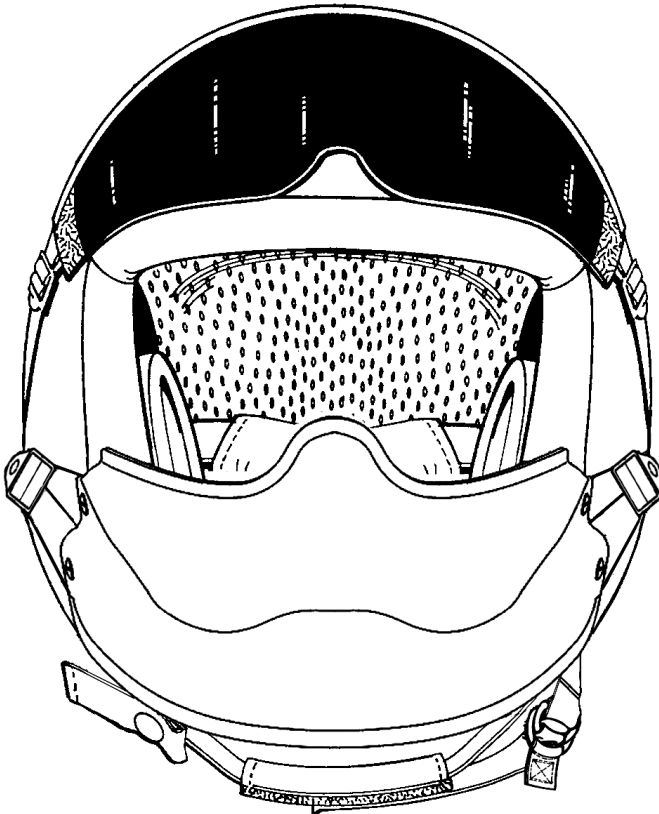


Installation/Operation Instructions

MAXILLOFACIAL SHIELD KIT, HGU-84/P

05D12001-2 (Medium/Large)
05D12001-3 (X-Large/X-Large Wide)



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OVERVIEW

The maxillofacial shield kit (**Figure 1**) includes a maxillofacial shield (MFS) and attaching hardware designed for installation onto the HGU-84/P helmet. The MFS protects the lower facial area from flying debris. The MFS is designed to match the contour of the visors when either visor is deployed.

This booklet contains instructions for installing the MFS. To install the MFS, you do the following:

- Locate and mark two snap holes on the helmet (using one of two methods)
- Drill the snap holes and install the snaps
- Attach the MFS to the snaps and adjust the straps as needed.

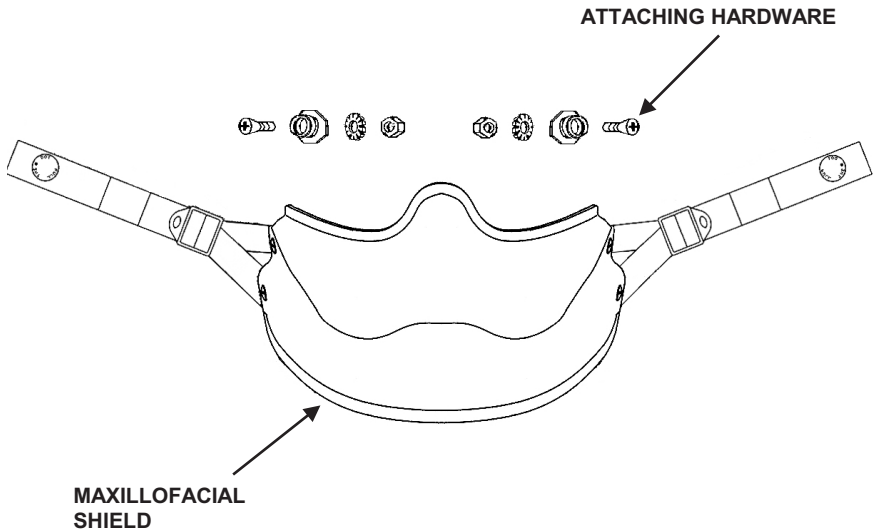


Figure 1. MFS and Attaching Hardware

INSTALLATION

Tools and Materials Required

- Compass or ruler
- Scriber
- Screwdriver, cross-tip
- Drill, electrical, portable
- Drill bit, #27
- Drill bit, 1/16
- Maxillofacial shield kit
- Thread-locking adhesive (Loctite 242)

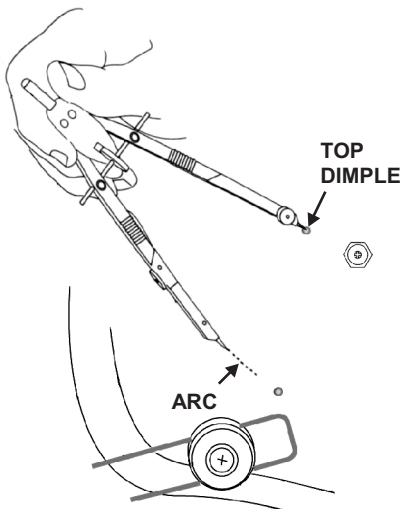
Loctite is a registered trademark of Loctite Corporation.

Locating and Marking Snap Holes

To locate the snap holes, you use either **Method 1**, which requires a compass, or **Method 2**, which requires a ruler.

Method 1 (Compass)

1. Remove the visor from the helmet.
2. Set the compass to the value shown below for your helmet size:
Medium: 1-3/8"
Large and X-Large: 1-13/32"
X-Large Wide: 15/16"
3. Referring to **Figure 2**, position the point of the compass in the top dimple on one side of the helmet, and draw an arc.



NOTE: This figure shows the arc location for the Large and X-Large helmets. The arc location for the Medium and X-Large Wide helmets will vary from this figure.

Figure 2. Drawing Arc from Top Dimple

4. Set the compass to the value shown below for your helmet size:
Medium: 1/4"
Large/X-Large: 11/16"
X-Large Wide: 1-1/2"
5. Referring to **Figure 3**, position the point of the compass in bottom dimple on the same side of the helmet, and draw an arc.
6. Use a scribe to mark a point where the two arcs intersect.
7. Repeat Steps 2-6 on the other side of the helmet.

NOTE: This figure shows the arc location for the Large and X-Large helmets. The arc location for the Medium and X-Large Wide helmets will vary from this figure.

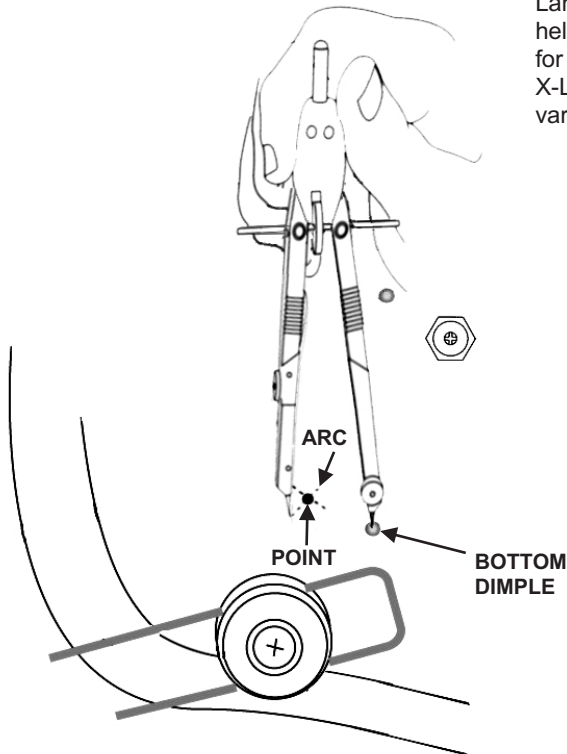


Figure 3. Drawing Arc from Bottom Dimple

Method 2 (Ruler)

1. Remove the visor from the helmet.
2. Depending on helmet size, locate and mark the holes on **both** sides of the helmet as follows:

NOTE: Figures 4, 5, and 6 represent the **right** side of the helmet as worn.

Medium

- a. Referring to **Figure 4**, draw a line between the center of the existing visor snap on the helmet and the rearward end of the chin strap grommet.
- b. Measure the following distances:
 - 1-1/8 inch down the line
 - 5/8 inch to the right of the line (on the **right** side of the helmet as worn)
 - 5/8 inch to the left of the line (on the **left** side of the helmet as worn)
- c. Use a scribe to mark a point at the end of the 5/8 inch mark. This will be the location of the snap for the maxillofacial shield.

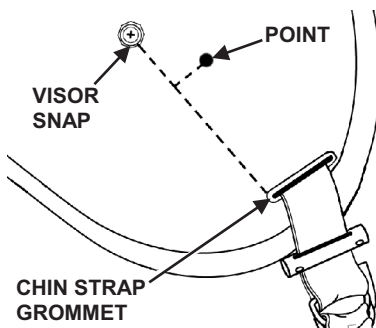


Figure 4. Medium/X-Large Wide

Large:

- a. Referring to **Figure 5**, draw a line 2-5/8 inches long upward from, and perpendicular to, the rearward end of the chin strap grommet.
- b. Use a scribe to mark a point at the upper end of the line. This will be the location of the snap for the maxillofacial shield.

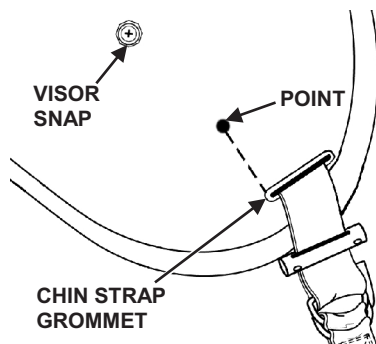


Figure 5. Large

X-Large:

- a. Referring to **Figure 6**, draw a line between the center of the existing visor snap on the helmet and the rearward end of the chin strap grommet.
- b. Measure a point 1-3/8 inch down the line. Use a scribe to mark the point. This will be the location of the snap for the maxillofacial shield.

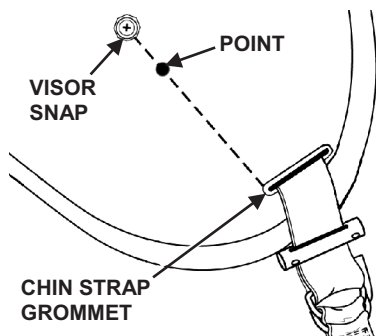


Figure 6. X-Large

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X-Large Wide:

- a. Referring to **Figure 4**, draw a line between the center of the existing visor snap on the helmet and the rearward end of the chin strap grommet.
- b. Measure the following distances:
 - 1-1/16 inch down the line
 - 3/4 inch to the right of the line (on the **right** side of the helmet as worn)
 - 3/4 inch to the left of the line (on the **left** side of the helmet as worn)
- c. Use a scribe to mark a point at the end of the 3/4 inch mark. This will be the location of the snap for the maxillofacial shield.

Drilling Snap Holes and Installing Snaps

1. Detach the earcups from the pile fasteners inside the helmet.

WARNING

Wear eye-protective goggles when drilling holes in Steps 2-4 to prevent eye injury.

CAUTION

- Be careful not to damage any components inside the helmet when performing Steps 2-4.
 - Be sure to drill the helmet shell as specified in Steps 2-4, or delamination of the helmet shell could result, making the helmet unserviceable.
 - When performing Steps 2-4, hold the drill perpendicular to the helmet shell to prevent damage to the shell and the energy-absorbing liner.
2. Using a drill with a 1/16" drill bit, drill a pilot hole in the marked point.
 3. Using a drill with a #27 drill bit, drill a finishing hole in the pilot hole.
 4. Repeat Steps 2 and 3 on the other side of the helmet.
 5. Referring to **Figure 7**, install a snap with a screw, a lock washer, and a nut on each side of the helmet in the drilled holes. Before installing the screws, apply thread-locking adhesive to the threads of each screw.

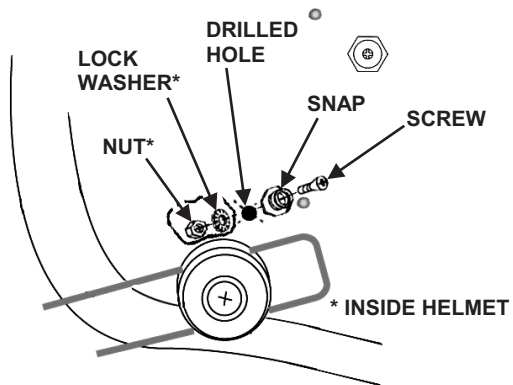


Figure 7. Installing Snap

Attaching and Adjusting Maxillofacial Shield

1. Reattach the earcups to the pile fasteners inside the helmet.
2. Reattach the visor to the helmet.
3. Referring to **Figure 8**, attach the maxillofacial shield to the helmet by fastening its snap to the newly installed snap from *front to back*. Repeat for the other side.
4. Adjust the maxillofacial shield straps as needed.
5. Adjust the helmet microphone so that it fits inside the maxillofacial shield.

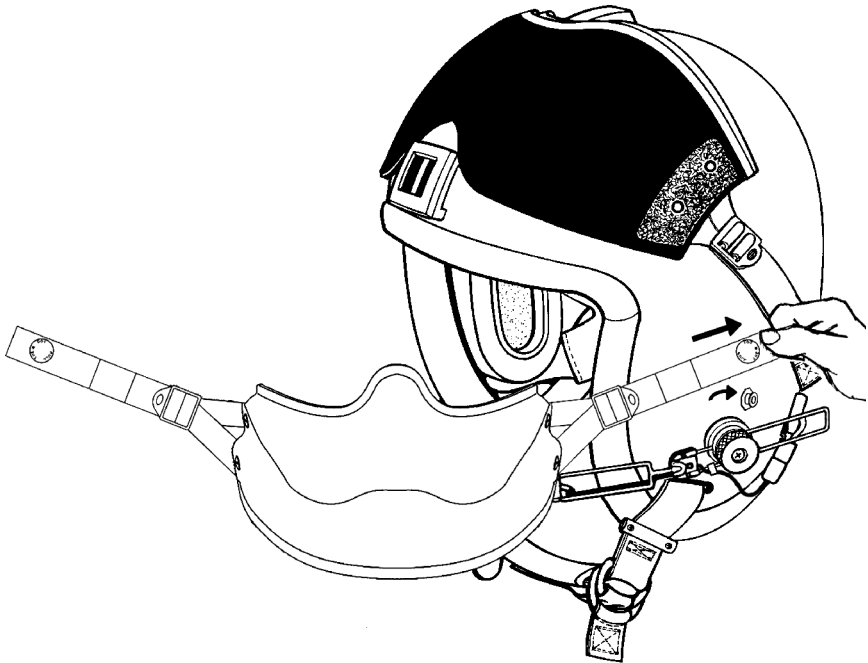


Figure 8. Attaching Maxillofacial Shield

6. Referring to **Figure 9**, lower the visor to check the interface between the visors and the maxillofacial shield. If necessary, readjust the visor straps and/or the maxillofacial shield straps.
7. To remove the maxillofacial shield, pull the shield strap away from the helmet.

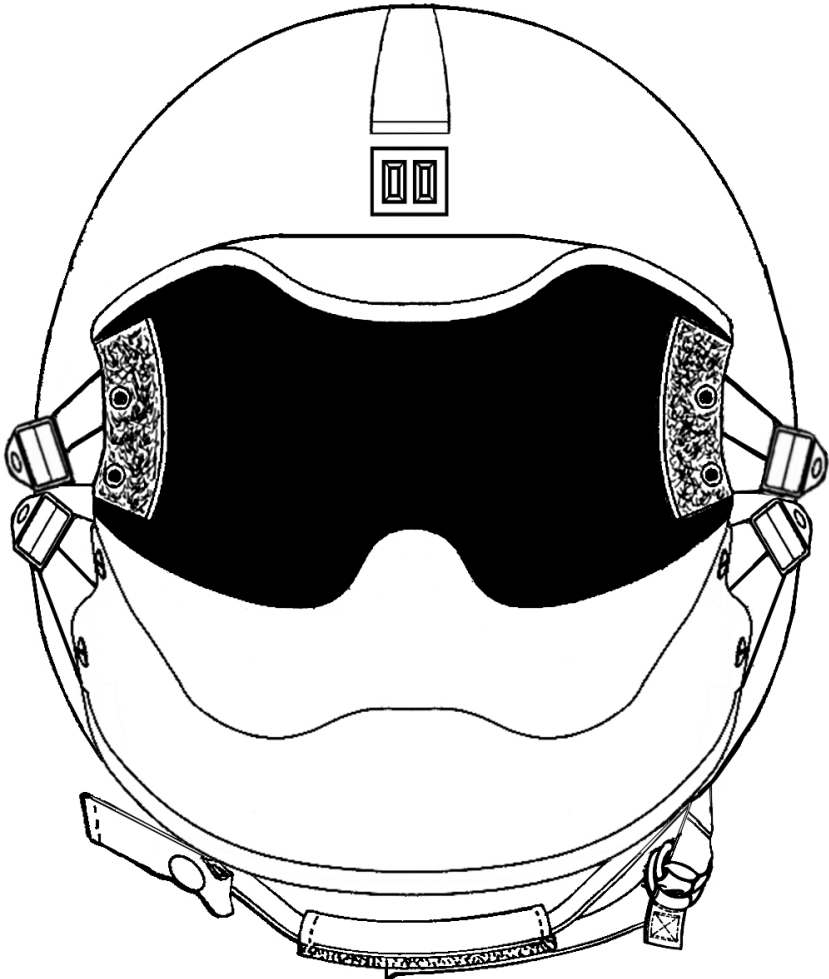


Figure 9. Visor Lowered to Check Interface with Maxillofacial Shield

CLEANING

Wipe the maxillofacial shield with a clean cloth dampened with a mild soap-and-water solution.

CONTACT INFORMATION

Maxillofacial Shield Kit

Part Number 05D12001-2 (Medium/Large)
 05D12001-3 (X-Large/X-Large Wide)

For more information about the maxillofacial shield kit, contact:

Gentex Corporation
P.O. Box 315
Carbondale, PA 18407
Phone: (570)282-3550
Fax: (570)282-8555
www.gentexcorp.com.

NOTES

GENTEX[®]
CORPORATION

www.gentexcorp.com

PO BOX 315 CARBONDALE, PENNSYLVANIA 18407 USA
p 570 282 3550 f 570 282 8555 sales@gentexcorp.com