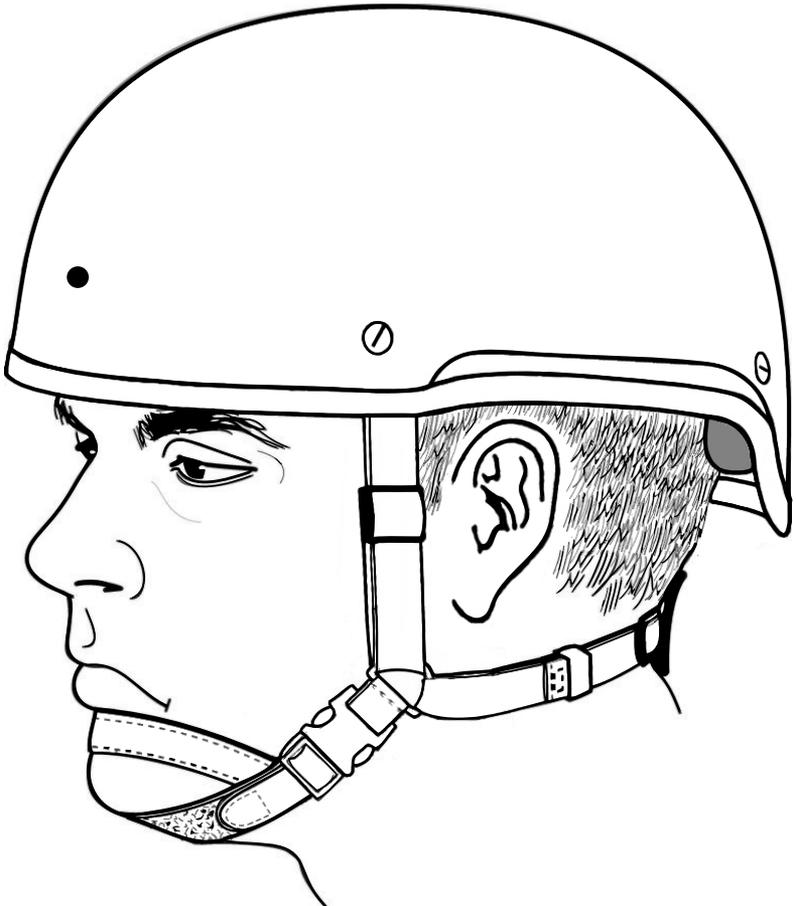


CARE AND USE INSTRUCTIONS

**TACTICAL BALLISTIC HELMET II
HIGH SIDE TRIM
(TBH II™ HST)**



**WARNING**

When you replace components or install additional components on Gentex products, always use genuine factory-new Gentex parts. This will ensure a correct fit and maintain the safety of the product. Use of non-Gentex parts (salvage, refurbished, etc.) for replacement or additional installation will void any product warranty and may compromise the safety of the user.

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TACTICAL BALLISTIC HELMET II HIGH SIDE TRIM (TBH II™HST)

FEATURES

- The helmet (**Figure 1**) is trimmed higher on the sides than the standard TBH II or ACH helmets to accommodate various headsets with earcups that protrude outward toward the bottom, such as GenCOM III and Comtac headsets.
- The helmet shell provides ballistic protection for the covered area in accordance with MIL-STD-662, 2150 FPS and 9mm FMJ at 1400-1450 FPS per PS-0428/A13244.
- A reduced profile provides expanded upward and peripheral field of view for improved situational awareness.
- The helmet provides improved interface with protective goggles, NVG components, sighting systems, and other equipment.
- A four-point adjustable retention system provides stability and comfort.
- The pad suspension system is designed for uniform compression and a snug fit. One style is water resistant; another style is adjustable and accommodates headband-style headsets.
- A compatible integrated communication system, a night vision goggle (NVG) mounting bracket, and various helmet covers are available.
- The helmet is available in sizes Medium, Large, and X-Large and with various colors and options as described on Pages 28-30.

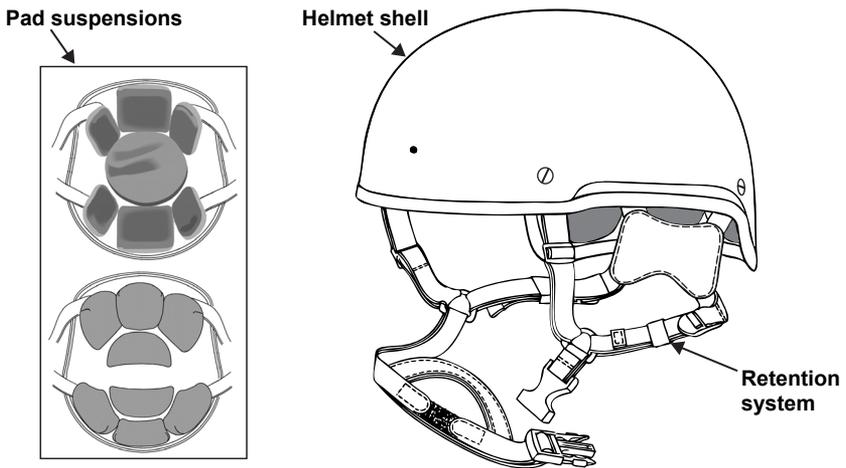


Figure 1. TBH II HST Helmet

COMPONENT DESCRIPTION

Helmet Shell

The ballistic composite helmet shell (**Figure 2**) incorporates state-of-the-art materials to enhance protection with reduced weight. It is available in three sizes. The helmet shell may have one or three pre-drilled holes at the front to permit the attachment of various styles of NVG mounting brackets.

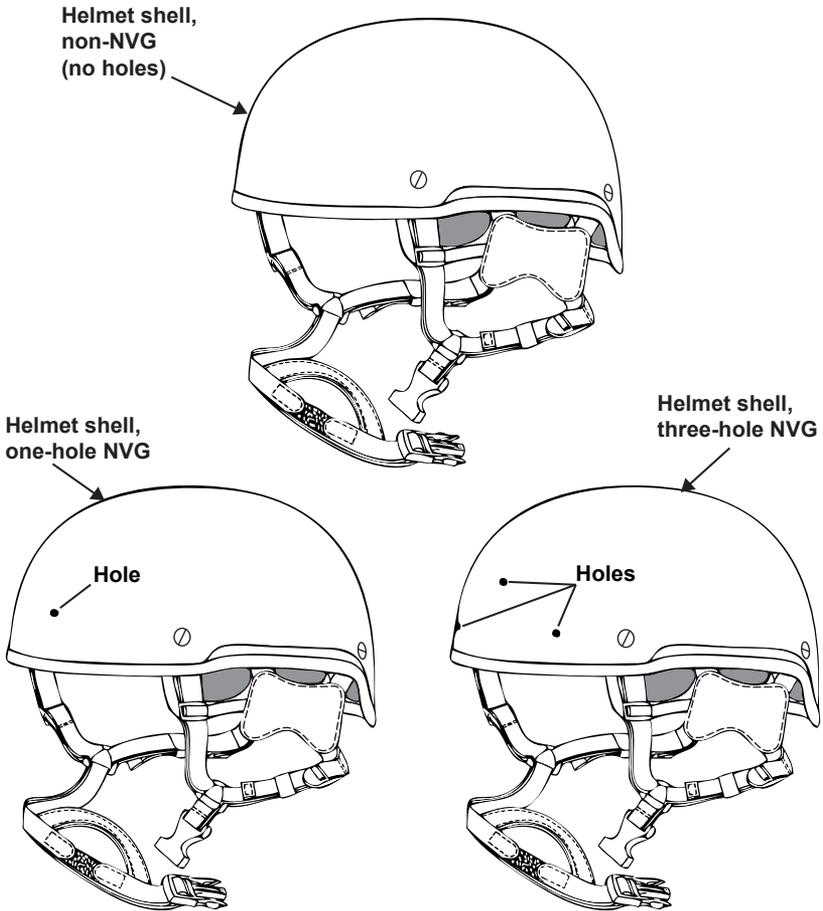


Figure 2. Helmet Shell

Retention Assembly

The retention assembly (**Figure 3**) provides stability and comfort. It is available in three styles. The **X-style** retention (in two sizes and several colors) includes a nape pad, an adjustable chin strap, front slide adjustments, and rear ladder-lock adjustments. (A variation of this style has buckle pads.) The **universal-size X-style** retention (in four colors) includes an adjustable nape pad, an adjustable chin strap, and front and rear slide adjustments. The **H-style** retention (one size, Foliage Green), includes a nape pad, a chin strap, and ladder-lock adjustments.

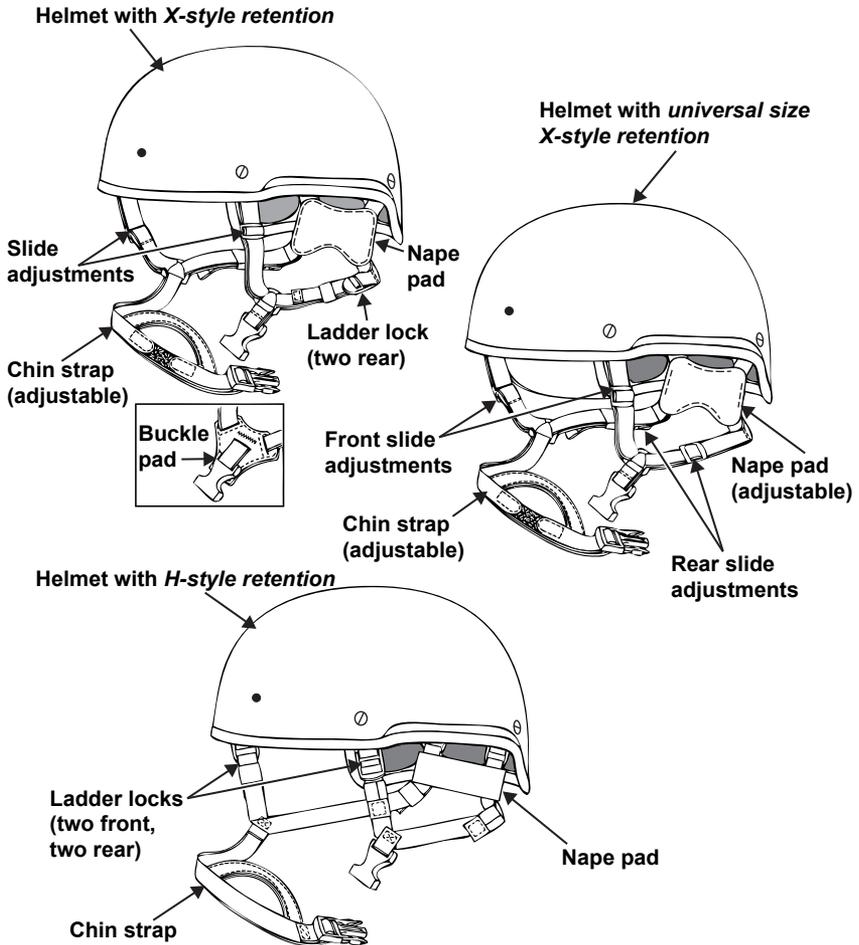


Figure 3. Retention Assembly

Suspension System

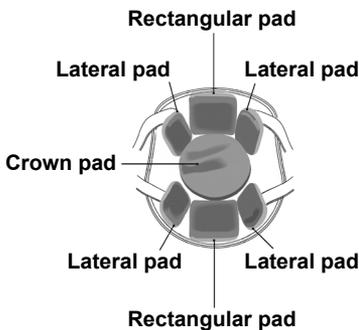
Your helmet is equipped with a pad suspension system (**Figure 4**), available in two different pad styles. Each pad style consists of a set of pads attached with hook and pile to the inside of the helmet shell. The differences between the two styles are as follows:

- If you have pad style part number **05D11950-3** or **05D11950-4**, you have a set of seven **water-resistant** pads attached to the inside of the helmet with hook-and-pile fastener. The set contains two rectangular pads (one in front and one in back), one round crown pad, and four oval lateral pads. The **05D11950-3** pads are $\frac{3}{4}$ -inch thick, and the **05D11950-4** pads are 1 inch thick. (The 1-inch-thick pad set has a $\frac{3}{4}$ -inch-thick crown pad.) The differences in thickness allow for ease of fitting.
- If you have pad style part number **05D11980-20**, you have a set of eight **adjustable** pads: three in the front of the helmet, three in the rear, and two at the crown. The crown pads can be spaced to accommodate a headband-style headset. Each pad consists of three impact-absorbing foam filler pads (two $\frac{1}{4}$ -inch-thick pads and one $\frac{1}{2}$ -inch-thick pad) inside a cover with a hook/pile closure. The $\frac{1}{4}$ -inch-thick foam pads can be removed or added to allow sizing adjustments for optimum stability and comfort.

⚠ WARNING

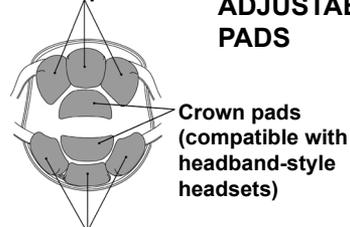
Pad style part number 05D11980-20 only: For impact protection, the $\frac{1}{2}$ -inch-thick foam pad must be kept inside each cloth cover of the adjustable pad suspension system at all times, and the pads must be properly installed inside the helmet.

WATER-RESISTANT PADS



Front pads

ADJUSTABLE PADS



Rear pads

PAD DETAIL

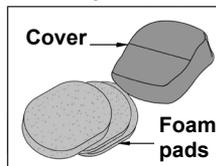


Figure 4. Pad Suspension Systems

HELMET PREPARATION

Helmet preparation includes determining helmet size, checking the fit of the pad suspension, making final adjustments to the helmet, and as applicable, installing the NVG mounting bracket on the helmet.

Determining Helmet Size

Helmet sizes are medium, large, and X-large. To determine helmet size, you must (1) measure and record the wearer's head length, (2) measure and record the wearer's head breadth, (3) measure and record the wearer's head circumference, and (4) select the helmet size based upon the parameters in **Table 1** on Page 6.

Tools/Equipment Needed

- Caliper
- Ruler
- Tape measure

Measuring Head Length

1. Use a caliper and a ruler as shown in **Figure 5** to measure the distance (to the nearest 1/16 inch) from the point between the eyebrows to the back of the head. This is the head length. Ensure that the caliper touches the skin lightly and does not indent the skin.

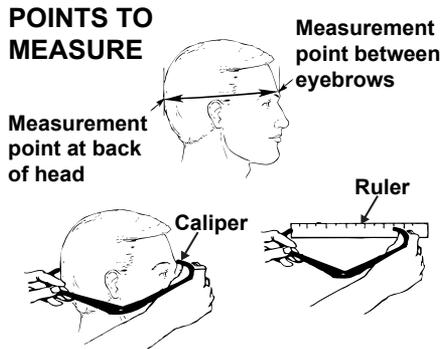


Figure 5. Head Length

2. Record the measurement.

Measuring Head Breadth

1. Use a caliper and a ruler as shown in **Figure 6** to measure the maximum head width (to the nearest 1/16 inch) above the ears. This is the head breadth. Ensure that the caliper touches the skin lightly and does not indent the skin.
2. Record the measurement.

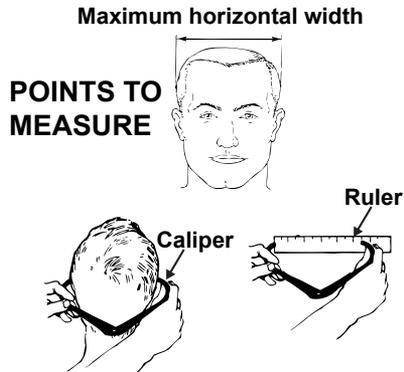
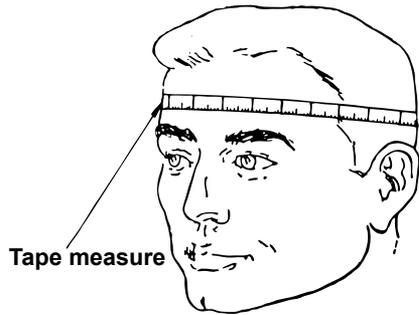


Figure 6. Head Breadth

(Continued on next page)

Measuring Head Circumference

1. Use a tape measure as shown in **Figure 7** to measure the maximum head circumference (to the nearest 1/16 inch) above the ears.
2. Record the measurement.



Selecting Helmet Size

Referring to **Table 1**, select the helmet size based on head length, head breadth, and head circumference.

Figure 7. Head Circumference

Table 1. Sizing Parameters

HELMET SIZE	HEAD LENGTH (Inches)	HEAD BREADTH (Inches)	HEAD CIRCUMFERENCE (Inches)
Medium	< 7-13/16	< 6-1/8	< 22-5/8
Large	7-13/16 to 8-1/8	6-1/8 to 6-5/16	22-5/8 to 23-3/8
X-Large	>8-1/8	>6-5/16	>23-3/8

NOTE:

- The sizing parameters for the helmets with fitting pads are based on a fitting pad compression of approximately 30 percent. This is the recommended compression for optimum helmet stability.
- The sizing parameters for the helmets are approximate. Depending upon the wearer's individual head shape, the next larger or smaller size may be needed.
- If the helmet will be worn with an M-40 respirator or a GenCom III or Peltor® headset, and a head measurement is near the maximum parameter for a given size (as specified in **Table 1**), a larger size may be needed.

Checking Pad Suspension Fit (Adjustable Pads)

WARNING

- Ensure that all helmet adjustment mechanisms are properly adjusted for a snug, secure fit at all times when the helmet is worn. Failure to do so can result in an unstable helmet that will not protect the wearer.
- Each pad contains one 1/2-inch-thick foam pad and two 1/4-inch-thick foam pads inside the cover. For impact protection and helmet stability, you must keep all 1/2-inch-thick foam pads inside the covers and all pads properly installed in the helmet when the helmet is worn. Remove the 1/4-inch-thick pads only where necessary to adjust the fit.

1. Have the wearer don the helmet. Allow the helmet to settle on the head for a few minutes before checking the fit.
2. Ensure that the front pads are just above the eyebrows. If the helmet is too high, have the wearer remove the helmet. Referring to **Figure 8**, adjust the height as follows:
 - a. Remove the two **crown pads**, noting their position inside the helmet.
 - b. Remove **one or both 1/4-inch-thick foam pads** from each crown pad cover.
 - c. Reinstall both crown pads (**with the 1/2-inch-thick foam pad inside each one**) in the helmet in the same positions from which they were removed. Ensure that the opening in each crown pad cover faces the top of the helmet. If the wearer uses a headset, space the crown pads to accommodate the headband of the headset.
 - d. Have the wearer don the helmet. Recheck the helmet height.

(Continued on next page)

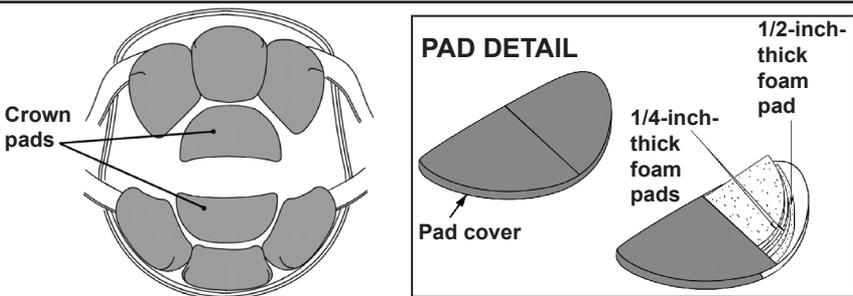


Figure 8. Crown Pads

3. Ensure that the helmet fit is snug and secure, yet comfortable. If the helmet is too tight, have the wearer remove the helmet, refer to **Figure 9**, and adjust the front and rear pads as follows:
 - a. Remove the **front or rear pads** from the helmet as needed, noting their position inside the helmet.
 - b. Remove **one or both 1/4-inch-thick foam pads** from front or rear pad cover.
 - c. Reinstall both rear pads (**with at least the 1/2-inch-thick foam pad inside each one**) in the helmet in the same positions from which they were removed. Ensure that the opening in each crown pad cover faces the rear of the helmet.
 - d. Have the wearer don the helmet again. Recheck the fit.
 4. Proceed to **Adjusting Helmet with X-Style Retention** (Page 10,) **Adjusting Helmet with Universal-Size X-Style Retention** (Page 11), or **Adjusting Helmet with H-Style Retention** (Page 12).
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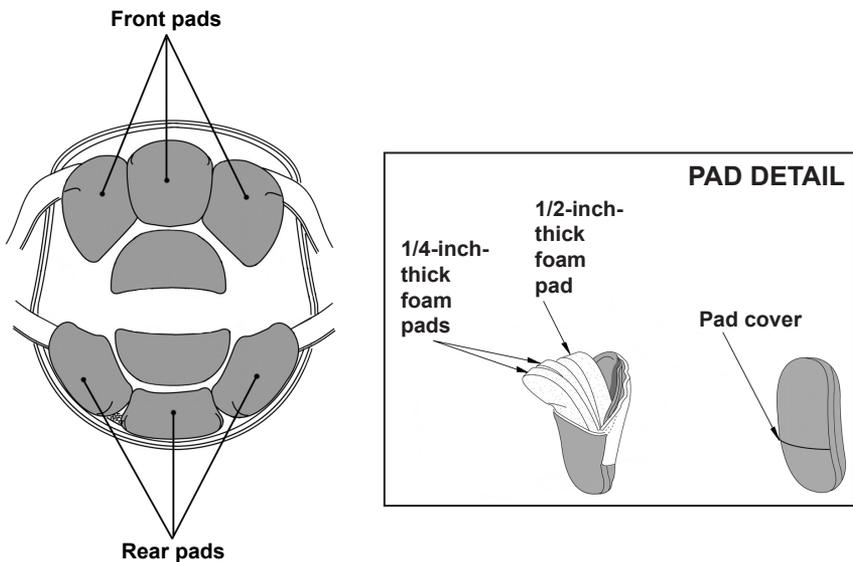


Figure 9. Adjusting Front and Rear Pads

Checking Pad Suspension Fit (Water-Resistant Pads)

⚠ WARNING

Ensure that all helmet adjustment mechanisms are properly adjusted for a snug, secure fit at all times when the helmet is worn. Failure to do so can result in an unstable helmet that will not protect the wearer.

1. Have the wearer don the helmet. Allow the helmet to settle on the head for a few minutes before checking the fit.

If the 1-inch-thick pads are installed and the helmet is too tight, remove the 1-inch-thick pads and install the $\frac{3}{4}$ -inch-thick pads as shown in **Figure 10**. (Pads must be ordered separately.)

If the $\frac{3}{4}$ -inch-thick pads are installed and the helmet is too loose, remove the $\frac{3}{4}$ -inch-thick pads and install the 1-inch-thick pads as shown in **Figure 10**. (The 1-inch-thick pad set has a $\frac{3}{4}$ -inch thick crown pad.)

NOTE: The helmet is only provided with one thickness of pads. The user must order the other thickness if needed.

2. Proceed to **Adjusting Helmet with X-Style Retention** (Page 10,) **Adjusting Helmet with Universal-Size X-Style Retention** (Page 11), or **Adjusting Helmet with H-Style Retention** (Page 12).

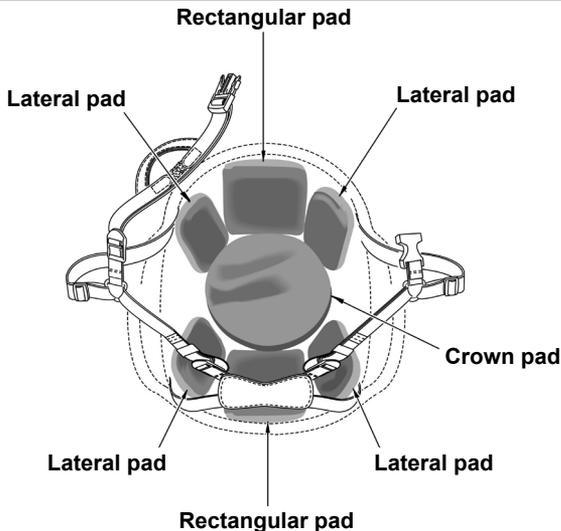


Figure 10. Water-Resistant Pads Installed

Adjusting Helmet with X-style Retention

WARNING

Ensure that all helmet adjustment mechanisms are properly adjusted for a snug, secure fit at all times when the helmet is worn. Failure to do so can result in an unstable helmet that will not protect the wearer.

1. Referring to **Figure 11**, do the following:
 - a. Buckle the chinstrap.
 - b. Adjust the nape strap for a snug, secure, comfortable fit at the nape.
 - c. Tighten the chin strap by pulling on the ends until the fit is snug, secure, and comfortable. Reattach the ends to the pile fastener when the desired fit is attained.
2. If the retention straps seem too long or too short, refer to **Figure 11** and move the slide adjustments up or down.
3. Check the helmet stability by attempting to rock the helmet back and forth on the head. If the helmet rocks back and forth, it is not stable. Adjust the nape strap further until the helmet is stable.
4. Repeat Steps 1 through 3 as necessary. Recheck helmet stability; no straps should be loose.
5. Release the buckle to remove the helmet.

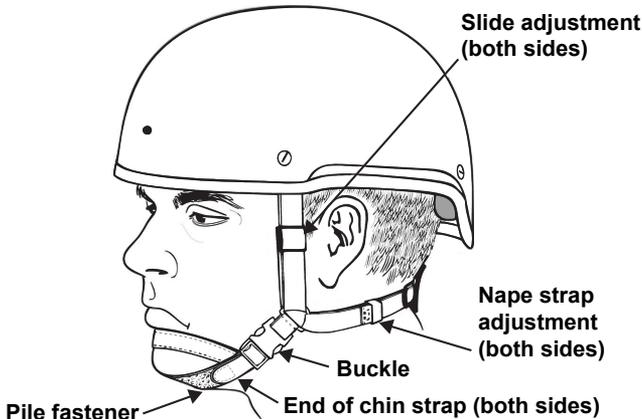


Figure 11. X-style Retention Adjustment

Adjusting Helmet with Universal X-Style Retention

WARNING

Ensure that all helmet adjustment mechanisms are properly adjusted for a snug, secure fit at all times when the helmet is worn. Failure to do so can result in an unstable helmet that will not protect the wearer.

1. Referring to **Figure 12**, do the following:
 - a. Buckle the chinstrap.
 - b. Adjust the nape pad for a snug, secure, comfortable fit at the nape by moving the two rear side adjustments.
 - c. Tighten the chin strap by pulling on the ends until the fit is snug, secure, and comfortable. Reattach the ends to the pile fastener when the desired fit is attained.
2. If the front retention straps seem too long or too short, refer to **Figure 12** and move the two front slide adjustments up or down.
3. If necessary, reposition the nape pad by sliding it up or down the straps.
4. Check the helmet stability by attempting to rock the helmet back and forth on the head. If the helmet rocks back and forth, it is not stable. Adjust the nape pad further until the helmet is stable.
5. Repeat Steps 1 through 4 as necessary. Recheck helmet stability; no straps should be loose.
6. Release the chin strap buckle to remove the helmet.

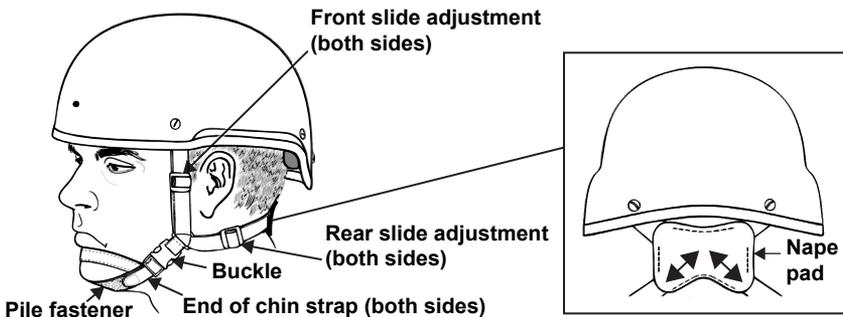


Figure 12. Universal X-style Retention Adjustment

Adjusting Helmet with H-style Retention

WARNING

Ensure that all helmet adjustment mechanisms are properly adjusted for a snug, secure fit at all times when the helmet is worn. Failure to do so can result in an unstable helmet that will not protect the wearer.

1. Position the helmet on the head and buckle the chin strap (**Figure 13**). Hold the helmet in place with one hand on top of the head.

NOTE: If you pull too tightly on any strap during Steps 3 and 4 — or if you do not hold the helmet with one hand on top for initial adjustment as instructed in Step 2 — the helmet may become uncomfortable and tilted on your head, and the chin cup may not be centered.

2. With hand on helmet, partially tighten the two back straps one at a time.
3. With hand on helmet, partially tighten the two front straps one at a time.
4. With both hands, fully tighten the back straps and then the front straps.
5. Slide the nape pad up or down the straps as necessary for a snug fit, and tighten the nape strap snugly. (Tighten further for additional stability with NVGs.) Keep the nape pad away from the ladder locks to prevent the straps from jamming.
6. Check the helmet stability by attempting to rock the helmet back and forth on the head. If the helmet rocks back and forth, it is not stable. Adjust the nape strap further until the helmet is stable.
7. Release the buckle to remove the helmet.

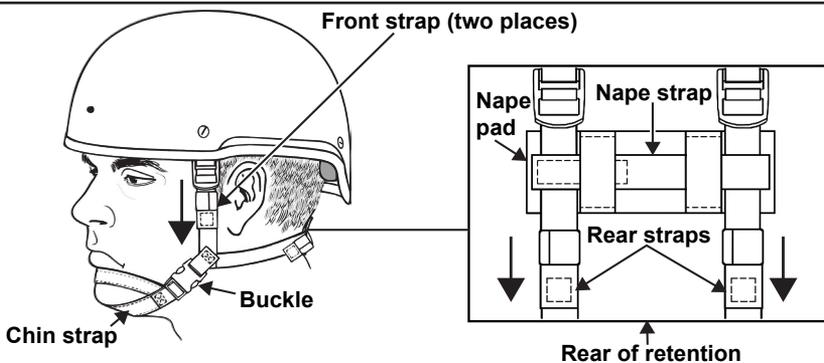


Figure 13. H-style Retention Adjustment

Installing Optional NVG Bracket (One-Hole Helmet)

Referring to **Figure 14**, do the following:

1. Ensure that you have an NVG mounting bracket assembly, a screw, and a threaded post.
2. Remove the center front fitting pad from inside the helmet. This will provide access to the mounting hole for the NVG bracket.
3. Place the NVG mounting bracket assembly over the center front edge of the helmet. Line up the hole in the plate and the hole in the helmet shell. Ensure that the bracket cleat is tightly aligned over the edge of the helmet.
4. From outside the helmet, insert the screw through the NVG mounting bracket assembly and through the hole in the helmet shell. From inside the helmet, align the threaded post over the end of the screw. Partially tighten the screw and post.
5. Before completely tightening the screw, ensure that the cleat of front bracket assembly is tight against the rim (edge) of the helmet. Push the bracket up so that the cleat is tight against the rim of the helmet while tightening the screw and post. It may help to have another person assist with this step.
6. Reinstall the center front fitting pad inside the helmet

CAUTION

Do not over-tighten the screw, or the bracket assembly may break.

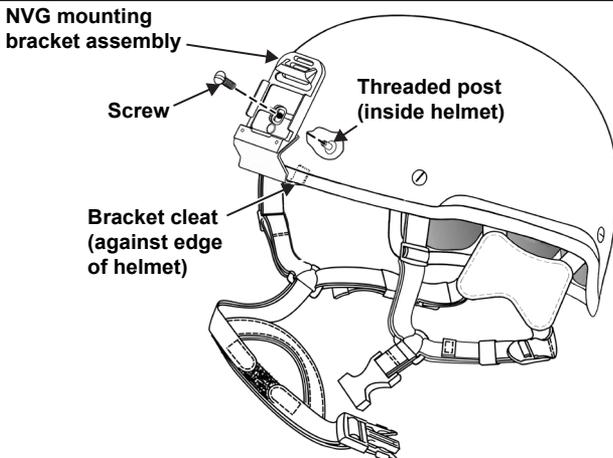


Figure 14. Attachment of One-Hole Mounting Bracket (03B11760-1)

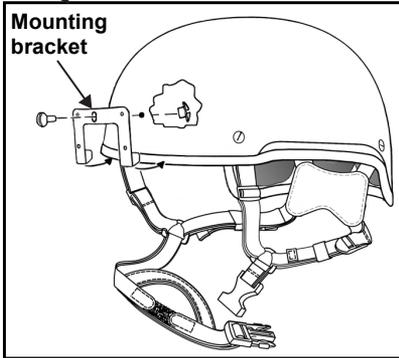
Installing Optional Quick-Disconnect NVG Mounting Kit (One-Hole Helmet)

To install the quick-disconnect NVG mounting kit (Figure 15), you must:

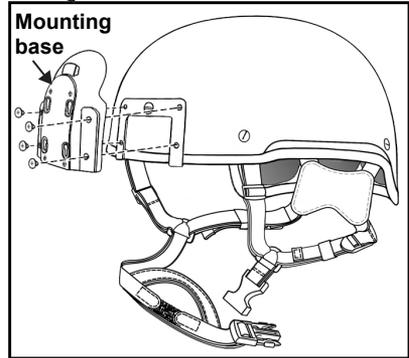
- Attach the mounting bracket to the helmet.
- Attach the NVG mounting base to the mounting bracket.
- Affix the pile fasteners to the back of the helmet (to hold the ANVIS battery pack).
- Modify the ANVIS mount (components not included with kit).

Refer to TP0279 (included with the kit) for more information.

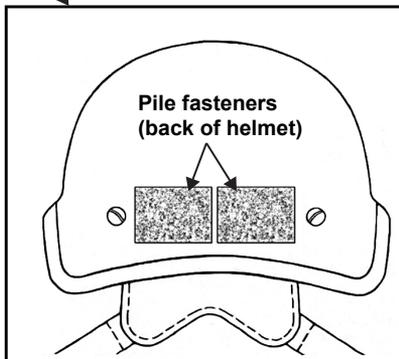
Attaching mounting bracket to helmet



Attaching NVG mounting base to mounting bracket



Affixing pile fasteners to helmet



Modifying ANVIS Mount (not included)

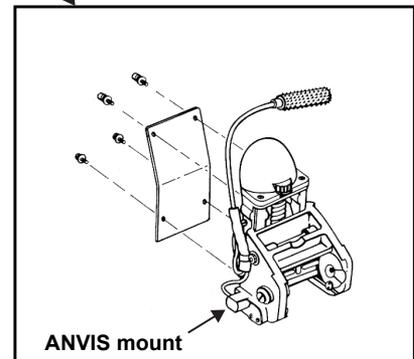


Figure 15. Attachment of Quick-Disconnect Mounting Kit (05C12036-2)

Installing Optional Low-Profile NVG Bracket (One-Hole or Three-Hole Helmet)

The low-profile NVG bracket can be mounted on a one-hole helmet with a screw and a bolt, or it can be mounted on a three-hole helmet with three screws and washers.

Installing Low-Profile NVG Bracket on One-Hole Helmet (See next page for three-hole helmet.)

Referring to **Figure 16**, do the following:

1. Remove the three screws and washers from the bracket.
2. Remove the center front fitting pad from the helmet to gain access to the mounting hole on the inside.
3. Inside the helmet, insert the bolt through the mounting hole.
4. Outside the helmet, align the hole in the center of the bracket with the mounting hole on the helmet.
5. Insert a screw through the center hole in the bracket and into the bolt. Slowly tighten the screw as you align the bracket to the helmet contour.
6. Reinstall the center front fitting pad in the helmet.

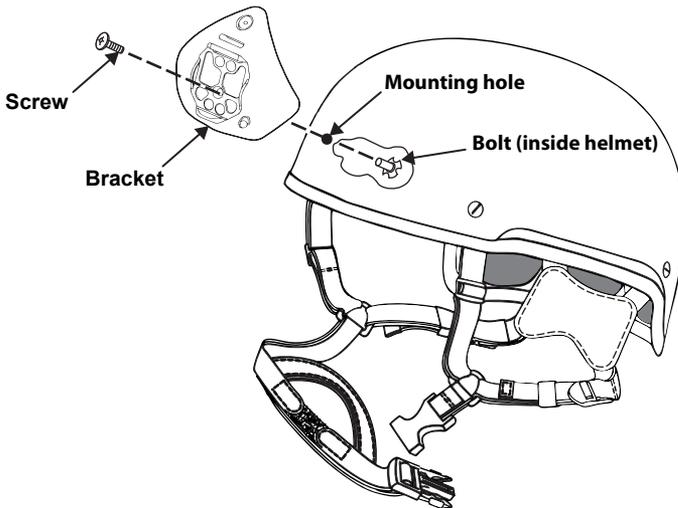


Figure 16. Attachment of Low-Profile NVG Bracket (A13479-1 or A13479-2)

**Installing Low-Profile NVG Bracket on Three-Hole Helmet
(See previous page for one-hole helmet.)**

NOTE: The nut plates move to allow the bracket to adjust for minor differences in the helmet hole pattern.

Referring to **Figure 17**, do the following:

1. Remove the three screws and washers from the bracket.
2. Remove the center front fitting pad from the helmet to gain access to the mounting holes on the inside.
3. Outside the helmet, align the three nut plates in the bracket with the three mounting holes on the helmet.
4. Inside the helmet, insert the three screws with washers through the mounting holes and into the nut plates. Slowly and evenly tighten the screws as you align the bracket to the helmet contour. When the bracket is properly aligned, finish tightening the screws.
5. Reinstall the center front fitting pad in the helmet.

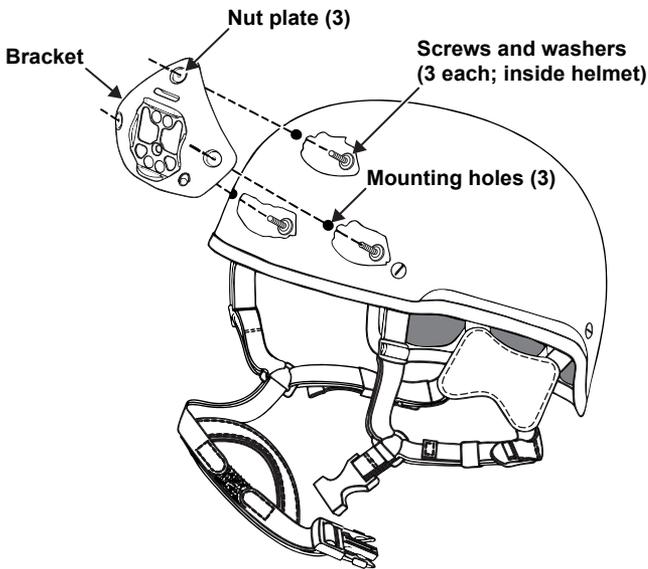


Figure 17. Attachment of Low-Profile NVG Bracket (A13479-1 or A13479-2)

DONNING/DOFFING/OPERATION

Operating Helmet with X-style Retention

⚠ WARNING

Ensure that all helmet adjustment mechanisms are properly adjusted for a snug, secure fit at all times when the helmet is worn. Failure to do so can result in an unstable helmet that will reduce protection to the wearer.

1. Referring to **Figure 18**, don the helmet, ensuring that the helmet rests just above the eyebrows.
2. Buckle the chinstrap.
3. As needed, adjust the nape pad for a snug, secure fit.
4. Tighten the chin strap by pulling on the ends until the fit is snug, secure, and comfortable. Reattach the ends to the pile fastener.
5. Check the helmet stability by attempting to rock the helmet back and forth on the head. If the helmet rocks back and forth, it is not stable. Adjust the nape pad further until the helmet is stable.
6. Repeat Steps 1 through 5 as necessary. Recheck helmet stability; no straps should be loose.
7. To doff the helmet, unbuckle the chinstrap and remove the helmet.

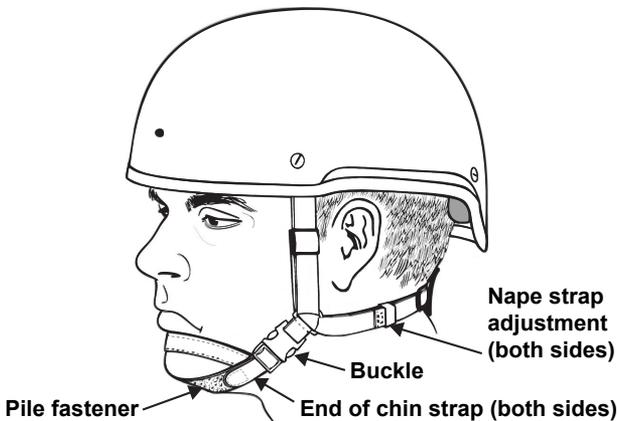


Figure 18. Helmet with X-style Retention

Operating Helmet with Universal X-Style Retention

WARNING

Ensure that all helmet adjustment mechanisms are properly adjusted for a snug, secure fit at all times when the helmet is worn. Failure to do so can result in an unstable helmet that will reduce protection to the wearer.

1. Referring to **Figure 19**, don the helmet, ensuring that the helmet rests just above the eyebrows.
2. Buckle the chinstrap.
3. Adjust the nape pad for a snug, secure, fit.
4. Tighten the chin strap by pulling on the ends until the fit is snug, secure, and comfortable. Reattach the ends to the pile fastener.
5. If necessary, reposition the nape pad by sliding it up or down the straps.
6. Check the helmet stability by attempting to rock the helmet back and forth on the head. If the helmet rocks back and forth, it is not stable. Adjust the nape pad further until the helmet is stable.
7. Repeat Steps 1 through 6 as necessary. Recheck helmet stability; no straps should be loose.
8. To doff the helmet, unbuckle the chinstrap and remove the helmet.

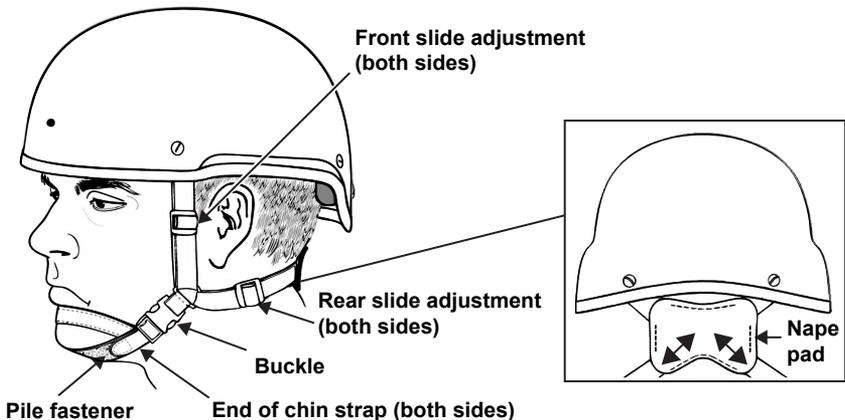


Figure 19. Helmet with Universal X-style Retention

Operating Helmet with H-style Retention

WARNING

Ensure that all helmet adjustment mechanisms are properly adjusted for a snug, secure fit at all times when the helmet is worn. Failure to do so can result in an unstable helmet that will reduce protection to the wearer.

1. Referring to **Figure 20**, don the helmet, ensuring that the helmet rests just above the eyebrows.
2. Buckle the chinstrap.
3. As needed, adjust the nape strap for a snug, secure fit.
4. As needed, tighten the front and rear straps evenly, ensuring that the helmet remains centered on the head.
5. To doff the helmet, unbuckle the chinstrap and remove the helmet from the head.

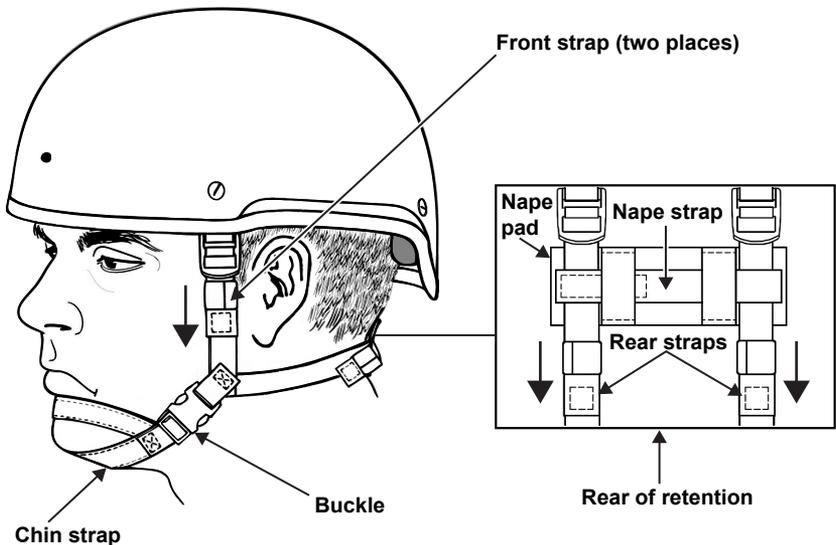


Figure 20. Helmet with H-style Retention

MAINTENANCE

Preventive Maintenance Checks

Table 2 lists the preventive maintenance tasks for each component and refers you to the appropriate procedure.

Table 2. Preventive Maintenance Checks

COMPONENT	EXAMINE FOR:	HELMET IS NOT READY IF:
Chinstrap	Broken buckles; torn or frayed webbing, worn hook/pile fasteners	Buckles are broken; webbing is torn or frayed; hook/pile fasteners do not secure
Pads	Worn hook/pile fasteners or foam; torn fabric or seams	Hook/pile fasteners or foam are worn, fabric or seams are torn
Retention Assembly	Torn/frayed webbing; broken nape strap buckles; worn nape pad; worn buckle pad	Webbing is torn or frayed; nape strap buckles are broken; nape pad is worn; buckle pad is worn
Helmet Shell	Holes, cracks, or delaminations greater than 2 inches	Helmet shell has holes, cracks, or delaminations greater than 2 inches

Cleaning

Table 3 lists the cleaning procedure for each of the helmet components.

Table 3. Cleaning

COMPONENT	PROCEDURE
Helmet Shell	Wipe clean with damp cloth.
Leather Components	Clean with soap, rinse thoroughly, wipe dry with clean cloth.
Retention Assembly	Wipe clean with damp cloth.
Pads	Machine wash with mild detergent in cold water.

Troubleshooting

Listed below are the troubleshooting tasks for each component, along with the appropriate repair procedure.

1. Malfunction: **Unable to fasten or adjust chin strap**
Test/Inspection: Inspect chin strap for defective webbing, buckles, or hook/pile fasteners.
Corrective Action: Replace chin strap as on Page 22 (for X-style retention) or replace retention straps as on Page 27.

2. Malfunction: **Unable to attain/maintain helmet stability**
Test/Inspection: Inspect retention assembly for defective buckles, worn buckle pads, torn/frayed webbing, or worn nape pad.
Corrective Action: Replace retention assembly as on Page 27.

3. Malfunction: **Helmet shell appears damaged.**
Test/Inspection: Inspect helmet shell for holes or cracks.
Corrective Action: Obtain new helmet.

COMPONENT REPLACEMENT

Replacing Chin Strap (X-style or Universal X-Style Retention Only)

Removal

1. Referring to **Figure 21**, unfasten the chin strap buckle on the left side (as worn) of the retention assembly.
2. Unlace the chin strap from the right side (as worn) of the retention assembly.

Installation

1. Lace the chin strap through the buckle on the right side (as worn) of the retention assembly.
2. Don the helmet. Fasten the chin strap to the buckle on the left side (as worn) of the retention assembly.
3. Check the fit in accordance with Page 10 or 11 as applicable. Make any necessary adjustments.

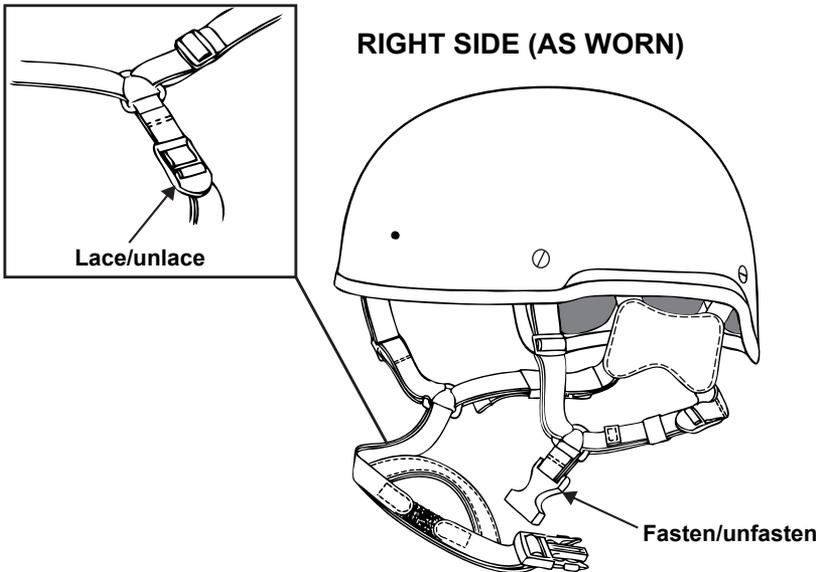


Figure 21. Chin Strap

Replacing Nape Pad (Universal X-Style Retention Only)

Removal

1. Referring to **Figure 22**, remove the rear pads as necessary to reach the attaching hardware of the retention assembly on the inside of the helmet, noting the position of the pads.
2. Referring to **Figure 23**, remove the two rear screws and nuts attaching the rear retention assembly straps to the helmet.
3. Remove the straps from the nape pad.

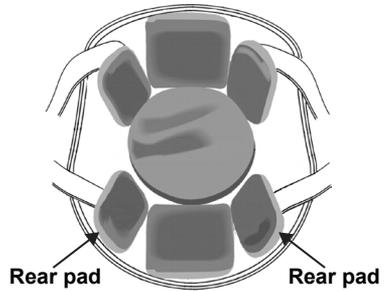


Figure 22. Pads to Remove

Installation

1. Referring to **Figure 24**, install the replacement nape pad as follows:
 - a. Insert the left rear strap through the bottom left opening in the nape pad, and then through the top right opening.
 - b. Insert the right rear strap through the bottom right opening of the nape pad, and then through the top left opening.

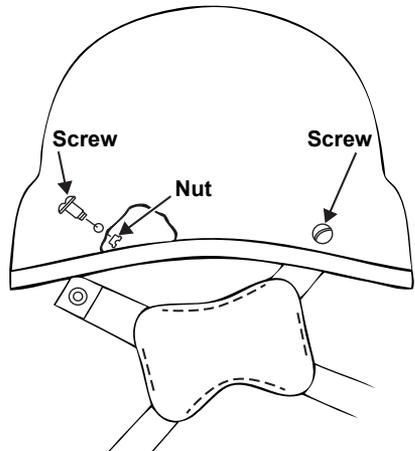


Figure 23. Rear Hardware

2. Referring to **Figure 23**, reattach the retention straps to the rear of the helmet with the two rear screws and nuts you removed previously.
3. Referring to **Figure 22**, reinstall the rear pads in the positions from which they were removed.
4. Check the fit in accordance with Page 11. Make any necessary adjustments.

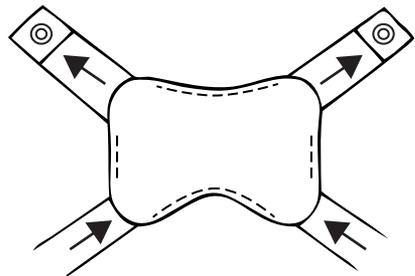


Figure 24. Nape Pad and Straps

Replacing Nape Pad (H-style Retention Only)

Removal

1. Referring to **Figure 25**, withdraw the nape strap from the webbing loops of the back of the nape pad.
2. Remove the nape pad.

Installation

1. Position the nape pad at the rear of the helmet.
2. Insert the nape strap through the webbing loops on the back of the nape pad.
3. Check the fit in accordance with Page 12, and adjust the nape pad for a snug fit.

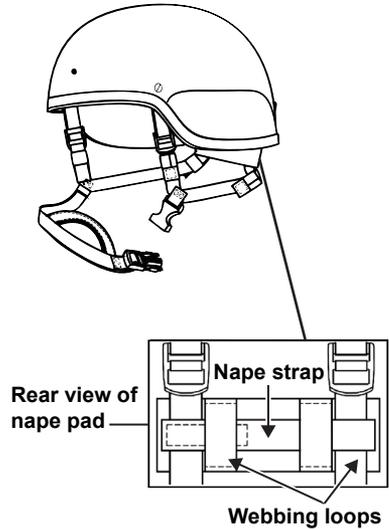


Figure 25. Nape Pad and Strap

Replacing Retention Straps (H-style Retention Only)

Removal

1. Referring to **Figure 26**, slide the four elastic webbing loops down to free the ends of the retention straps.
2. Unlace the ends of the retention straps from the four ladder locks.

Installation

1. Lace the ends of the straps through the four ladder locks.
2. Slide the four elastic webbing loops over the ends of the straps.
3. Check the fit as on Page 12, and adjust the straps for a snug fit.

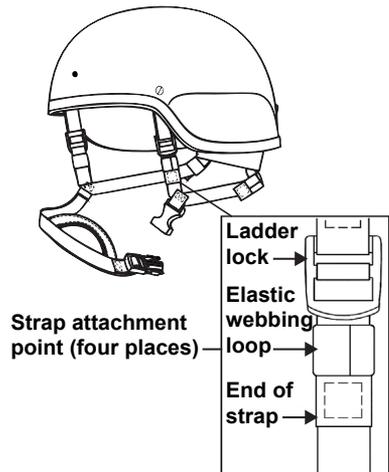


Figure 26. Retention Straps

Replacing Pad Suspension Assembly (Adjustable)

Removal

1. Referring to **Figure 27**, remove the pads from the helmet, noting their position and orientation in the helmet.
2. Look inside each of the removed pads, noting which foam pads are installed inside the cover.

Installation

⚠ WARNING

Each fitting pad contains one 1/2-inch-thick foam pad and two 1/4-inch-thick foam pads inside the cover. For impact protection and helmet stability, you must keep all 1/2-inch-thick foam pads inside the covers and all fitting pads properly installed in the helmet when the helmet is worn. Remove the 1/4-inch-thick pads only as necessary to adjust the fit.

1. Obtain the replacement pads. If only the 1/2-inch-thick foam pads were used in the previous pads, remove the 1/4-inch-thick foam pads from the replacement pads in the same manner. Otherwise, leave the 1/4-inch-thick foam pads inside.
2. Install the replacement pads in the helmet in the same manner in which the previous pads were installed. If the wearer uses a headset, space the crown pads to accommodate the headband of the headset.
3. Don the helmet, and check the fit in accordance with Page 7 and Pages 10-12 as applicable. Make any needed adjustments.

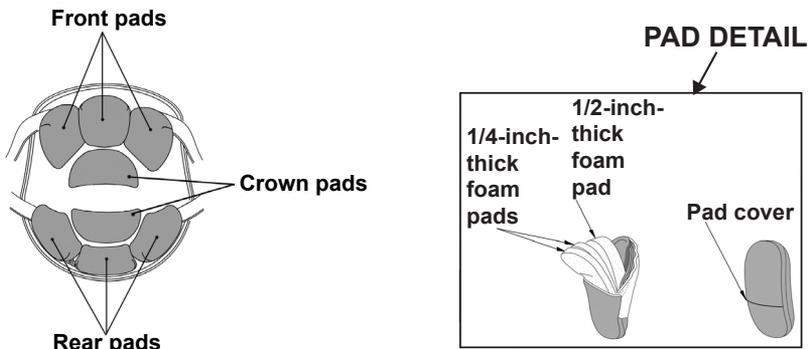


Figure 27. Pad Suspension Assembly (Adjustable)

Replacing Pad Suspension Assembly (Water-Resistant)

Removal

Referring to **Figure 28**, remove the pads from the helmet, noting their position and orientation in the helmet. Also note the pad thickness (05C11950-3 is 3/4 inch thick; 05C11950-4 is 1 inch thick).

Installation

1. Install the replacement pads (of the same thickness) in the helmet in the same manner in which the previous pads were installed.
2. Don the helmet, and check the fit in accordance with Page 9 and Pages 10-12 as applicable. Make any necessary adjustments.

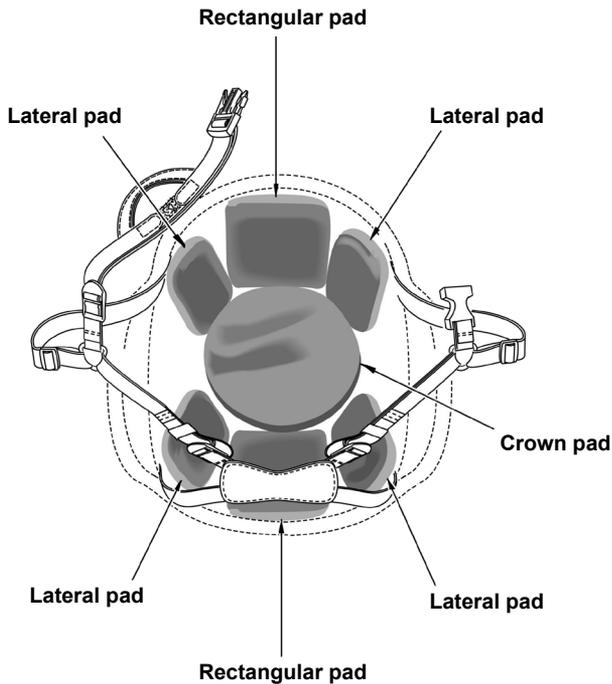


Figure 28. Pad Suspension Assembly (Water-Resistant)

Replacing Retention Assembly (All Styles)

Removal

1. Referring to **Figure 29**, remove the front and rear pads as necessary to reach the attaching hardware of the retention assembly on the inside of the helmet, noting the position of the pads.

NOTE: Figure 30 shows the X-style retention assembly. The same procedure applies to all retention assemblies.

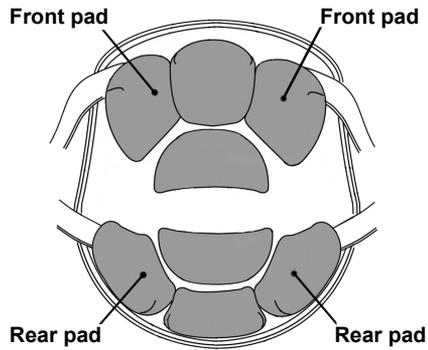
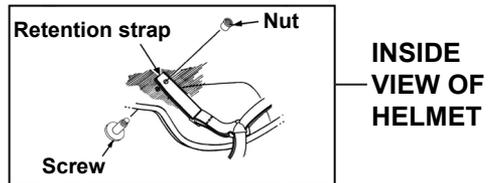


Figure 29. Pads to Remove

2. Referring to **Figure 30**, remove the four screws and nuts attaching the retention assembly to the helmet.



Installation

1. Install the replacement retention assembly with the screws and nuts.
2. Reinstall the front and rear pads in the positions from which they were removed.
3. Don the helmet, check the fit in accordance with Pages 10-12 as applicable. Make any necessary adjustments.

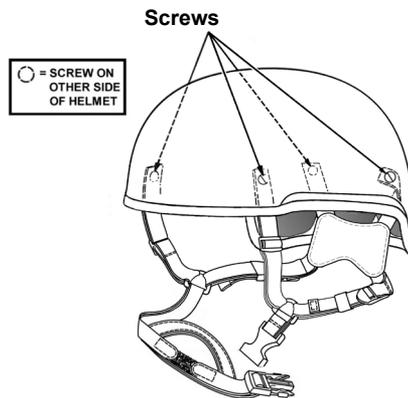


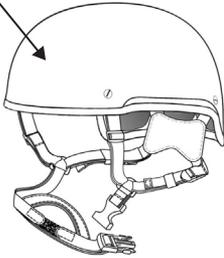
Figure 30. Retention Assembly Hardware

PARTS LIST

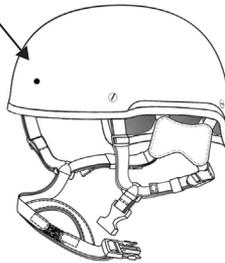
On the next page is a parts list for the TBH II HST helmet. The parts list corresponds to the components shown in **Figure 31**.

For more information, contact Gentex Corporation, P.O. Box 315, Carbondale, PA 18407, phone (570)282-3550, fax (570)282-8555, www.gentexcorp.com.

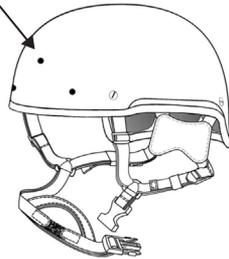
**Helmet shell,
no NVG holes**



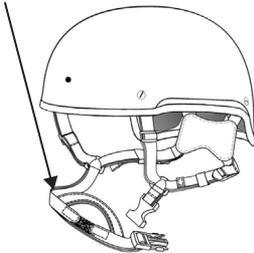
**Helmet shell,
one NVG hole**



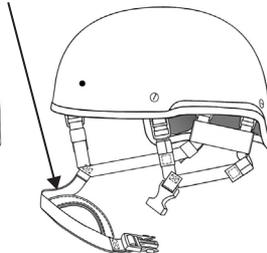
**Helmet shell,
three NVG holes**



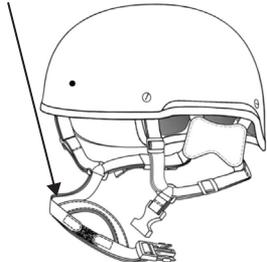
**Retention assembly
X-style, part number
04D11896-1 through
04D11896-6**



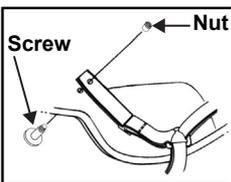
**Retention assembly,
H-style, part number
05D11948-1**



**Retention assembly, X-style,
universal size, part number
A13229-1 through A13229-4**



**Water-resistant pads,
part number 04B11847-1 (5/8-inch-thick),
05C11950-3 (3/4-inch-thick), 04B11847-3 (7/8-inch-thick),
or 05C11950-4 (1-inch-thick)**



**Adjustable pads,
part number
05D11980-20**

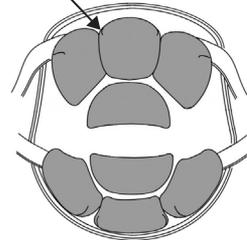
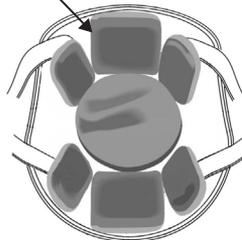


Figure 31. TBH II HST Helmet Assembly

Helmet Size	TBH II HST Helmet, No NVG Hole	TBH II HST Helmet, One NVG Hole	TBH II HST Helmet, Three NVG Holes
Medium	A13244-2*	A13244-6*	A13244-10*
Large	A13244-3*	A13244-7*	A13244-11*
X-Large	A13244-4*	A13244-8*	A13244-12*

All helmets include:

- **Screw, shoulder (4 ea.):** B12190-1
- **Nut, conic (4 ea.):** 04B11815-1
- **Instruction Booklet:** TP0348

* Each helmet part number is followed by three suffixes. The first suffix (**A** through **J**) denotes helmet shell color. The second suffix (**1** through **13**) denotes retention assembly size and color. The third suffix (**A** through **C**) denotes the pad style.

Helmet shell color suffixes:

- A** (Black)
- B** (Green)
- C** (Olive Drab)
- D** (CHP Blue)
- E** (UN Blue)
- F** (Desert Tan)
- G** (Foliage Green)
- H** (Coyote Brown)
- J** (Met Blue)

Example: A13244-2A05A

A13244-2.....TBH II HST Helmet,
Medium, No NVG Holes

A.....Black helmet shell

05.....Small/Medium Black
retention assembly

A.....3/4-inch thick pad set,
part number 05C11950-3

Retention assembly suffixes:

NOTE: Ensure that the retention assembly size matches the helmet size.

- 1** (X-style, Small/Medium, Green, part number 04D11896-1)
- 2** (X-style, Large/X-Large, Green, part number 04D11896-2)
- 3** (X-style, Small/Medium, Foliage Green, part number 04D11896-3)
- 4** (X-style, Large/X-Large, Foliage Green, part number 04D11896-4)
- 5** (X-style, Small/Medium, Black, part number 04D11896-5)
- 6** (X-style, Large/X-Large, Black, part number 04D11896-6)
- 7** (H-style, Universal size, Foliage Green, part number 05D11948-1)
- 8** (X-style, buckle pads, Small/Medium, Coyote Brown, A13292-3, not shown)
- 9** (X-style, buckle pads, Large/X-Large, Coyote Brown, A13292-4, not shown)
- 10** (X-style, Universal size, Camo Green, part number A13229-1)
- 11** (X-style, Universal size, Foliage Green, part number A13229-2)
- 12** (X-style, Universal size, Black, part number A13229-3)
- 13** (X-style, Universal size, Coyote Brown, part number A13229-4)

Pad suffixes:

- A** (Water-resistant 3/4-inch thick pad set, part number 05C11950-3)
- B** (Water-resistant 1-inch thick pad set, part number 05C11950-4)
- C** (Adjustable pad suspension, part number 05D11980-20)

OPTIONS

The following options are available for use with the TBH II HST Helmet. Contact Gentex Corporation at (570) 282-3550 for more information. Visit our web site at www.gentexcorp.com and click on "Force Protection" for ballistic-protective products.

- Various headsets, including an GDH headset for maximum situational awareness and a modified GenCOM III headset for high-noise environments
- NVG Mounting Bracket, Lever (NVG Front Bracket Assembly), Gentex part number 03B11760-1; NSN 5430-01-509-1467
- NVG Quick-Release Mounting Bracket, Gentex part number 05C12036-2 (requires hardware kit 90A7946-6)
- Low-Profile NVG Mounting Bracket, Gentex part number A13479-1 (Tan) or A13479-2 (Black)
- Ballistic Optical Armor (BOA™) Goggles
- Eye Protective System-21 (EPS-21™) Goggles
- Ballistic Neck Protectors

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