(3) From inside facepiece, separate nosecup (1, Figure 6-41) from voicemitter duct (2).

(4) Carefully pull on nosecup to remove from other voicemitter duct groove.

(5) Remove nosecup from facepiece.

b. **Installation.**

(1) Visually inspect nosecup for heat damage, cracks, discoloration, cuts, or abrasions. If damage is noted, replace as required.

(2) Inspect nosecup for cleanliness. If dirt or other foreign matter is found, clean IAW paragraph 4.7.2.

(3) Insert nosecup into facepiece. Fit tabs (2, Figure 6-42) of nosecup into cutouts (1) of adapter port.
(4) Ensure nosecup is fully seated in adapter port and is not distorted.

(5) Install nosecup (1, Figure 6-36) onto voicemitter duct (2). Repeat to install in other voicemitter duct.

(6) Verify nosecup is not distorted. Ensure bottom of nosecup is in front of chin pocket as shown in Figure 6-43.

Figure 6-42.  Align Tabs with Cutouts.

Figure 6-43.  2007 Edition AV-3000® Nosecup In Front of Chin Pocket.
WARNING

Failure to successfully perform a negative-pressure check may allow exposure to hazardous substances, resulting in serious personal injury or death.

(7) Perform negative-pressure check IAW paragraph 6.6.3.

6.7.2.6 Voicemitter Duct Removal and Installation.

CAUTION

The following removal and installation procedures must be performed by hand, without using any tools. Using tools to pry or pull components may damage rubber parts.

a. Removal.
   (1) Remove voice amplifier and mounting bracket IAW paragraph 6.7.2.1.
   (2) Remove nosecup assembly IAW paragraph 6.7.2.4.
   (3) To remove voicemitter, carefully roll back exterior flap (3, Figure 6-44) with thumb and forefinger of one hand and with index finger of other hand, pull voicemitter (1) free.

   Figure 6-44. AV-3000® Voicemitter Removal and Installation.

   (4) Repeat for other voicemitter.
   (5) To remove voicemitter duct, collapse voicemitter duct outside facepiece and remove from lens.
   (6) Repeat for other voicemitter duct.

b. Installation.
   (1) Visually inspect voicemitters and voicemitter ducts for heat damage, cracks, discoloration, cuts, or abrasions. If damage is noted, replace as required.
   (2) Inspect voicemitter and voicemitter ducts for cleanliness. If dirt or other foreign matter is found, clean IAW paragraph 4.7.2.
NOTE
An L or R is molded into the AV-3000® voicemitter ducts, indicating the left-side or right-side of facepiece as worn.

(3) Collapse round end of voicemitter duct and insert through hole in lens, from inside facepiece. Ensure correct voicemitter duct is installed.

(4) Ensure exterior flap is on outside of lens and lens is fully seated in exterior flap groove.

(5) Repeat steps c.(3) and c.(5) for remaining voicemitter duct.

(6) Ensure the L and R molded into the voicemitter ducts are visible when looking into the facepiece as worn. See Figure 6-45 for proper alignment (L and R highlighted for clarity).

![Figure 6-45. Proper Position of AV-3000® Voicemitter Duct.](image)

(7) With four raised dots (2, Figure 6-44) facing up, insert voicemitter (1) into exterior flap (3) until fully seated.

(8) Repeat for other voicemitter.

NOTE
Perform negative-pressure check only after complete assembly of facepiece.

(9) Install nosecup assembly IAW paragraph 6.7.2.4.

(10) Install voice amplifier and mounting bracket IAW paragraph 6.7.2.1.

WARNING
Failure to successfully perform a negative-pressure check may allow exposure to hazardous substances, resulting in serious personal injury or death.

(11) Perform negative-pressure check IAW paragraph 6.6.3.

6.7.2.7 Inhalation Check Valve Removal and Installation.
Tools, Parts, and Materials.
• Water, fresh

a. Removal.
   (1) Remove voicemitters and voicemitter ducts IAW paragraph 6.7.2.6.
   (2) From inside voicemitter duct (1, Figure 6-46), grasp rectangular portion of inhalation check valve (2) and pull inhalation check valve free. Repeat for remaining inhalation check valve.
b. Installation.
   (1) Inspect inhalation check valves for cuts, nicks, tears, or other damage. If damage is noted, replace as required.
   (2) Inspect inhalation check valves for cleanliness. If dirt or other foreign matter is found, clean IAW paragraph 4.7.2.
   (3) Moisten inhalation check valve tips (1, Figure 6-47) and stems (2) with fresh water.
   (4) From inside voicemitter duct (3, Figure 6-48), insert both inhalation check valve tips (1) into small holes of voicemitter duct.
NOTE
When inhalation check valve is properly installed, rectangular portion of inhalation check valves will lie flat against inside of voicemitter duct and stems will be captured in small holes of voicemitter duct.

(5) From outside voicemitter duct, gently pull inhalation check valve tip until stem (2) is seated.
(6) Trim excess tip as required.
(7) Repeat steps b.(3) through b.(6) for other inhalation check valve.

NOTE
Perform negative-pressure check only after complete assembly of facepiece.

(8) Reinstall voicemitter and voicemitter ducts IAW paragraph 6.7.2.6.

WARNING
Failure to successfully perform a negative-pressure check may allow exposure to hazardous substances, resulting in serious personal injury or death.

(9) Perform negative-pressure check IAW paragraph 6.6.3.

6.7.2.8 Bezel and Face seal Removal and Installation.
Tools, Parts, and Materials.
• Key set, socket head screw (Allen wrench), 7/64 inch
• Water, fresh

a. Removal.
   (1) Remove voice amplifier and mounting bracket IAW paragraph 6.7.2.1.
   (2) With 7/64 inch socket head key wrench, remove bezel screws (2, Figure 6-49). Set aside for installation.
Figure 6-49. Bezel Screws Removal.

(3) Pull upper bezel (1) away from faceseal (4).
(4) Pull lower bezel (3) away from faceseal.
(5) Remove faceseal from lens, working symmetrically from chin area to forehead area. Use fingers to work faceseal from lens.
(6) If replacing faceseal, remove head harness IAW paragraph 6.7.2.3. Set aside for installation.

b. Installation.

NOTE
There are three sizes of faceseals. Size is molded onto chin area of faceseal. Ensure correct size faceseal is used.

(1) Visually inspect bezels and faceseal for heat damage, cracks, discoloration, cuts, or abrasions. If damage is noted, replace as required.
(2) Inspect bezels and facepiece for cleanliness. If dirt or other foreign matter is found, clean IAW paragraph 4.7.2.
(3) Align forehead centerline mark on faceseal (1, Figure 6-50) with forehead alignment mark on lens (2).

Figure 6-50. AV-3000® Faceseal Alignment with Lens.

(4) Insert lens fully into groove of faceseal.
Applying fresh water to bezels and face seal with aid in assembly of these components. Do not use commercial lubricants in assembling facepiece components. Commercial lubricants may cause equipment damage.

(5) Align chin centerline mark on face seal (2, Figure 6-51) with chin alignment mark on lens (1). Ensure lens is fully seated in face seal, and that chin alignment mark on lens and chin centerline mark on face seal align.

(6) Align centerline mark on lower bezel (2, Figure 6-52) with chin centerline marks on lens (1). Install lower bezel.

(7) Install upper bezel onto face seal.
(8) Ensure both bezels are fully seated and that all centerline marks align.
(9) Install bezel screws (2, Figure 6-49). Using 7/64 inch socket head key wrench, tighten screws evenly, alternating from one side to the other until tightened.

**NOTE**

Perform negative pressure check only after complete assembly of facepiece.

(10) If applicable, install head harness IAW paragraph 6.7.2.3.
(11) Install voice amplifier and mounting bracket IAW paragraph 6.7.2.1.

**WARNING**

Failure to successfully perform a negative-pressure check may allow exposure to hazardous substances, resulting in serious personal injury or death.

(12) Perform negative-pressure check IAW paragraph 6.6.3.

6.7.2.9 **Lens Removal and Installation.**

a. **Removal.**
   (1) Remove voicemitters and voicemitter ducts IAW paragraph 6.7.2.6.
   (2) Remove bezel and faceseal IAW paragraph 6.7.2.8.

b. **Installation.**
   (1) Visually inspect all components for heat damage, cracks, discoloration, cuts, or abrasions. If damage is noted, replace as required.
   (2) Inspect all components for cleanliness. If dirt or other foreign matter is found, clean IAW paragraph 4.7.2.

**NOTE**

Perform negative-pressure check only after complete assembly of facepiece.

(3) Install bezel and faceseal IAW paragraph 6.7.2.8.
(4) Install voicemitters and voicemitter ducts IAW paragraph 6.7.2.6.

**WARNING**

Failure to successfully perform a negative-pressure check may allow exposure to hazardous substances, resulting in serious personal injury or death.

(5) Perform negative-pressure check IAW paragraph 6.6.3.

6.7.3 **Mask-Mounted Regulator Corrective Maintenance.**

6.7.3.1 **Sealing Gasket Removal and Installation.**

**Tools, Parts, and Materials.**
- Gasket, Sealing, PN 10005368
- Scraper, Plastic
- Tape, Masking

a. **Removal.**
   (1) Bleed system IAW paragraph 6.6.1.
   (2) Remove mask-mounted regulator from regulator holder.
   (3) Cover mask-mounted regulator outlet (2, Figure 6-53) with masking tape.
(4) Without using tools, remove sealing gasket (1) from around mask-mounted regulator outlet.

**CAUTION**
Only use plastic scraper to remove remaining portions of sealing gasket to avoid equipment damage.

(5) Carefully remove any remaining portions of sealing gasket with plastic scraper.

b. **Installation.**

(1) Ensure replacement sealing gasket is free of cuts, nicks, or other damage. Replace as required.

(2) Position mask-mounted regulator (2, Figure 6-53) facing up.

**NOTE**
Do not remove peel-away paper from back of sealing gasket.

(3) With peel-away paper facing mask-mounted regulator outlet, gently stretch sealing gasket (1) over mask-mounted regulator outlet.

**NOTE**
Ensure mask-mounted regulator sealing gasket lays flat before removing any peel-away paper.

(4) Fold back sealing gasket and remove 1/2 of peel-away paper.

(5) Press portion of sealing gasket with exposed adhesive into place around mask-mounted regulator.

(6) Repeat steps c.(4) and c.(5) for remaining half of sealing gasket.

(7) Remove masking tape covering mask-mounted regulator outlet.

**WARNING**
Failure to successfully perform a negative-pressure check may allow exposure to hazardous substances, resulting in serious personal injury or death.
(8) Perform negative-pressure check IAW paragraph 6.6.3.
(9) Install mask-mounted regulator in regulator holder.

**6.7.3.2 Mask-Mounted Regulator Removal and Installation**

**Tools, Parts, and Materials.**
- O-ring, PN 18002-00
- Pliers, slip joint, soft-jawed
- Screwdriver, cross-tip, No. 2
- Sealing compound, Threadlocker, Loctite® Grade 222 - Hazardous Material
- Wrench, open-end, 3,8 inch
- Wrench, open-end, 5/8 inch
- Wrench, hex key, 7/64 inch

**a. Removal.**

(1) Bleed system IAW paragraph 6.6.1.

(2) If Heads-Up Display (HUD)(Configuration 4) is installed on mask-mounted regulator, remove HUD electrical cable (3, Figure 6-54) from Visualert® (5) by rotating knurled connector fully CCW by hand. If necessary, use soft-jawed slip joint pliers.

![Figure 6-54. Visualert® and Low-Pressure Hose (Configuration 4 Shown).](image)

(3) If Heads-Up Display (HUD)(Configuration 5) is installed on mask-mounted regulator, remove HUD electrical cable (2, Figure 6-55) from Visualert® with 3/8 inch open-end wrench, turning fully CCW.

![Figure 6-55. Anti-Rotational Device (Configuration 5).](image)