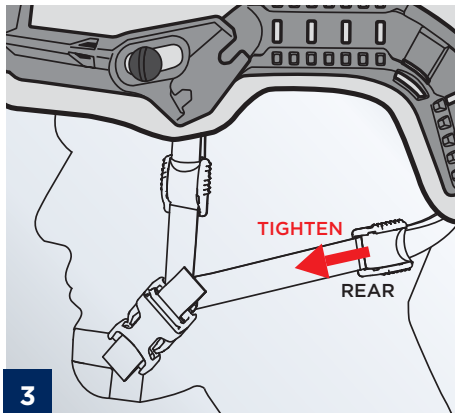
**1**

Buckle chinstrap.

**2**

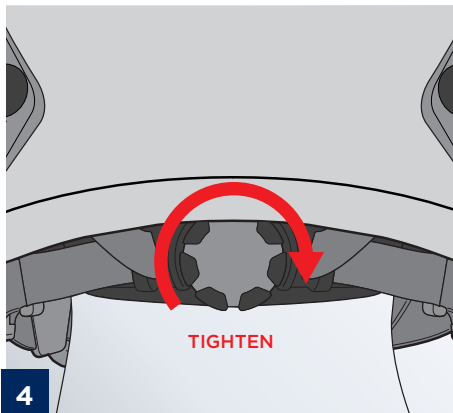
Unlock front tensioner and tighten as needed. Lock in place.

Users may find it easier to adjust tensioners on both left and right side of harness at the same time.



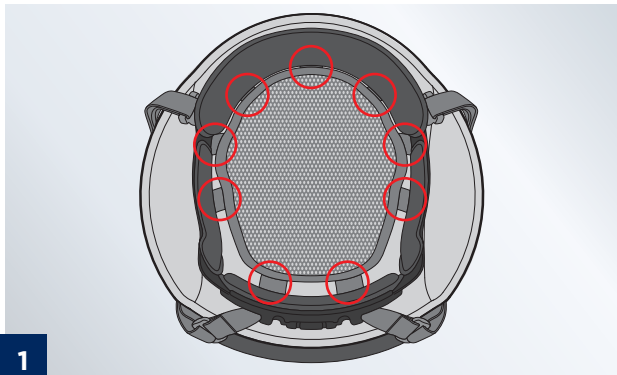
Unlock rear tensioner and tighten as needed. Lock in place.

Users may find it easier to adjust tensioners on both left and right side of harness at the same time.



Tighten fitband by turning the dial clockwise.

## MODULAR SUSPENSION SYSTEM (MSS)



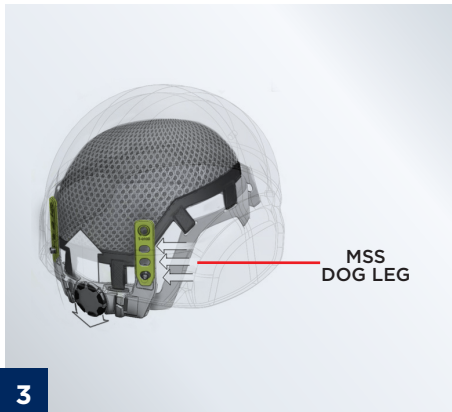
**NOTE:** The Modular Suspension System (MSS) comes with both a net and no-net option.

1

### NET OPTION

Once impact pads are installed, attach the net by adhering the hook and loop on tabs.

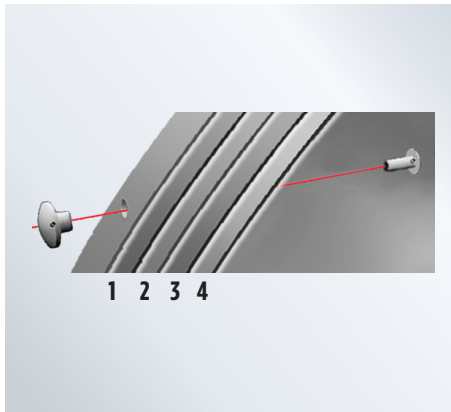
**NOTE:** For ease of installation, the rear impact pad can be removed and replaced once rear of MSS has been installed.



### REAR HELMET HOLES

Insert a t-nut into one of the three holes in the nape dog legs, depending on the preferred height of the nape pad (most users prefer the middle option). Align the retention system strap with this hole and the hole of the helmet shell and secure by threading a bolt into t-nut. Repeat for the remaining rear hole.

12



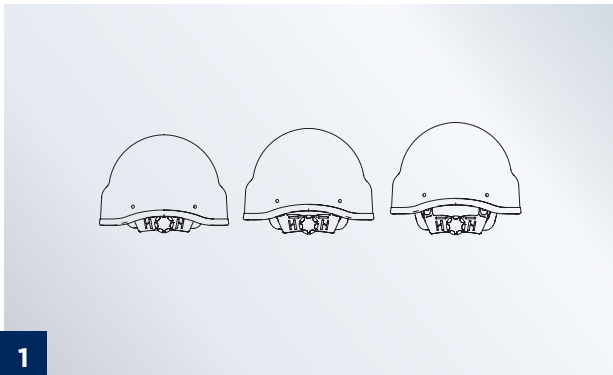
### REAR BOLTS GOES THROUGH:

1. Rear Rail Hole
2. Helmet Shell
3. MSS Dog Leg
4. Retention System Strap

**SECURE WITH A T-NUT.**

## FIT AND ADJUSTMENT

The Modular Suspension System can be adjusted in four ways to ensure proper fit .



### 1 NAPE HEIGHT

Adjust the height of the retention system nape pad at the rear of the fit band by inserting the rear t-nuts into a higher or lower position on the dog legs. Users with larger heads may prefer a lower nape pad. When assembling the retention system for the first time, place the t-nuts into the middle hole and only move if required once all other adjustments have been made.



### **NET HEIGHT (FOR NET OPTION ONLY)**

Adjust the helmet height by raising or lowering the net using the hook tabs. The net height should be adjusted so that the front brim of the helmet sits approximately 1/2" (12 mm) above the wearers' eyebrows and the head is not in contact with the impact liner. To confirm height of nape, tilt head back fully. If the dial touches your neck it is too low.

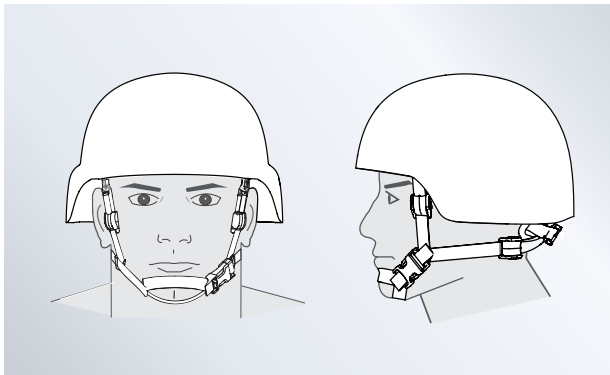
## NO-NET OPTION



### COMFORT LAYERS

Install the comfort layers onto the two crown pads and rear impact pad. Stick the adhesive side of the comfort layer to the surface of the impact pad that comes into contact with head. Press to secure.

## EVALUATING HELMET FIT



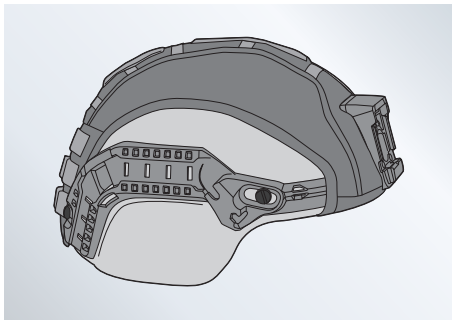
Helmet should sit approximately  $\frac{1}{2}$ " (12 mm) above eyebrows and should cover ear canals.

Install retention system and 7 pad liner (refer to page 13) or MSS (refer to page 15). Once installed, don helmet and adjust retention straps.

Evaluate fit of helmet on head. If helmet is still too loose, try a smaller size. If too tight, try a larger size.

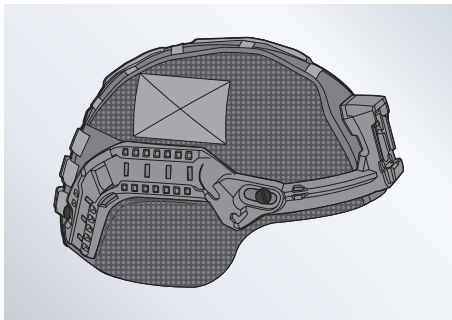


## HELMET COVERS



**OVER-THE-RAIL** design allows users to install or remove helmet cover without removing any helmet components

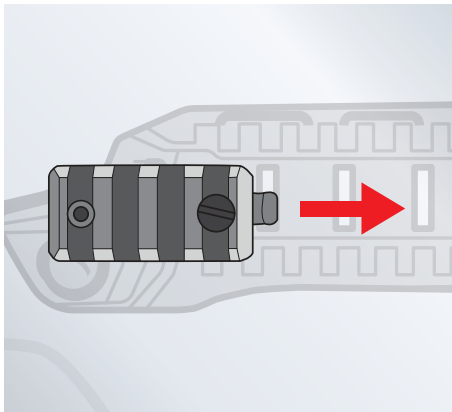
1. Pull cover over helmet shell, ensuring seams of cover are symmetrical and there are minimal ripples in the fabric.
2. Pull loop tabs tightly over helmet edge and adhere to hook dots already installed in helmet. The loop tabs should not cover any holes in helmet.



**UNDER RAIL** helmet covers are designed to be installed under helmet components covering more shell area

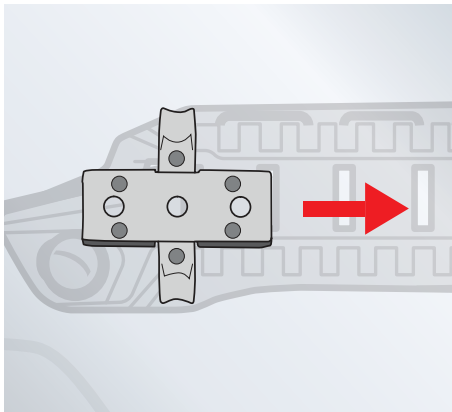
1. Remove attached helmet components.
2. Pull cover over helmet shell, ensuring seams of cover are symmetrical and there are minimal ripples in the fabric.
3. Pull loop tabs tightly over helmet edge and adhere to hook dots already installed in helmet. The loop tabs should not cover any holes in helmet.

## RAIL ADAPTERS



### PICATINNY RAIL ADAPTER

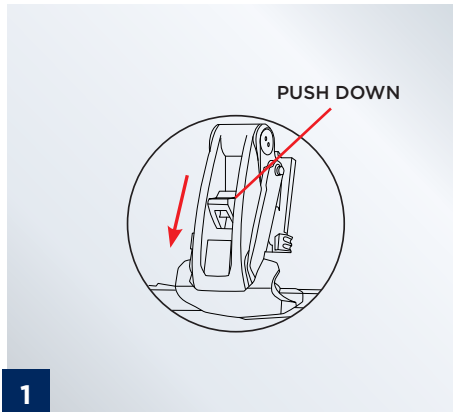
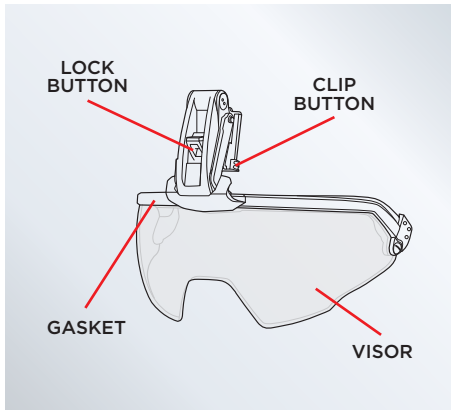
Squeeze the end tab and slide the adapter onto rail channel tab—first. Once in the preferred position, release the tab and tighten the screw to secure the adapter in place.



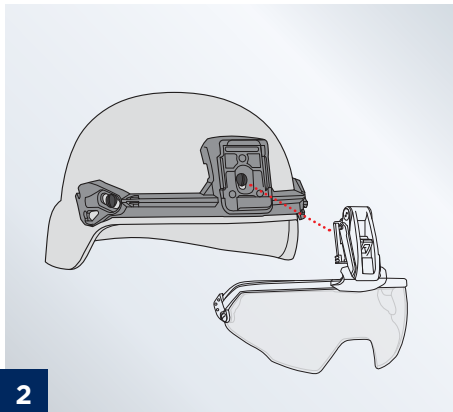
### CROSS BASE RAIL ADAPTER

Attach the desired accessory onto the rail adapter. Tighten screws provided with the accessory to secure it in place. Pinch the tabs on either side of the adapter and slide onto rail. Release the tabs when in the preferred position.

## BALLISTIC VISOR

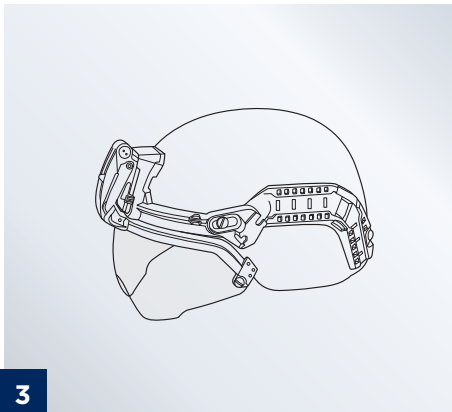
**1**

Push lock button down and swing visor to up position.



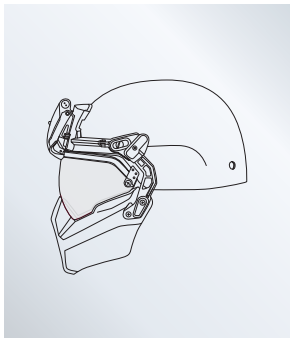
**2**

Hold base of attachment arm with two fingers and insert top half of visor arm clip into front bracket of Front Mount, then the bottom half.

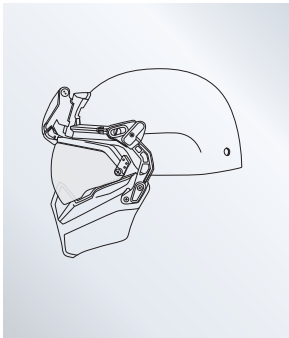


**3**

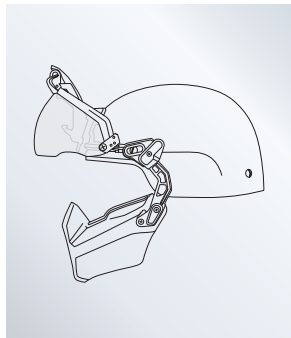
Slide clip button over until locked in place. Ensure arm is secure by pulling on it; the arm should not release.

**THE VISOR HAS THREE POSITIONS:****LOCKED**

Provides maximum ballistic protection.

**VENTED**

Slightly open for ventilation, provides limited ballistic protection.

**UP**

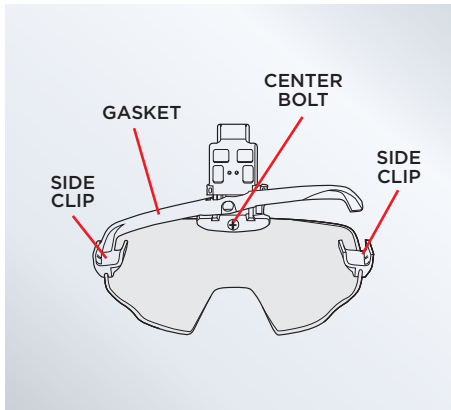
Position for maximum ventilation.

When the visor is in the locked position, push the lock button down to lift the visor into the vented or up position.

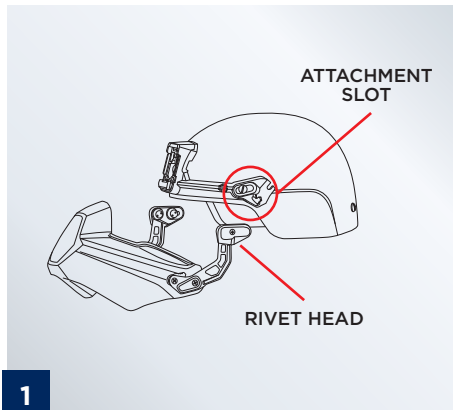
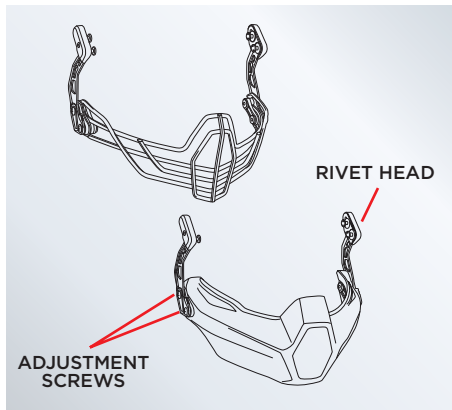
## VISOR LENS REPLACEMENT

To replace the visor lens, please follow the steps below:

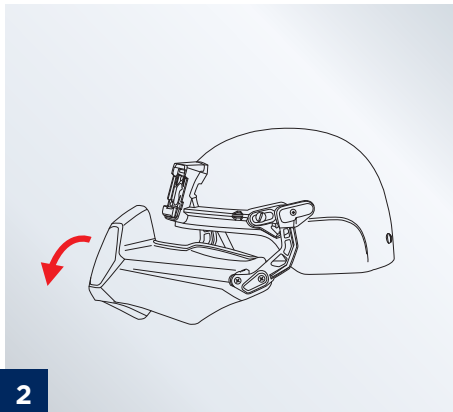
1. Unscrew center bolt of visor arm and remove from damaged visor lens.
2. Pull off visor gasket from lens.
3. Unscrew the bolts on the side clips of lens.
4. Take the new visor lens & attach the visor arm by threading screw into the center hole of the arm & lens.
5. Install the gasket on the lens:
  - a. Slide the left side of the gasket over the left corner of the visor.
  - b. Stretch the gasket center hole around the center screw of the visor.
  - c. Slide the right side of the gasket over the right corner of the visor.
6. Screw in the side clips onto either side of the lens.



## MANDIBLE GUARD

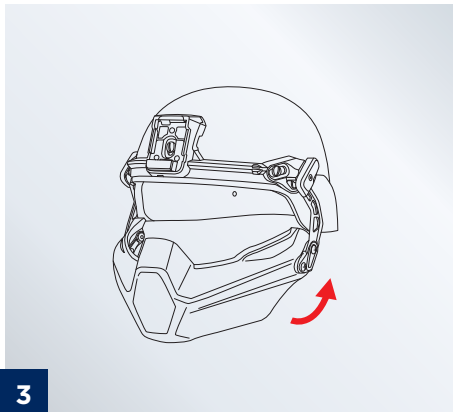


1  
Insert rivet heads on both sides of the mandible with the attachment slots on the front mount.



**2**

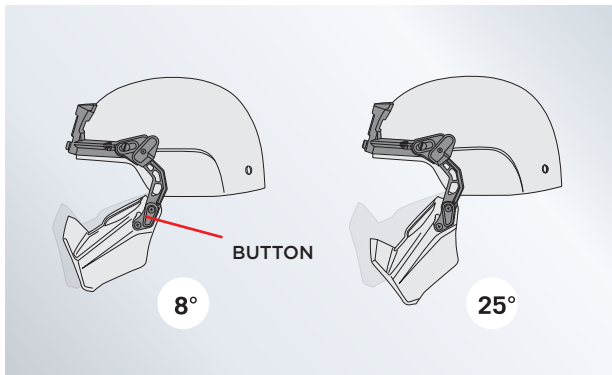
Rotate the mandible downward while continually pulling forward allowing the rivet heads to engage the front slots.



**3**

Allow the mandible to snap backwards into the locked position.



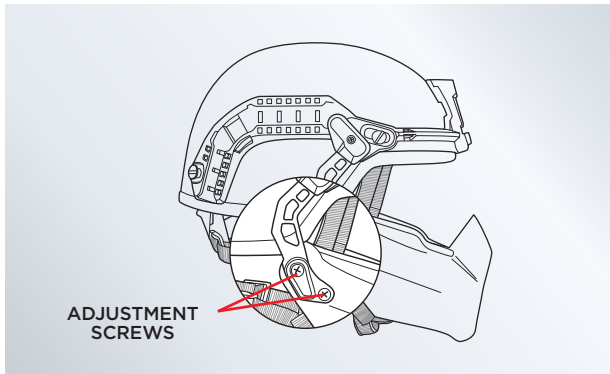


### POSITIONING MANDIBLE

The mandible can be tilted downwards by 8° or 25° by pressing the two buttons on the side brackets.

This will allow for better sight compatibility and ability to eat or drink.

To move mandible back to normal position (0°), tilt head to push mandible against chest, pushing the mandible upwards.

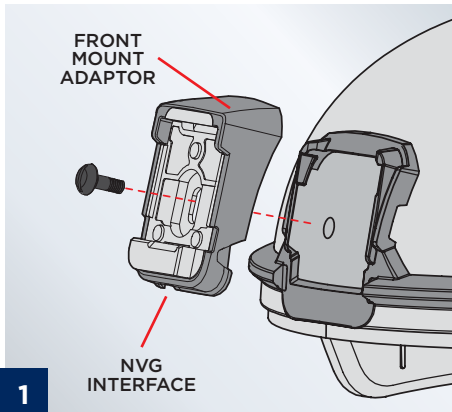


### ADJUSTMENT AND FIT

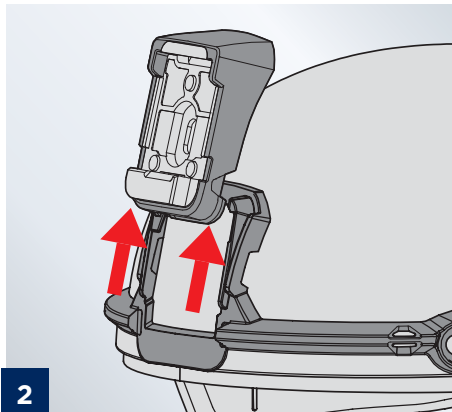
For proper fit, loosen the two adjustment bolts on both sides of the mandible guard. Tilt the mandible guard upwards or downwards to ensure proper jaw coverage and retighten screws while holding mandible guard in desired position.

Once screws are tightened, test the visor fit by moving the visor to the up position and back into the locked position - you should be able to move the visor down easily using one hand.

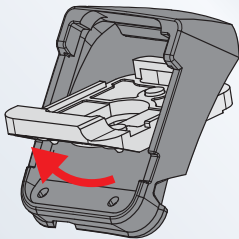
## CHANGING NIGHT VISION GOGGLE (NVG) INTERFACE



To change the NVG interface in the Front Mount, unscrew the center bolt and t-nut.

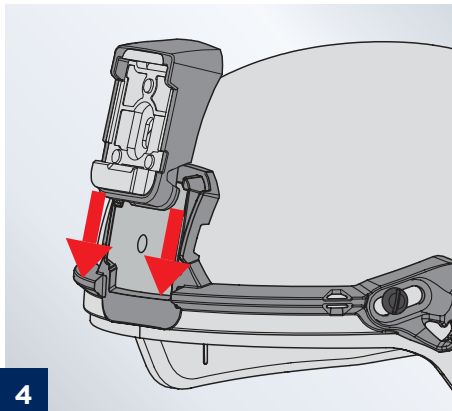


Remove the Front Mount adaptor by sliding it upwards.



3

Push the bottom end of the NVG interface out of the adaptor.

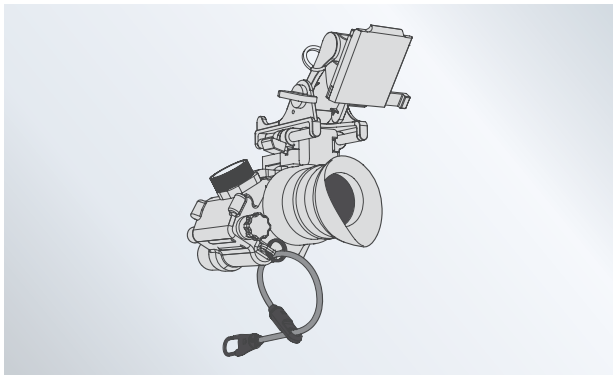


4

Insert the new NVG interface into the adaptor. Slide adaptor down into the Front Mount as shown.

Use center bolt and t-nut to fasten adaptor of Front Mount to helmet.

## AFFIXING NIGHT VISION GOGGLES



1. With helmet in lap, hold base of NVG attachment arm with two fingers and insert top half of arm into the front bracket of Front Mount.
2. Push bottom half of arm into NVG dock until it clicks into place. Ensure NVG arm is secure by pulling on it; the arm should not release.



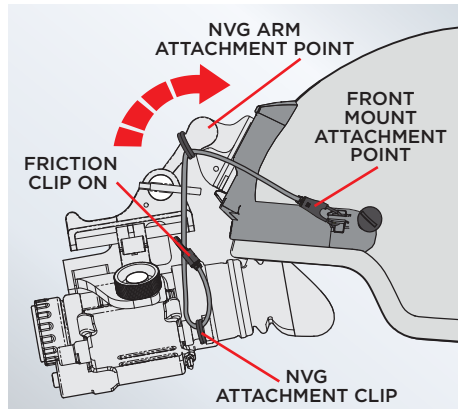
### **FITTING THE SHOCK CORD TO THE HELMET & NVGS**

This Head Protection System may be supplied with a shock cord to help support NVGs when they are fitted to the Front Mount and to secure the NVGs in case they are dislodged by a collision or fall.

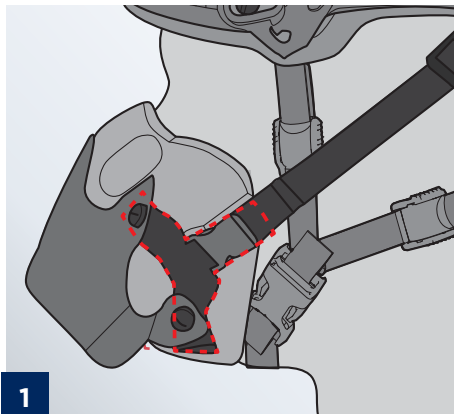
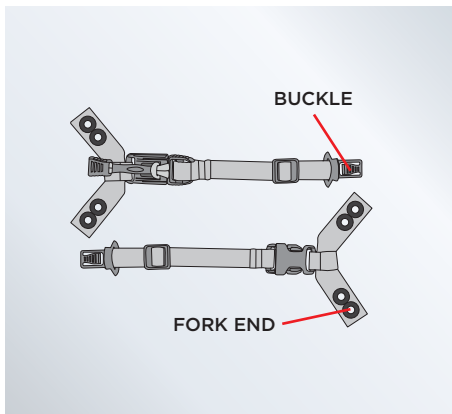
The bungee cable is fitted with a friction clip to allow the user to adjust the length and the tension of the bungee.

## ASSEMBLY

1. Attach the bungee mounted ring to the NVG device on the outside edge.
2. Attach the loose ring onto the NVG arm. Ensure both rings are secure and free to swivel and turn.
3. Attach the NVG arm to the Front Mount on the helmet.
4. Pass the bungee hook clip through the NVG spring clip and then attach the hook clip to the Front Mount securing point on the same side of the helmet where the NVG will be used, e.g. left side if being used with the left eye.
5. Tension loosely until NVG has been tested for position, then tension more to reduce any shaking in the NVG by sliding the friction clip up towards the pivot point of the arm.



## STRAP EXTENDER FOR MASK

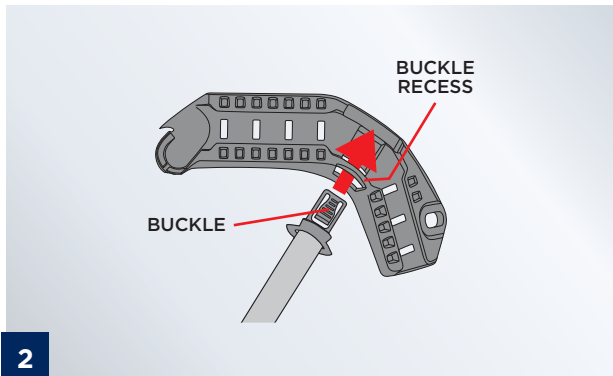


### INCLUDED

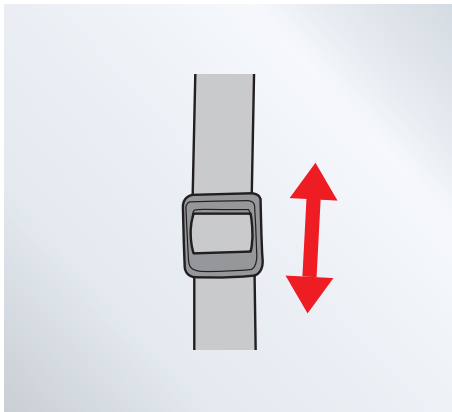
- 1 Left Strap Extender
- 1 Right Strap Extender

**NOTE:** Depending on type of mask used, fork ends may be installed either on the outside of the mask's plastic housing or underneath between the housing and the rubber face mask.

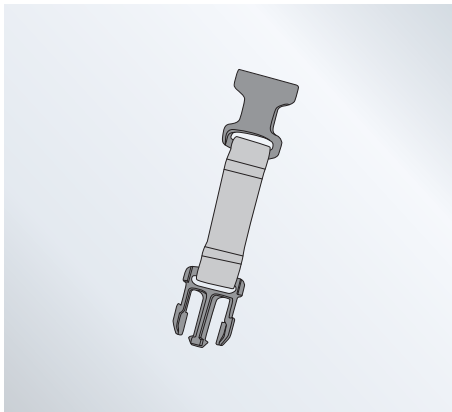




Don the helmet and mask. Clip the buckle of the Strap Extender into the recess located in the middle of the rail. Repeat for the other side.



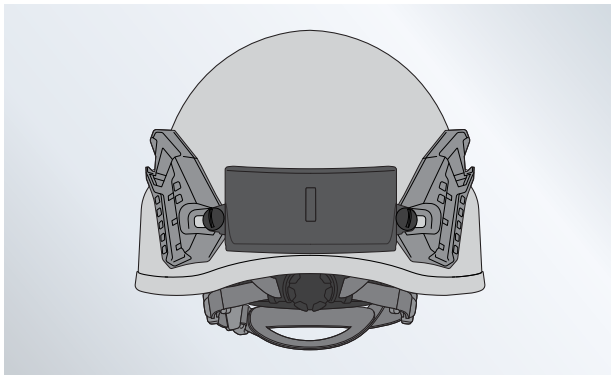
**ADJUSTMENT:** To adjust the length of the straps once clipped to the rails, use ladder-lock to loosen or tighten straps.



### **CBRN RETENTION SYSTEM STRAP EXTENDER**

If using a CBRN mask, a strap extension can be used to lengthen the retention system straps by clipping the buckle of the strap extension to the retention system buckle.

## COUNTERWEIGHT



Install counterweight by removing rear rail bolt and placing counterweight straps over rail holes.

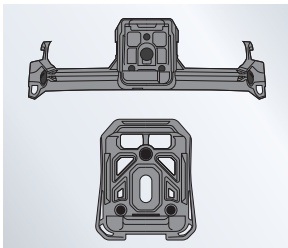
Reinstall rail bolts through counterweight straps and rails

## SPARE PARTS

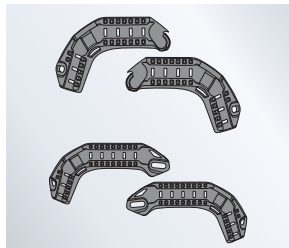
*(Ordered Separately)*



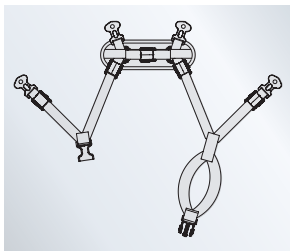
**SUSPENSION ASSEMBLY**



**SHROUDS**



**RAILS**



**RETENTION SYSTEM**



**HARDWARE**

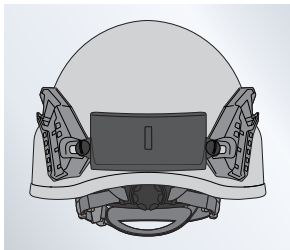


**RAIL BUNGEEES**

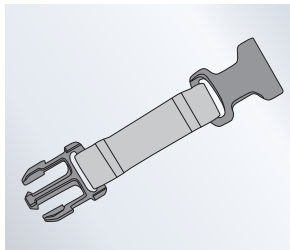
## ADDITIONAL ACCESSORIES

*(Ordered Separately)*

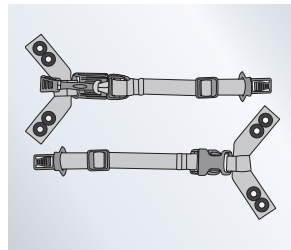
THE IMAGES USED IN THIS GUIDE ARE FOR REFERENCE ONLY AND MAY NOT REFLECT THE EXACT CONFIGURATION OF THE PRODUCT



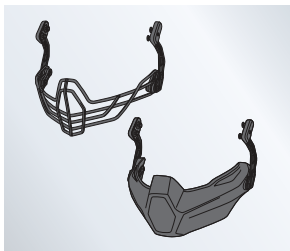
**COUNTERWEIGHT**



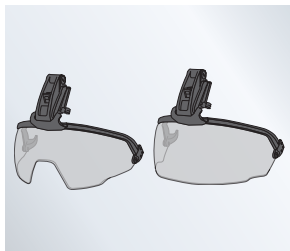
**CBRN EXTENDER**



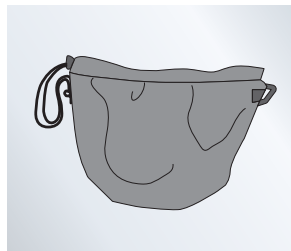
**O2 STRAP EXTENDER**



**MANDIBLES**



**VISOR**



**HELMET BAGS**

# CARE & SUPPORT

## ONE-TIME EVENTS

If a severe impact damages the helmet resulting in dented or flattened areas, the helmet performance might be reduced. The helmet system should be replaced.

**HELMET COVER CAN BE WORN TO MINIMIZE WEAR AND TEAR ON THE HELMET SHELL LOOP AND PAINT.**

## RECOMMENDED MAINTENANCE: ALL USERS

1. Clean the helmet with a mild soap and water
2. Check that the retention system bolts are tight
3. Clean the Loop to remove dust and dirt by using air pressure
4. Visually check the shroud and rails for signs of breakage
5. Visually check the fit band for signs of breakage
6. Check that the rear dial on the fit band works properly
7. Check that the retention system does not have any damage, that the buckle and strap tensioners open and close properly

**IF ANY DEFECTS ARE DETECTED, THE DAMAGED COMPONENTS MUST BE REPLACED BEFORE USE.**

**HAVE QUESTIONS OR COMMENTS? CONTACT GALVION CUSTOMER SUPPORT**

**1-866-713-0406 | [CUSTOMERCARE@GALVION.COM](mailto:CUSTOMERCARE@GALVION.COM) | [GALVION.COM](http://GALVION.COM)**

## OPERATOR NOTES

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