



# SCOTT AV-3000 HT FULL FACEPIECE (includes Optional SIGHT Imaging System)

## INSTALLATION AND OPERATION INSTRUCTIONS



AV-3000 HT



AV-3000 HT WITH  
SCOTT SIGHT COMPONENTS  
INSTALLED

### WARNING

THIS SCOTT AV-3000 HT FULL FACEPIECE ASSEMBLY IS INTENDED FOR USE AS PART OF A COMPLETE RESPIRATOR WHICH MAY SUPPORT HUMAN LIFE IN HAZARDOUS ATMOSPHERES. ADDITIONAL COMPONENTS ARE REQUIRED TO MAKE A COMPLETE RESPIRATOR. TRAINING IS REQUIRED BEFORE USE. REFER TO THE DONNING, USE, DOFFING, AND MAINTENANCE INSTRUCTIONS SUPPLIED WITH THE COMPLETE RESPIRATOR.

INSPECT THIS FACEPIECE AND HEAD HARNESS BEFORE EVERY USE. DO NOT USE WITH WORN, LOOSE, OR DAMAGED COMPONENTS. FAILURE TO READ, UNDERSTAND, AND CAREFULLY FOLLOW THESE INSTRUCTIONS WHEN USING AND/OR CLEANING THE FACEPIECE ASSEMBLY MAY RESULT IN SERIOUS INJURY OR DEATH.

THIS PRODUCT IS DESIGNED AND INTENDED TO FUNCTION PROPERLY IN REASONABLE/ORDINARY FIREFIGHTING CONDITIONS. LIKE ALL EQUIPMENT, THE FUNCTIONALITY OF THIS PRODUCT MAY BE COMPROMISED BY EXTREME FIRE CONDITIONS.



CE 0086  
CE 0891



AS/NZS 1716 : 2012 - Respiratory Protective Devices  
Lic. BMP 540244 BSI Benchmark

# CONDITIONS OF SAFE USE



## Scott SIGHT TIC

This equipment is listed as intrinsically safe by CSA Group to UL Std. UL-913 for use in the following hazardous locations:

- Class I, II, III Division I Groups C, D, E, F and G T3A

This equipment is listed as intrinsically safe by CSA Group to CSA 60079-11 for Canada and UL 60079-11 for the USA for use in the following hazardous locations:

- Ex ia IIB T3A Ga (Canada)
- Class 1 Zone 0 AEx ia IIB T3 Ga (USA)
- IP 66/67

## Scott SIGHT IMD

This equipment is listed as intrinsically safe by CSA Group to UL Std. UL-913 for use in the following hazardous locations:

- Class I, II, Division I Groups C, D, E, F and G T4

This equipment is listed as intrinsically safe by CSA Group to CSA 60079-11 for Canada and UL 60079-11 for the USA for use in the following hazardous locations:

- Ex ia IIB T4 Ga (Canada)
- Class 1 Zone 0 AEx ia IIB T4 Ga (USA)
- IP 66/67

To maintain the Intrinsic Safety Listing, inspect equipment regularly per the Regular Operational Inspection procedures in this instruction. Do not tamper with or substitute components in any manner. Use only batteries of the type indicated in the "Replacing the Batteries" section of these instructions. Do not mix old batteries with unused batteries, or from different manufacturers. Open the battery compartments only in an area known to be free of flammable or explosive hazards. Due to the potential for electrostatic discharge, clean with dampened cloth only. Do not use dry cloth to clean the surface. Do not clean or perform maintenance on device in an explosive environment.

## Scott SIGHT TIC

Cet équipement est classé comme étant sécuritaire de façon intrinsèque par le CSA Group en vertu de la norme UL UL-913 pour usage dans les emplacements dangereux suivants :

- Catégorie I, II, et III, division 1, groupes C, D, E, F et G T3A

Cet équipement est classé comme étant sécuritaire de façon intrinsèque par le CSA Group en vertu de la norme CSA 60079-11 au Canada et UL 60079-11 aux États-Unis pour usage dans les emplacements dangereux suivants :

- Ex ia IIB T3A Ga (Canada)
- Catégorie I zone 0 AEx ia IIB T3 Ga (É.-U.)
- IP 66/67

## Scott SIGHT IMD

Cet équipement est classé comme étant sécuritaire de façon intrinsèque par le CSA Group en vertu de la norme UL UL-913 pour usage dans les emplacements dangereux suivants :

- Catégorie I et II, division 1, groupes C, D, E, F et G T4

Cet équipement est classé comme étant sécuritaire de façon intrinsèque par le CSA Group en vertu de la norme CSA 60079-11 au Canada et UL 60079-11 aux États-Unis pour usage dans les emplacements dangereux suivants :

- Ex ia IIB T4 Ga (Canada)
- Catégorie I zone 0 AEx ia IIB T4 Ga (É.-U.)
- IP 66/67

Pour préserver la classification de sécurité intrinsèque, cet équipement doit être régulièrement inspecté selon les procédures d'inspection opérationnelle normales se trouvant dans ces directives. Aucun élément ne doit être modifié ni substitué d'aucune façon. N'utiliser que les piles du type indiqué dans la notice de remplacement des piles. Ouvrir les compartiments à piles uniquement dans un endroit reconnu comme étant exempt de dangers d'incendie ou d'explosion. La substitution de composants peut compromettre la sécurité intrinsèque. Afin de prévenir le risque d'inflammation dans une atmosphère inflammable, ne changer les piles que dans des endroits non inflammables. Afin de réduire le risque d'explosion, ne pas utiliser à la fois des piles usagées et des piles neuves ni des piles provenant de différents fabricants.

### SCOTT SIGHT TIC

MODEL NUMBER 201450-01

ATEX Certificate No. SIRA 16ATEX2250X



Ex ia IIB T3 Ga

Ta = -30° C to +60° C

IECEX Certificate No. IECEX CSA 16.0027X

Intrinsically Safe per IEC 60079-0: 2007 5th Edition, IEC 60079-11:2011 6th Edition for use in Zone 0, 1, 2, Group IIB, potentially explosive atmospheres.

### SCOTT SIGHT TIC

MODEL NUMBER 201450-01

ATEX Certificate No. SIRA 16ATEX2250X



Ex ia IIB T3 Ga

Ta = -30° C to +60° C

IECEX Certificate No. IECEX CSA 16.0027X

Sécurité intrinsèque en vertu de IEC 60079-0: 2007, 5e édition, IEC 60079-11:2011 6e édition pour usage dans les atmosphères potentiellement explosives des zones 0, 1, 2, groupe IIB.

### SCOTT SIGHT IMD

MODEL NUMBER 201455-01

ATEX Certificate No. SIRA 16ATEX2249X



Ex ia IIB T4 Ga

Ta = -30° C to +60° C

IECEX Certificate No. IECEX CSA 16.0036X

Intrinsically Safe per IEC 60079-0: 6th Edition, IEC 60079-11 6th Edition for use in Zone 0, 1, 2, Group IIB, potentially explosive atmospheres.

### SCOTT SIGHT IMD

MODEL NUMBER 201455-01

ATEX Certificate No. SIRA 16ATEX2249X



Ex ia IIB T4 Ga

Ta = -30° C to +60° C

IECEX Certificate No. IECEX CSA 16.0036X

Sécurité intrinsèque en vertu de IEC 60079-0, 6e édition, IEC 60079-11:2011 6e édition pour usage dans les atmosphères potentiellement explosives des zones 0, 1, 2, groupe IIB.

## APPROVED BATTERIES / PILES APPROUVÉES

Alkaline Batteries / Piles Alcalines:

- Energizer® E92
- Energizer Industrial EN92
- Duracell® Copper Top MN2400
- Duracell ProCell PC2400
- Duracell Quantum QU2400
- Rayovac® 824

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## **SAFETY LISTINGS**

### **FCC COMPLIANCE**

#### **FCC Compliance Statement (Part 15.19)**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

#### **FCC Warning (Part 15.21)**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This portable transmitter with its antenna complies with FCC's RF exposure limits for general population / uncontrolled exposure.

**Contains transmitter module FCC ID: QQBT121**

### **CLASS B DIGITAL DEVICE**

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

### **INDUSTRY CANADA COMPLIANCE**

#### **Industry Canada Statement**

The term "IC" before the certification / registration number only signifies that the Industry Canada technical specifications were met.

#### **Section 14 of RSS-210**

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population. Consult Safety Code 6, obtainable from Health Canada's web site: [www.hc-sc.gc.ca/rpb](http://www.hc-sc.gc.ca/rpb).

Operation is subject to the following two conditions:

- a) this device may not cause interference, and
- b) this device must accept any interference, including interference that may cause undesired operation of the device.

**IC ID: 5123A-BGTBT121**

### **LA DÉCLARATION DE CANADA D'INDUSTRIE**

L'« IC » de terme avant que la certification/le nombre d'enregistrement signifie seulement que le Canada d'Industrie spécifications techniques ont été rencontrées.

#### **Sectionner 14 de RSS-210**

Le programme d'installation de cet équipement de radio doit garantir que l'antenne est localisée ou tel est indiqué qu'il n'émet pas le champ de RF dépassant les limites de Canada de Santé pour la population générale. Consulter le Code de Sécurité 6, procurable du site Web de Canada de Santé : [www.hc-sc.gc.ca/rpb](http://www.hc-sc.gc.ca/rpb). L'opération est assujetti au suivre deux conditions :

- a) cet appareil ne peut pas causer l'intervention, et
- b) cet appareil doit accepter de l'intervention, y compris l'intervention qui peut causer l'opération non désirée de l'appareil.

**IC ID: 5123A-BGTBT121**

# SCOTT AV-3000 HT FULL FACEPIECE

(INCLUDES OPTIONAL SCOTT SIGHT IMAGING SYSTEM)

## WARNING

THIS SCOTT AV-3000 HT FULL FACEPIECE ASSEMBLY IS INTENDED FOR USE AS PART OF A COMPLETE RESPIRATOR WHICH MAY SUPPORT HUMAN LIFE IN HAZARDOUS ATMOSPHERES. ADDITIONAL COMPONENTS ARE REQUIRED TO MAKE A COMPLETE RESPIRATOR. TRAINING IS REQUIRED BEFORE USE. REFER TO THE DONNING, USE, AND MAINTENANCE INSTRUCTIONS SUPPLIED WITH THE COMPLETE RESPIRATOR.

INSPECT THIS FACEPIECE AND HEAD HARNESS BEFORE EVERY USE. DO NOT USE WITH WORN, LOOSE, OR DAMAGED COMPONENTS. FAILURE TO READ, UNDERSTAND, AND CAREFULLY FOLLOW THESE INSTRUCTIONS WHEN USING AND/OR CLEANING THE FACEPIECE ASSEMBLY MAY RESULT IN SERIOUS INJURY OR DEATH.

THIS PRODUCT IS DESIGNED AND INTENDED TO FUNCTION PROPERLY IN REASONABLE/ORDINARY FIREFIGHTING CONDITIONS. LIKE ALL EQUIPMENT, THE FUNCTIONALITY OF THIS PRODUCT MAY BE COMPROMISED BY EXTREME FIRE CONDITIONS.

## CAREFULLY READ ALL WARNINGS AND INSTRUCTIONS BEFORE USE

The following warnings are in accordance with certifying authority requirements and apply to the use of breathing apparatus in general:



Breathing apparatus users must be fully trained in the use and care of self-contained compressed air breathing apparatus.



Ensure that the selection of the apparatus type is sufficient for the tasks being undertaken and the hazards likely to be encountered. Please refer to the National Regulations for guidance.



Adequate protection may not be provided in certain highly toxic atmospheres.



The apparatus must be tested and serviced in accordance with scheduled Maintenance, Personnel training, and Servicing sections of the User Instructions provided with the complete respiratory system.



Ensure that a good seal can be obtained between the face and facemask. The wearing of beards, side-burns or spectacles may adversely affect the sealing of a facemask to the wearer's face.



The apparatus is not designed for use underwater.



Ensure that you are familiar with the Warnings, Cautions, and Limitations contained in the user instructions for any apparatus to be used with the AV-3000 HT.



The AV-3000 HT will only provide the Class 3 respiratory protection described in EN 136:1998 when used with an apparatus for which it is approved.



To decontaminate the equipment correctly, please refer to your standard operating procedures.



Beware of the hazards of oxygen enriched air.



In Australia and New Zealand, ensure that your selection of respiratory protective devices conform to the requirements of AS/NZS1715:2009.

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## SCOTT AV-3000 HT FULL FACEPIECE

See the NIOSH approval label for the complete respirator for a full listing of approved part numbers and components.



**NIOSH approval AV-3000 HT** To maintain NIOSH approval, read and follow these special instructions:

- AV-3000 HT 5-Strap Facepiece P/N 805337-34 (Small), P/N 805337-35 (Medium), or P/N 805337-36 (Large) must be used **only** with DARK Gray Nose Cup P/N 201126 (Small), P/N 201127 (Medium), or P/N 201128 (Large).
- AV-3000 HT 4-Strap Facepiece P/N 805337-37 (Small), P/N 805337-38 (Medium), or P/N 805337-39 (Large) must be used **only** with DARK Gray Nose Cup P/N 201126 (Small), P/N 201127 (Medium), or P/N 201128 (Large).

### **NIOSH approval AV-3000 HT with Scott Sight**

- AV-3000 HT 5-Strap Facepiece P/N 805337-34 (Small), P/N 805337-35 (Medium), or P/N 805337-36 (Large) must be used **only** with IMD Nose Cup P/N 201476 (Small), P/N 201477 (Medium), or P/N 2201478 (Large).
- AV-3000 HT 4-Strap Facepiece P/N 805337-37 (Small), P/N 805337-38 (Medium), or P/N 805337-39 (Large) must be used **only** with IMD Nose Cup P/N 201476 (Small), P/N 201477 (Medium), or P/N 2201478 (Large).

If you are using an AV-3000 HT facepiece and do not have the correct Nose Cup, contact Scott or your authorized Scott distributor. Failure to comply with this requirement will void the approvals for your respirator. Use of a non-compliant configuration in a hazardous atmosphere may result in serious injury or death.

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### **EN Approvals for the AV-3000 HT (5-STRAP ONLY)**

- AV-3000 HT 5-Strap Facepiece is marked in accordance with the various standards to which it is approved. It is approved to EN 136:1998/AC:2003 Class 3, EN 137:2006 and BS EN 8468-1:2006. The AV3000-HT is also CE marked in accordance with EEC Directive EC/686/1986. The polycarbonate visor conforms to EN 166 Grade B for impact resistance.
- AV-3000 HT 5-Strap Facepiece is suitable for CBRN use as a positive-pressure mask when connected to a Propak CBRN EZ Flo BA Set.

**Notified Bodies:** BSI Group (NB 0086), Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes, MK5 8PP, United Kingdom.

### **ANZ Approvals for the AV-3000 HT (5-STRAP ONLY)**

- AV-3000 HT 5-Strap Facepiece is approved to AS/NZS 1716:2012.

**Notified Bodies:** BSI Group Australia | Suite 5.02, Level 5, 484 St Kilda Road, Melbourne, VIC 3004

**Approved part numbers for the AV-3000 HT:** 8005242, 8005243, 8005244, 8005245, 8005246, 8005247, 8005248, 8005249, 8005250

**Approved part numbers for the AV-3000 HT with Scott Sight:** 8005251, 8005252, 8005253, 8005254, 8005255, 8005256, 8005263, 8005264, 8005265, 8005266, 8005267, 8005268

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### **SCOTT SIGHT IMAGING SYSTEM**

Consists of a Mask-Mounted Thermal Image Camera (TIC), an In-Mask Display (IMD) and an alternate nose cup designed specifically for the IMD. Scott Sight is designed to be used **ONLY** with a Scott AV-3000 HT full facepiece.

Scott Sight has been designed to meet the applicable standards that govern SCBA accessories including NIOSH approval, NFPA 1981 approval, and approval as an intrinsically safe device.

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## **GENERAL DESCRIPTION OF THE AV-3000 HT FULL FACEPIECE**

Refer to the USER INSTRUCTIONS for the complete respirator for full details of donning and use of the respirator. **ADDITIONAL DONNING INFORMATION IS INCLUDED IN YOUR COMPLETE RESPIRATOR USER INSTRUCTIONS.** Remember, the facepiece alone does not provide any protection against a hazardous atmosphere without the use of the other components which are required for operation of the complete respirator.



## WARNING

THE FACEPIECE ALONE DOES NOT PROVIDE ANY PROTECTION AGAINST A HAZARDOUS ATMOSPHERE WITHOUT THE USE OF THE OTHER COMPONENTS WHICH ARE REQUIRED FOR OPERATION OF THE COMPLETE RESPIRATOR. FIT TESTING IS REQUIRED BEFORE USE OF THIS FACEPIECE WITH A RESPIRATOR. REFER TO THE USER INSTRUCTIONS PROVIDED WITH THE COMPLETE RESPIRATOR FOR FULL DETAILS OF DONNING AND USE OF THE RESPIRATOR. IMPROPER USE OF THE RESPIRATOR OR USE OF AN INCOMPLETE RESPIRATOR MAY RESULT IN SERIOUS INJURY OR DEATH.

The AV-3000 HT full facepiece is made of heat resistant materials. When using the AV-3000 HT full facepiece in applications where high heat may occur, follow all training and operating procedures relating to heat exposure. To avoid possible injury, the respirator user must understand the hazards of heat exposure including temperature, duration and repeat exposure.

## FIT TESTING THE AV-3000 HT FULL FACEPIECE

### WARNING

THE AV-3000 HT FULL FACEPIECE IS MADE OF HEAT RESISTANT MATERIALS. WHEN USING THE AV-3000 HT FULL FACEPIECE, FOLLOW ALL TRAINING AND OPERATING PROCEDURES RELATING TO HEAT EXPOSURE. THE RESPIRATOR USER MUST UNDERSTAND THE HAZARDS OF HEAT EXPOSURE INCLUDING TEMPERATURE, DURATION, AND REPEAT EXPOSURE. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

Fit testing is required to determine the correct facepiece for each user. It is the responsibility of the Respiratory Protection Program Manager or Safety Coordinator to assist the user in selecting the correct respirator size relative to the user's facial features and dimensions. Greater detail of the requirements for fit testing and use are provided in the USER INSTRUCTIONS provided with the complete respirator.

**Prior to use, fit testing must be performed with any approved Scott accessory that will be installed on a facepiece, such as a communications devices or thermal imaging systems installed on the facepiece.**

Respirator fit tests are explained fully in the American National Standard Practices for Respiratory Protection, ANSI/AIHA/ASSE Z88.10-2010 which is published by the American National Standards Institute (ANSI), 11 West 42nd Street, New York, New York, 10036, and in the Occupational Safety and Health Standards, OSHA 29 CFR 1910.134 Appendix A, which is published by the Occupational Safety and Health Administration (OSHA), 200 Constitution Avenue, NW, Washington DC, 20210.

Quantitative Fit Testing per OSHA Standard 29 CFR Part 1910.134 Appendix A, or ANSI/AIHA/ASSE Z88.10-2010 requires testing in the negative pressure mode using equipment such as a Portacount<sup>1</sup> Respirator Fit Tester. For Quantitative Fit Testing, Scott facepieces require use of the appropriate negative pressure testing equipment such as the Portacount<sup>1</sup> Respirator Fit Tester along with the necessary Scott components and accessories.

The use of Mask Seal Kit P/N 805655-01 may be required to attain a proper fit. Refer to the INSTALLATION AND USE INSTRUCTIONS, Scott P/N 89462-01, included with the Mask Seal Kit. After installing the Mask Seal Kit, repeat the fit testing process to confirm a proper fit.

The size of each AV-3000 HT facepiece is indicated with color inserts at the head harness anchors. The sizes are: SMALL (Green inserts), MEDIUM (Black inserts), and LARGE (Red inserts).

The DARK GRAY nose cups for the standard AV-3000 HT and the Scott Sight are also available in three sizes (S, M, and L). Users must verify that they have the correct size facepiece, the correct size nose cup, and the appropriate nose cup before use.

- For a standard AV-3000 HT facepiece **only use** DARK GRAY Nose Cups P/N 201126 (Small), P/N 201127 (Medium), or P/N 201128 (Large).
- For an AV-3000 HT facepiece equipped with Scott Sight **only use** DARK GRAY IMD Nose Cups P/N 201476 (Small), P/N 201477 (Medium), or P/N 2201478 (Large).

The AV-3000 HT Facepieces are equipped with either four (4) or five (5) head harness straps.

<sup>1</sup> Portacount Plus is a registered trademark of TSI Incorporated.

## REGULAR OPERATIONAL INSPECTION

Always inspect and clean a new facepiece before the first use. Remove and keep the label attached to the lens of a new facepiece. See “CLEANING AND STORAGE” on page 14.

Before each use of the respirator, perform the following INSPECTION of the facepiece as part of the REGULAR OPERATIONAL INSPECTION of the complete respirator as defined in the USER INSTRUCTIONS supplied with the respirator:

1. Inspect the facepiece seal and other rubber components for deformation, wear, damage, or cracks.
2. Inspect the lens and lens frame as follows:
  - a) Inspect the lens for scratches, gouges, cracks, crazing, distortion, melting, or any other damage or condition that could impair the user’s vision or the operation of the facepiece.
  - b) Inspect the lens frame for damage such as cracks or distortion.
  - c) Verify that the lens frame screws are present and installed correctly.
3. Inspect the head harness as follows:
  - a) Check that all harness anchors are present and operating properly.
  - b) Inspect the head harness for correct installation with all straps oriented correctly.
  - c) Inspect the head harness for damage or worn components.
4. Inspect the voicemitter ducts as follows:
  - a) Verify that the voicemitter ducts are properly installed through the facepiece lens.
  - b) Verify that each voicemitter duct has an outer grill installed and the grills are not damaged.
  - c) If the facepiece has a communications bracket installed, verify that the bracket is not damaged and that it is properly installed and secure.
  - d) Inspect the voicemitters for damage and verify that the voicemitters are properly installed and secure in the voicemitter ducts.

### CAUTION

**ALWAYS VERIFY THAT THE PROPER NOSE CUP IS INSTALLED PRIOR TO DONNING THE AV-3000 HT FULL FACEPIECE. AV-3000 HT FULL FACEPIECES EQUIPPED WITH A THERMAL IN-MASK SCOTT SIGHT ASSEMBLY [P/N 201448-01, -02, -03] USE AN ALTERNATE STYLE NOSE CUP TO ACCOMMODATE THE IN-MASK DISPLAY (IMD). ALWAYS USE NOSE CUP P/Ns 201476 (SMALL), 201477 (MEDIUM), AND 201478 (LARGE) WHEN USING AN IMD. NEVER USE SCOTT SIGHT NOSE CUP WITHOUT IMD ATTACHED.**

5. Inspect the nose cup as follows:

*If using STANDARD NOSE CUP (non-IMD nosecup)*

- a) Inspect the nose cup for cuts or damage. Look for any signs of damage to the facepiece port side of the nose cup where the regulator attaches.
- b) Verify that both inhalation valves in the nose cup are present and properly installed. Inhalation valves must be clean and undamaged. Verify that the valve stems are secure and that the valves lay flat inside the nose cup. See FIGURE 1.
- c) Verify that the nose cup is properly installed. Check that the nose cup is properly seated between the flanges of the voicemitter ducts and over the chin cup. See FIGURE 3.

***If using standard nose cup proceed to step 8.***

*If using IMD NOSE CUP*

- a) Inspect the nose cup for cuts or damage. Look for any signs of damage to the facepiece port side of the nose cup where it attaches to the IMD.
- b) Verify that both inhalation valves in the nose cup are present and properly installed. Inhalation valves must be clean and undamaged. Verify that valve stems are secure and that the valves lay flat inside the nose cup. See FIGURE 2.



**FIGURE 1**  
CHECK INHALATION VALVES ON THE STANDARD NOSE CUP



**FIGURE 2**  
CHECK INHALATION VALVES ON THE IMD NOSE CUP



- c) Verify that the nose cup is properly installed. Check that the nose cup is properly seated between the flanges of the voicemitter ducts, over the chin cup, and firmly seated through the center of IMD. See FIGURE 3.

**If using IMD nose cup proceed to step 6.**



**FIGURE 3**  
NOSE CUP OVER CHIN CUP

6. Inspect the IMD Assembly as follows (*when installed*):
- a) Inspect the IMD housing for any damage, such cracks, chips, discoloration, corrosion, missing or loose parts, or burned or melted components. Inspect for any signs of damage where the IMD attaches to the nose cup and where the IMD attaches to the facepiece port. Check that the retaining clips are not damaged or broken.
  - b) Verify that all IMD components are present and in working order including the power button and optics adjustment screw. Check that the display lens is clean.
  - c) Verify that the IMD is properly installed. IMD must be firmly secured to facepiece port opening and the IMD battery is firmly clipped in place and that it is behind the face seal.
  - d) Check battery condition. Press and hold the ON/OFF button for three (3) seconds to turn on the IMD. A Battery icon on the top left of the IMD screen will display the remaining battery life of the IMD. If low, Scott recommends that both batteries be changed before the facepiece is used. See *“REPLACING THE BATTERIES”* on page 22.
  - e) Leave the IMD ON to test the TIC assembly in the next step.
7. Inspect Mask-Mounted TIC Assembly as follows (*when installed*):
- a) Inspect the TIC housing for damage such as cracks, chips, discoloration, corrosion, missing or loose parts, or burned or melted components.
  - b) Verify that all TIC components are present and in working order including the power button, power LED indicator, bezel bracket and battery cover. Check that the camera lens is clean.
  - c) Verify that the Mask-Mounted TIC is firmly attached to the bezel and the top bezel bolt and bottom retaining bolt are tightly fastened.
  - d) Verify that the Mask-Mounted TIC is paired to the IMD. With the IMD turned ON, press and hold the ON/OFF power button on the Mask-Mounted TIC for three (3) seconds. The LED will flash RED to indicate that there is power to the unit and then flash GREEN when successfully paired with the IMD.
  - e) Check battery condition. A Battery icon on the top right of the IMD screen will display the remaining battery life of the IMD. If low, Scott recommends that both batteries be changed before the facepiece is used. See *“REPLACING THE BATTERIES”* on page 22.
8. Verify that the facepiece is clean. See *“CLEANING AND STORAGE”* on page 14.
9. Adjust the head straps to the full outward position. The facepiece must be complete and in serviceable condition with no worn, loose, or damaged components.

**If any damage is found, remove the facepiece from service and tag for repair by authorized personnel.**

## WARNING

RESPIRATORS SHALL NOT BE WORN WHEN CONDITIONS PREVENT A GOOD FACE SEAL. SUCH CONDITIONS MAY INCLUDE, BUT ARE NOT LIMITED TO, GROWTH OF BEARDS, SIDEBURNS, FACIAL HAIR OR LOW HAIRLINE THAT CROSSES OR INTERFERES WITH THE SEALING SURFACE, THICK OR PROTRUDING HAIRSTYLES SUCH AS PONY TAILS OR BUNS THAT INTERFERE WITH THE SMOOTH AND CLOSE FIT OF THE HEAD HARNESS TO THE HEAD, A SKULL CAP THAT PROJECTS UNDER THE FACEPIECE, TEMPLE PIECES ON CORRECTIVE EYE GLASSES, EXCESSIVE USE OF COSMETICS INCLUDING MOISTURIZERS, MAKE-UP, OR AFTER SHAVE, OR ANYTHING ELSE WHICH INTERFERES WITH THE FACE TO FACEPIECE SEAL. ALSO, THE ABSENCE OF ONE OR BOTH DENTURES CAN SERIOUSLY AFFECT THE FIT OF A FACEPIECE. USE OF AN IMPROPERLY FITTED FACEPIECE MAY LEAD TO EXPOSURE TO THE HAZARDOUS ATMOSPHERE WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

REFER TO THE USER INSTRUCTIONS FOR THE COMPLETE RESPIRATOR FOR ADDITIONAL INFORMATION.

## DONNING THE AV-3000 HT FULL FACEPIECE

The user must be familiar with and practice the prescribed donning and termination of use procedures prior to respirator use. Follow the donning instructions for the model facepiece you have. The AV-3000 HT facepiece can have either a FIVE or a FOUR strap head harness

### NOTE

REFER TO THE DONNING INSTRUCTIONS PROVIDED WITH YOUR COMPLETE SCOTT RESPIRATOR.

## WARNING

FAILURE TO DON THE FACEPIECE PROPERLY AND/OR FAILURE TO ADJUST THE HEAD HARNESS PROPERLY MAY RESULT IN A POOR FACE TO FACEPIECE SEAL OR MAY RESULT IN THE FAILURE OF THE FACE TO FACEPIECE SEAL DURING USE. A POOR OR FAILED FACE TO FACEPIECE SEAL MAY REDUCE THE DURATION OF USE OF THE RESPIRATOR AND/OR EXPOSE THE USER TO THE ATMOSPHERE THE RESPIRATOR IS INTENDED TO PROTECT AGAINST RESULTING IN SERIOUS INJURY OR DEATH.

An optional neck strap assembly (P/N 804088-XX) can be attached prior to donning the facepiece to allow hands free carry of the facepiece when not in use.

To attach the neck strap assembly, clip the snap springs at each end of the neck strap assembly to the D-rings on the temple strap of the facepiece. Check to make sure that the strap is not twisted and is securely fastened. See FIGURE 4.



**FIGURE 4**  
CLIP TO D-RING ON  
TEMPLE STRAP

## DONNING THE AV-3000 HT 4-STRAP FACEPIECE (4- strap AV-3000 HT not approved under EN or ANZ)

1. Adjust the head straps to the full outward position.
2. Hold the facepiece in one hand. Either hold the head harness up and out of the way with the other hand or fold the head harness back over the lens. See FIGURES 5A and 5B.
3. Place the facepiece centered on the face with the chin properly positioned in the chin cup. Using the hand hold at the bottom of the netting, pull the head harness down over the crown of the head. Verify that no hair or clothing is interfering with the face to facepiece seal. If needed, long or loose hair (ie. pony tail, bun, etc.) can be pulled through the opening in head harness netting to obtain a close fit of the head harness to the head. Hold the facepiece in place with chin properly located in the chin cup throughout the donning process.



**FIGURE 5A**  
HOLD HARNESS  
OUT OF WAY



**FIGURE 5B**  
FOLD HARNESS  
BACK OVER  
FACEPIECE LENS

## NOTE

ENSURE THE CHIN IS PROPERLY LOCATED IN THE CHIN POCKET OF THE FACEPIECE THROUGHOUT THE DONNING PROCESS.

4. Stroke the head harness over the head and ensure that straps are lying smooth and flat against head and neck with no twists. Verify the head harness is centered and properly located at the back and base of head. Maintain the head harness in this position.
5. While holding the facepiece in place with one hand, tighten the neck straps evenly one at a time by pulling each neck strap end back toward the rear of the head. Alternate hands to maintain the facepiece position on the face. See FIGURE 6.
6. Verify the proper location of the face in the facepiece and the chin in the chin cup. While still holding the facepiece in place with one hand, tighten the temple straps evenly one at a time by pulling each temple strap end back toward the rear of the head. Alternate hands to maintain the facepiece position on the face. See FIGURE 7.
7. Verify the proper location of the face in the facepiece and the chin in the chin cup and retighten all straps as needed.
8. Stroke the head harness down the back of the head and make sure the net is flat against the head. If necessary, adjust the bottom of the head harness to sit below the crown of the head. See FIGURE 8.
9. Verify the proper location of the face in the facepiece and the chin in the chin cup. Retighten the straps if required. All straps must be snug and the facepiece should feel secure. See FIGURE 8.



**FIGURE 6**  
HOLD AND TIGHTEN



**FIGURE 7**  
HOLD AND TIGHTEN

## NOTE

VERIFY THAT THE TOP CENTER PORTION OF THE HEAD HARNESS IS POSITIONED OVER THE CROWN OF THE HEAD.

10. ALWAYS perform NEGATIVE PRESSURE LEAK TEST prior to use as described in USER INSTRUCTIONS for the complete respirator.



**FIGURE 8**  
CENTER HEAD HARNESS ON CROWN OF HEAD

## WARNING

FAILURE TO CHECK THE FACE TO FACEPIECE SEAL BEFORE USE MAY RESULT IN USE OF THE RESPIRATOR WITH A POOR FACE TO FACEPIECE SEAL. A POOR FACE TO FACEPIECE SEAL MAY RESULT IN LOSS OF AIR WHICH MAY CAUSE REDUCED DURATION OF USE AND/OR EXPOSURE OF THE USER TO THE HAZARDOUS ATMOSPHERE WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

## WARNING

WHEN DONNING A HOOD OVER A FACEPIECE EQUIPPED WITH SCOTT SIGHT, ENSURE THAT THE HOOD IS FULLY TUCKED BETWEEN THE TIC AND THE FACEPIECE SEAL. PULLING THE HOOD OVER THE TIC OR NOT FULLY TUCKING THE HOOD BEHIND THE TIC CAN ALLOW AN AIR GAP THAT COULD EXPOSE THE RESPIRATOR USER DIRECTLY TO HEAT OR FLAME AND LEAD TO SERIOUS INJURY OR DEATH.

**REFER TO THE USER INSTRUCTIONS FOR THE COMPLETE RESPIRATOR FOR PROPER USE OF THE RESPIRATOR WITH THIS FACEPIECE.**

## **DONNING THE AV-3000 HT 5-STRAP FACEPIECE**

1. Adjust the head straps to the full outward position.
2. Hold the facepiece in one hand while holding the head harness up and out of the way with other hand. If so equipped, use the Head Harness Pull Tab on the bottom rear of the head harness.

### **NOTE**

ENSURE THE CHIN IS PROPERLY LOCATED IN THE CHIN POCKET OF THE FACEPIECE THROUGHOUT THE DONNING PROCESS.

3. Place the facepiece centered on the face with the chin properly positioned in the chin cup. See FIGURE 9. Verify that no hair or clothing is interfering with the face to facepiece seal. Hold the facepiece in place with the chin properly located in the chin cup throughout the donning process.
4. Stroke the head harness over the head and ensure that straps are lying smooth and flat against the head and neck with no twists. Verify the head harness is centered and properly located at the back and base of the head. Maintain the head harness in this position.



**FIGURE 9**  
CHIN IN CHIN POCKET

5. While holding the facepiece in place with one hand, tighten the neck straps evenly one at a time by pulling each neck strap end back toward the rear of the head. Alternate hands to maintain the facepiece position on the face. See FIGURE 10.



**FIGURE 10**  
HOLD AND TIGHTEN

6. Verify the proper location of the face in the facepiece and the chin in the chin cup. While still holding the facepiece in place with one hand, tighten the temple straps evenly one at a time by pulling each temple strap end back toward the rear of the head. Alternate hands to maintain the facepiece position on the face. See FIGURE 11.



**FIGURE 11**  
HOLD AND TIGHTEN

7. Verify the proper location of the face in the facepiece and the chin in the chin cup. Tighten the forehead strap last by pulling the forehead strap toward back toward the rear of the head. Do not overtighten the forehead strap.
8. Verify that the head harness is centered on the crown of the head and lying flat against the back of the head. Verify the proper location of the face in the facepiece and the chin in the chin cup and retighten all straps as needed. See FIGURE 12.



**FIGURE 12**  
ADJUST HEAD HARNESS

9. Stroke the head harness down the back of the head and make sure the net is centered on your head. If necessary, adjust the head harness to the center of the crown of the head. See FIGURE 13.



**FIGURE 13**  
CENTER HEAD HARNESS ON CROWN OF HEAD

10. Verify the proper location of the face in the facepiece and the chin in the chin cup. Retighten the straps if required. All straps must be snug and the facepiece should feel secure.

**NOTE**

VERIFY THAT THE TOP CENTER PORTION OF THE HEAD HARNESS IS POSITIONED OVER THE CROWN OF THE HEAD.

11. ALWAYS perform NEGATIVE PRESSURE LEAK TEST prior to use as described in USER INSTRUCTIONS for the complete respirator.

**WARNING**

FAILURE TO CHECK THE FACE TO FACEPIECE SEAL BEFORE USE MAY RESULT IN USE OF THE RESPIRATOR WITH A POOR FACE TO FACEPIECE SEAL. A POOR FACE TO FACEPIECE SEAL MAY RESULT IN LOSS OF AIR WHICH MAY CAUSE REDUCED DURATION OF USE AND/OR EXPOSURE OF THE USER TO THE HAZARDOUS ATMOSPHERE WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

**WARNING**

WHEN DONNING A HOOD OVER A FACEPIECE EQUIPPED WITH SCOTT SIGHT, ENSURE THAT THE HOOD IS FULLY TUCKED BETWEEN THE TIC AND THE FACEPIECE SEAL. PULLING THE HOOD OVER THE TIC OR NOT FULLY TUCKING THE HOOD BEHIND THE TIC CAN ALLOW AN AIR GAP THAT COULD EXPOSE THE RESPIRATOR USER DIRECTLY TO HEAT OR FLAME AND LEAD TO SERIOUS INJURY OR DEATH.

**REFER TO THE USER INSTRUCTIONS FOR THE COMPLETE RESPIRATOR FOR PROPER USE OF THE RESPIRATOR WITH THIS FACEPIECE.**

## CLEANING AND STORAGE OF THE AV-3000 HT

Supplies needed:

- Scott recommended sanitizing or disinfecting cleaner such as Wescodyne Plus. This is a dilute iodine solution.
- Drinking (potable) water - running or in a spray bottle
- Air supply of lubricant free, dry breathing air, maximum 30 psig, for drying

### NOTE

FOLLOW ALL THE INSTRUCTIONS AND THE MATERIAL SAFETY DATA SHEET (MSDS) PROVIDED WITH THE SANITIZING OR DISINFECTING CLEANER.

### NOTE

REMOVE IMD COMPONENTS PRIOR TO CLEANING. THESE COMPONENTS SHOULD BE CLEANED WHEN NECESSARY USING A CLOTH DAMPENED WITH A SOLUTION OF MILD DETERGENT AND WATER. IF THE IMD IS REMOVED FOR INSPECTION, MAKE CERTAIN IT IS REINSTALLED PROPERLY.

### NOTE

THE STANDARD NOSE CUP IS DESIGNED TO BE AN INTEGRAL PART OF THE FACEPIECE AND DOES NOT NEED TO BE REMOVED FOR CLEANING AND DISINFECTING. IF THE NOSE CUP IS REMOVED FOR INSPECTION, MAKE CERTAIN IT IS REINSTALLED PROPERLY.

1. Carefully wash the facepiece assembly with Scott recommended cleaner according to the instructions provided with the cleaner and thoroughly rinse in clean water.
2. If the facepiece is heavily soiled, it may be necessary to first wash the facepiece with a solution of mild soap or detergent in warm water (110° F / 43° C maximum).
  - a) If there is dirt or debris in the voicemitter ducts, remove the plastic Voicemitter Grill Covers and clean any trapped debris from the inside of the voicemitter ducts.
  - b) Rinse thoroughly and replace the Voicemitter Grill Covers.
3. To sanitize or disinfect the facepiece, use the Scott recommended sanitizing or disinfecting cleaner according to the instructions provided with the cleaner. Sanitizing or disinfecting may require a specific contact time of the cleaner prior to rinsing.

### NOTE

THE SCOTT RECOMMENDED CLEANER MAY NOT BE EFFECTIVE ON HEAD HARNESES MADE OF POROUS MATERIAL SUCH AS KEVLAR<sup>2</sup> OR POLYESTER.

1. Rinse with drinking water using a spray bottle or running water.
2. Shake excess water off of facepiece and then dry with a clean, lint free cloth or gently blow dry with clean, dry breathing air of 30 psig or less pressure. **DO NOT** use shop air or any other air containing lubricants or moisture.
3. Dry thoroughly before storage.
4. **DO NOT** store the facepiece with the regulator/adaptor attached.
5. Store the facepiece with nothing on top of it that could cause deformation or distortion of the facepiece lens, seals, or other parts.
  - **DO NOT** use abrasive cleaners.
  - **DO NOT** use bleach stronger than a 3% solution in water.
  - **DO NOT** use cleaners which contain quaternary ammonium compounds.
  - **DO NOT** use solvents such as acetone, paint and lacquer thinner, benzene, or dry cleaning fluid.
  - **DO NOT** polish with paper towels as most paper contains abrasives.
  - **DO NOT** autoclave or wash in an automatic washer.
  - **DO NOT** use a vapor degreaser/polisher.

<sup>2</sup>Kevlar is a registered trademark of E.I. du Pont de Nemours and Company, Wilmington, DE.



## CAUTION

THE LENS IN THIS FACEPIECE ASSEMBLY IS MOLDED OF POLYCARBONATE PLASTIC AND HARD-COATED TO RESIST ABRASION, BUT CARE IN HANDLING AND CLEANING IS STILL REQUIRED. THE LENS CAN BE DAMAGED BY ABRASIVE OR HARSH CLEANERS AND SOFTENED BY SOME SOLVENTS. WHILE MANY HOUSEHOLD CLEANERS, DISINFECTANTS, AND PLASTIC CLEANERS ARE ACCEPTABLE, FIRST TEST THE CLEANER ON THE EDGE OF A LENS OUTSIDE THE VIEWING AREA. IF THE CLEANER CAUSES ANY SCRATCHES OR ANY CHANGE IN THE APPEARANCE OF THE LENS, DO NOT USE THE CLEANER AS IT MAY CAUSE IRREPARABLE DAMAGE TO THE FACEPIECE.

If Wescodyne PLUS is not available or is not recommended in the manufacturer's label or instructions, facepiece can also be disinfected by immersing in one of the following solutions for two minutes:

- Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 110° F / 43° C ; or,
- Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 110° F / 43° C.

## NOTE

SCOTT DOES NOT GUARANTEE THE EFFICACY OF ITS DISINFECTANT FOR SPECIFIC INFECTIOUS PATHOGENS.

## NOTE

PRIOR TO HANDLING OR USE OF ANY OF THE CLEANING AGENTS MENTIONED IN THIS INSTRUCTION, CONSULT THE MANUFACTURER'S MATERIAL SAFETY DATA SHEET (MSDS) FOR PRECAUTIONS AND IMPORTANT INSTRUCTIONS.

## WARNING

DUE TO THE POTENTIAL FOR ELECTROSTATIC DISCHARGE, CLEAN SCOTT SIGHT COMPONENTS WITH DAMPENED CLOTH ONLY. DO NOT USE DRY CLOTH TO CLEAN THE SURFACE.

CLEANING OR PROVIDING MAINTENANCE ON SCOTT SIGHT COMPONENTS IN AN EXPLOSIVE ENVIRONMENT MAY CAUSE AN IGNITION WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

## CAUTION

REGULARLY INSPECT THE AV-3000 HT FACEPIECE AND SCOTT SIGHT THERMAL IMAGING SYSTEM FOR LOOSE, WORN, OR DAMAGED COMPONENTS. IF ANY DAMAGE IS FOUND, REMOVE THE UNIT FROM SERVICE AND TAG FOR REPAIR BY AUTHORIZED PERSONNEL.

## AV-3000 HT WARRANTY INFORMATION

### **SCOTT SAFETY LIMITED WARRANTY FOR AV-3000 HT FACEPIECE**

Scott Safety (Scott) warrants AV-3000 HT FACEPIECE PRODUCTS (THE PRODUCTS) to be free from defects in workmanship and materials for a period of ten (10) years from the date of original manufacture by Scott. This warranty applies to all components of THE PRODUCTS including all accessories and optional equipment purchased and supplied at the time of original sale of THE PRODUCTS, EXCEPT electronically operated devices, consumable supplies, and storage bags. Scott's obligation under this warranty is limited to replacing or repairing (at Scott's option) THE PRODUCTS or components shown to be defective in either workmanship or materials.

Only personnel of Scott or, when directed by Scott, authorized Scott agents are authorized to perform warranty obligations. This warranty does not apply to defects or damage caused by any repairs of or alterations to THE PRODUCTS made by owner or any third party unless expressly permitted by Scott product manuals or by written authorization from Scott. To obtain performance under this warranty, and as a condition precedent to any duty of Scott, the purchaser must return such products to Scott, a Scott authorized distributor or a Scott authorized service center. Any product returned to Scott shall be sent to "Scott Safety" (Attn: Warranty Claim Dept.), P.O. Box 569, Monroe, NC 28111.

This warranty does not apply to any malfunction of or damage to THE PRODUCTS resulting from accident, alteration, misuse or abuse.

THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN ADDITION, SCOTT EXPRESSLY DISCLAIMS ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN ANY WAY CONNECTED WITH THE SALE OR USE OF SCOTT SAFETY PRODUCTS, AND NO OTHER FIRM OR PERSON IS AUTHORIZED TO ASSUME ANY SUCH LIABILITY.

## IMAGING SYSTEM FOR THE AV-3000 HT

### WARNING

THERMAL IMAGING SYSTEMS HAVE UNIQUE OPERATING CHARACTERISTICS. THEY ARE NOT NIGHT VISION CAMERAS. THE THERMAL IMAGE REPRESENTS THE RELATIVE TEMPERATURES OF OBJECTS AND DOES NOT DEPICT WHAT THE HUMAN EYE NORMALLY SEES. INTERPRETATION OF THE THERMAL IMAGE REQUIRES TRAINING AND EXPERIENCE. DO NOT USE THE THERMAL IMAGING SYSTEM IF YOU HAVE NOT BEEN PROPERLY TRAINED IN ITS USE AND OPERATION. DO NOT USE THE THERMAL IMAGING SYSTEM IF IT STOPS OPERATING OR OPERATES INCORRECTLY. USE OF THIS DEVICE WITHOUT PROPER TRAINING AND UNDERSTANDING OF ITS OPERATION MAY RESULT IN SERIOUS INJURY OR DEATH.

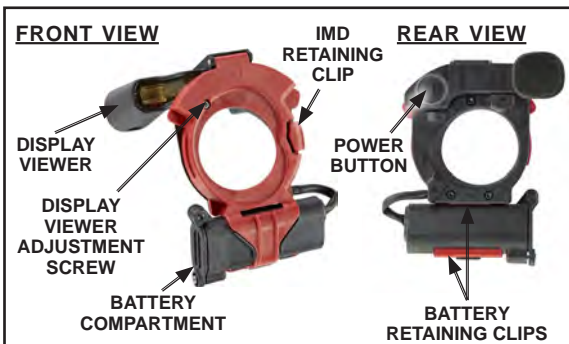
THIS PRODUCT IS DESIGNED AND INTENDED TO FUNCTION PROPERLY IN REASONABLE/ORDINARY FIREFIGHTING CONDITIONS. LIKE ALL EQUIPMENT, THE FUNCTIONALITY OF THIS PRODUCT MAY BE COMPROMISED BY EXTREME FIRE CONDITIONS.



**FIGURE 14**  
MASK-MOUNTED THERMAL  
IMAGING CAMERA (TIC)



**FIGURE 15**  
IN-MASK DISPLAY (IMD)  
NOSE CUP



**FIGURE 16**  
IN-MASK DISPLAY (IMD)

## GENERAL DESCRIPTION OF SCOTT SIGHT IMAGING SYSTEM

The Scott Sight is a rugged, mask-mounted thermal imaging system designed for hands free use with the AV-3000 HT as part of a complete respirator. Use of this equipment must be part of a complete respiratory protection program. The user must verify that the Scott Sight and AV-3000 HT are approved for use on the selected Scott respirator. Scott Sight operates independently of respirator electronics.

The Thermal Imaging Camera (TIC) uses highly sensitive infrared technology to determine even small differences in temperature, then transmits the information to the In-Mask Display (IMD) inside the facepiece, using BLUETOOTH<sup>®3</sup> wireless technology. Rather than displaying colors that correspond to an actual value, the Scott Sight looks at the entire scene in the display and calculates the range of temperatures. The IMD viewer then displays the range of relative temperatures on the screen as a gradient scale from BLACK (lower temperatures) to WHITE (higher temperatures). Additionally, a RED overlay easily indicates the highest temperatures on the screen. This feature may be an aid in helping fire fighters direct operations.

Training is required before use. This assembly is NOT intended for use under water or for any purpose not specifically authorized by the user's organized respiratory protection program.

**Fit Testing must be performed with any approved Scott accessory that will be used with the respirator installed on the facepiece. See "FIT TESTING THE AV-3000 HT" on page 7.**

The Scott Sight thermal imaging system consists of the following components:

- Mask-Mounted Thermal Image Camera (P/Ns 201450 and 201451)
- In-Mask Display (P/N 201455)
- Nose cup designed to accommodate the IMD. (Small P/N 201476, Medium P/N 201477, and Large P/N 201478)

### CAUTION

**ALWAYS VERIFY THAT THE PROPER NOSE CUP IS INSTALLED PRIOR TO DONNING THE AV-3000 HT FULL FACEPIECE. AV-3000 HT FULL FACEPIECES EQUIPPED WITH A THERMAL IN-MASK SCOTT SIGHT ASSEMBLY [P/N 201448-01, -02, -03] USE AN ALTERNATE STYLE NOSE CUP TO ACCOMMODATE THE IN-MASK DISPLAY (IMD). ALWAYS USE NOSE CUP P/Ns 201476 (SMALL), 201477 (MEDIUM), AND 201478 (LARGE) WHEN USING AN IMD. NEVER USE SCOTT SIGHT NOSE CUP WITHOUT IMD ATTACHED.**

### WARNING

**READ AND UNDERSTAND THIS ENTIRE MANUAL. TRAINING IS REQUIRED BEFORE USE OF THIS EQUIPMENT IN A HAZARDOUS SITUATION. THE TRAINING MUST INCLUDE EXTENSIVE PRACTICE WITH THE THERMAL IMAGING SYSTEM IN A VARIETY OF ENVIRONMENTS AND A COMPLETE UNDERSTANDING OF HOW TO INTERPRET THE THERMAL IMAGE. BECAUSE DIFFERENT BRANDS AND MODELS OF THERMAL IMAGING SYSTEMS MAY OPERATE DIFFERENTLY, ALWAYS UPDATE TRAINING WITH EACH NEW PIECE OF EQUIPMENT. USE OF A THERMAL IMAGING SYSTEM WITHOUT PROPER TRAINING MAY RESULT IN SERIOUS INJURY OR DEATH.**

### WARNING

**NEVER BECOME WHOLLY DEPENDENT ON THE THERMAL IMAGING SYSTEM FOR PERSONAL NAVIGATION. IT IS NOT A NIGHT VISION CAMERA. ALWAYS MAINTAIN AWARENESS OF LOCATION AND ESCAPE ROUTES WHEN USING THIS DEVICE. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.**

## OPERATIONAL ENVIRONMENT

Scott Sight is designed to operate within an internal core temperature range of up to +158 °F /+70 °C. The housing is waterproof and made of impact resistant thermoplastic.

### WARNING

**INTERNAL TEMPERATURES ABOVE +158 °F /+70 °C CAN COMPROMISE THE FUNCTIONALITY OF THE SCOTT SIGHT COMPONENTS. IF THIS OCCURS, DO NOT USE UNTIL PERFORMANCE HAS RETURNED TO NORMAL, AS THIS MAY RESULT IN SERIOUS INJURY OR DEATH.**

<sup>3</sup>The BLUETOOTH trademarks are owned by BLUETOOTH SIG, Inc. Other trademarks and trade names in this document are those of their respective owners. ©2013 BLUETOOTH SIG, Inc. Subject to change without prior notice.

## INSTALLING THE SCOTT SIGHT COMPONENTS

### WARNING

FAILURE TO INSTALL THE SCOTT SIGHT COMPONENTS PROPERLY AND/OR FAILURE TO INSPECT THE FACEPIECE AFTER INSTALLATION MAY RESULT IN A POOR FACE TO FACEPIECE SEAL OR MAY RESULT IN THE FAILURE OF THE FACE TO FACEPIECE SEAL DURING USE. A POOR OR FAILED FACE TO FACEPIECE SEAL MAY REDUCE THE DURATION OF USE OF THE RESPIRATOR AND/OR EXPOSE THE USER TO THE ATMOSPHERE THE RESPIRATOR IS INTENDED TO PROTECT AGAINST WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

**SCOTT SAFETY STRONGLY SUGGESTS THIS INSTALLATION IS COMPLETED BY OR SUPERVISED BY SOMEONE WITH EXPERIENCE IN ASSEMBLING AND DISASSEMBLING A FACEPIECE.**

### INSTALLING THE MASK-MOUNTED TIC ASSEMBLY

Supplies needed for installation:

- 8 in-lbs Torque wrench with 7/64" hex bit
- Scott Sight TIC
- Phillips screwdriver
- Scott AV-3000 HT full facepiece

Install the Mask-Mounted TIC as follows:

1. Use the hex wrench to remove upper bezel retaining screw from the right hand side (as worn) of the AV-3000 HT facepiece. **DO NOT** tamper with the bezel while the screw is removed as this may compromise the sealing of the mask.

### WARNING

**BE CAREFUL NOT TO MOVE BEZELS WHILE REMOVING THE BEZEL RETAINING SCREWS. MOVING THE BEZELS CAN COMPROMISE THE INTEGRITY OF THE FACE SEAL WHICH MAY LEAD TO EXPOSURE TO THE HAZARDOUS ATMOSPHERE WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

2. Slide the lower bezel bracket of the TIC in place over the lower bezel mount on the facepiece. Do not add lower bezel screw at this time. See FIGURE 17A.
3. Rotate the TIC clockwise until the upper bezel housing of the TIC slides firmly in place over the upper bezel mount on the facepiece. See FIGURE 17B.

### CAUTION

**DO NOT RE-INSERT THE RETAINING BOLT SUPPLIED WITH THE STANDARD AV-3000 HT AS THIS DOES NOT HAVE SUFFICIENT LENGTH TO SUPPORT THE MASK-MOUNTED TIC.**

4. With the TIC in position, insert the upper bezel retaining screw supplied with the components into the upper bezel mount and tighten to 8 in-lb torque.
5. Check that the TIC upper bezel screw is fully seated and fastened properly.
6. Check that the lower bezel bracket of the TIC is located over the lower bezel mount on the facepiece.
7. Install lower bezel screw and washer onto the lower bezel mount and tighten with Phillips screwdriver until snug. **DO NOT OVERTIGHTEN.**
8. Verify that the TIC is firmly attached to the AV-3000 HT.



FIGURE 17A  
LOWER BEZEL



FIGURE 17B  
UPPER BEZEL

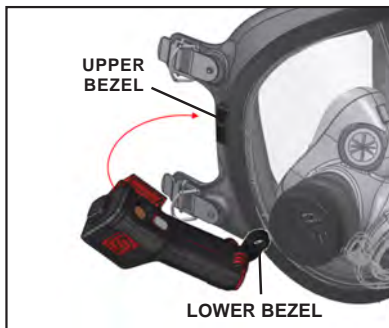


FIGURE 17  
ROTATE TIC OVER UPPER BEZEL

Remove the Mask-Mounted TIC as follows:

1. Use Phillips screwdriver to remove the lower bezel mount retaining screw and washer.
2. Use hex wrench to remove the TIC retaining screw from upper bezel mount. **DO NOT** tamper with bezel while the screw is removed as this may compromise sealing of the mask.
3. Rotate the TIC counterclockwise and slide back off of the upper bezel mount.
4. Slide the TIC lower bezel bracket from the lower bezel mount.

### WARNING

**BE CAREFUL NOT TO MOVE THE BEZEL WHILE REMOVING THE MASK-MOUNTED TIC. MOVING THE BEZEL CAN COMPROMISE THE INTEGRITY OF THE FACE SEAL WHICH MAY LEAD TO EXPOSURE TO THE HAZARDOUS ATMOSPHERE WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

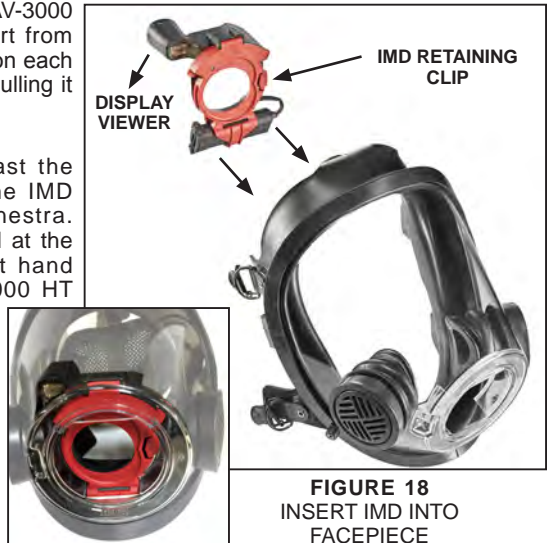
### INSTALLING THE IMD ASSEMBLY

Supplies needed for installation:

- Scott Sight IMD
- Scott AV-3000 HT full facepiece

Install the IMD as follows:

1. Remove the nose cup from the AV-3000 HT by lifting the voicemitter port from between the voicemitter flanges on each side of the nose cup and firmly pulling it out of the facepiece.
2. Insert the IMD Assembly.
  - a) Carefully guide the IMD past the voice ducts and position the IMD against the front of the fenestra. The viewer should be located at the top of the IMD on the right hand side (as worn) of the AV-3000 HT facepiece with the viewer display facing inside the facepiece.
  - b) Gently press the IMD forward into the facepiece port until the IMD retaining clip snaps into position. See FIGURE 18.
3. Check that the IMD is firmly seated against the facepiece port.



Remove the IMD Assembly as follows:

1. Remove IMD nose cup from mask. See "INSTALLING THE IMD NOSE CUP" on page 21.
2. Press the IMD retaining clip to unsnap it from facepiece port.
3. Carefully guide the IMD past the voice ducts and out of the facepiece.



## INSTALLING THE IMD NOSE CUP

Supplies needed for installation:

- Scott Sight IMD nose cup
- Scott AV-3000 HT full facepiece with IMD installed. See "INSTALLING THE IMD ASSEMBLY" on page 20.

### CAUTION

**ALWAYS VERIFY THAT THE PROPER NOSE CUP IS INSTALLED PRIOR TO DONNING THE AV-3000 HT FULL FACEPIECE. AV-3000 HT FULL FACEPIECES EQUIPPED WITH A THERMAL IN-MASK SCOTT SIGHT ASSEMBLY [P/N 201448-01, -02, -03] USE AN ALTERNATE STYLE NOSE CUP TO ACCOMMODATE THE IN-MASK DISPLAY (IMD). ALWAYS USE NOSE CUP P/Ns 201476 (SMALL), 201477 (MEDIUM), AND 201478 (LARGE) WHEN USING AN IMD. NEVER USE SCOTT SIGHT NOSE CUP WITHOUT IMD ATTACHED.**

Install the IMD nose cup as follows:

1. Carefully insert the IMD nose cup exhalation tube through the center of the IMD with end firmly seated against the front of the IMD. See FIGURE 19.
2. Seat the voicemitter port between voicemitter flanges on each side of the nosecup.
3. Check that the nose cup is positioned over the chin cup, and the end of the exhalation tube is firmly seated through the center of IMD Assembly.



**FIGURE 19**  
INSTALLING THE NOSE CUP

Remove the IMD nose cup as follows:

1. Remove the IMD nose cup by lifting voicemitter ports from around the voicemitter flanges.
2. Pull the nose cup exhalation tube from the center of the IMD and out of the facepiece.

## REPLACING THE BATTERIES

Both the Mask-Mounted TIC and the IMD require battery power to operate. The complete system requires a total of five (5) AAA batteries; three (3) for the Mask-Mounted TIC and two (2) for the IMD. The batteries for both the TIC and the IMD can be replaced without removing the device from the facepiece.

Do not mix battery types, old and new batteries, or batteries from different manufacturers. Scott does not recommend use of any other batteries except those listed below. The area must be known to be nonflammable and safe before opening the battery door.

Use only fresh batteries from the following list.

- Energizer<sup>4</sup> E92
- Duracell ProCell PC2400
- Energizer Industrial EN92
- Duracell Quantum QU2400
- Duracell<sup>5</sup> Copper Top MN2400
- Rayovac<sup>6</sup> 824

### WARNING

**THE USE OF BATTERIES OTHER THAN THOSE LISTED IN THESE INSTRUCTIONS OR REPLACING BATTERIES IN AN AREA WHICH IS NOT KNOWN TO BE FREE OF FLAMMABLE GASES AND VAPORS MAY CAUSE A FIRE OR EXPLOSION AND MAY LEAD TO SERIOUS INJURY OR DEATH.**

### WARNING

**TO REDUCE THE RISK OF EXPLOSION, USE BATTERIES ONLY FROM THE LIST PROVIDED. DO NOT MIX OLD BATTERIES WITH UNUSED BATTERIES AND DO NOT MIX BATTERIES FROM DIFFERENT MANUFACTURERS. UNAUTHORIZED SUBSTITUTION OF COMPONENTS MAY CAUSE AN EXPLOSION WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.**

## REPLACING THE TIC BATTERIES

The batteries for the TIC can be replaced without removing the module from AV-3000 HT full facepiece

1. The battery compartment is located at the bottom of the TIC. Using a Phillips screwdriver, turn the battery door screw counterclockwise until the door is released. The screw cannot be fully removed, and will remain with the battery door once it is opened.
2. Inspect assembly for damage. Check contacts inside the battery compartment for dirt, corrosion, or damage. Clean as needed. ]
3. Place batteries in battery compartment. Check orientation of + and - polarity of batteries as marked on the outside of the battery door.
4. Close the battery door. Using a Phillips screwdriver, tighten the battery door bolt until it is snug. DO NOT OVERTIGHTEN.



**FIGURE 20**  
REPLACE BATTERY

### NOTE

SCOTT SIGHT WILL NOT OPERATE IF THE BATTERY IS NOT PROPERLY INSTALLED. IF THE TIC DOES NOT OPERATE OR IF THE BATTERIES DO NOT FIT AS DESCRIBED, VERIFY THAT THE BATTERIES ARE PROPERLY ORIENTED AND NOT DAMAGED.

**If any damage beyond the scope of this instruction is found or the TIC does not operate properly, do not use. Return to authorized Scott repair center for service.**

<sup>4</sup> Energizer is a registered trademark of Energizer Holdings, Inc., St. Louis, MO.

<sup>5</sup> Duracell is a registered trademark of The Procter & Gamble Company, Cincinnati, OH.

<sup>6</sup> Rayovac is a registered trademark of Spectrum Brands, Madison WI.

## REPLACING THE IMD BATTERIES

The IMD battery pack is clipped in place at the bottom of the IMD and can be accessed between the nose cup and the face seal without removing the IMD from the facepiece. See FIGURE 21. The battery pack will need to be unclipped and rotated outward to access the battery door.

1. Unclip the battery pack located at the bottom of the IMD assembly by holding the battery cover door hinge and gently rotating the battery pack outward from between the battery retaining clips.  
DO NOT force the battery from between the battery retaining clips.



**FIGURE 21**  
UNCLIP BATTERY PACK

### CAUTION

**DO NOT FORCE THE BATTERY PACK FROM BETWEEN THE BATTERY RETAINING CLIPS. FORCING THE BATTERY FROM BETWEEN THE BATTERY RETAINING CLIPS, PULLING THE BATTERY PACK STRAIGHT OUT, OR PULLING THE BATTERY PACK FROM THE BOTTOM CAN CAUSE DAMAGE TO THE BATTERY RETAINING CLIPS RENDERING IT UNABLE TO HOLD THE BATTERY IN PLACE.**

**IF THE BATTERY RETAINING CLIP IS DAMAGED, DO NOT USE. RETURN TO AUTHORIZED SCOTT REPAIR CENTER FOR SERVICE.**

2. Rotate the battery pack out to access the battery door located at the end of the battery pack. See FIGURE 22.
3. Using a Phillips screwdriver, turn the battery door screw counterclockwise until the door is released. The screw cannot be fully unscrewed, and will remain with the battery door once open.
4. Inspect assembly for damage. Check contacts inside the battery compartment for dirt, corrosion, or damage. Clean as needed.
5. Place batteries in battery compartment. Check orientation of + and - polarity of batteries as marked on the inside of the battery door.
6. Close the battery door. Using a Phillips screwdriver, tighten the battery door bolt until it is snug. DO NOT OVERTIGHTEN.
7. Clip battery pack back in place under the IMD assembly.



**FIGURE 22**  
ROTATE BATTERY TO  
ACCESS BATTERY DOOR

### NOTE

SCOTT SIGHT WILL NOT OPERATE IF THE BATTERY IS NOT PROPERLY INSTALLED. IF THE IMD DOES NOT OPERATE OR IF THE BATTERIES DO NOT FIT AS DESCRIBED, VERIFY THAT THE BATTERIES ARE PROPERLY ORIENTED AND NOT DAMAGED.

If any damage beyond the scope of this instruction is found or the IMD does not operate properly, do not use. Return to authorized Scott repair center for service.

## OPERATING SCOTT SIGHT

### WARNING

BEFORE ENTERING A POTENTIALLY HAZARDOUS SITUATION, TURN ON AND TEST SCOTT SIGHT TO CONFIRM IT IS OPERATING PROPERLY. FAILURE TO CONFIRM THE DEVICE IS OPERATING PROPERLY MAY PLACE THE USER AT HIGHER RISK IN DANGEROUS SITUATIONS WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

### CAUTION

DO NOT POINT THE THERMAL IMAGING SYSTEM DIRECTLY AT THE SUN. DO NOT POINT THE SYSTEM AT HEAT SOURCES IN EXCESS OF 2700 °F / 1500 °C FOR EXTENDED PERIODS OF TIME. DOING SO MAY RESULT IN AN AFTER IMAGE ON THE DISPLAY THAT COULD CAUSE TEMPORARY REDUCTION IN PERFORMANCE OF THE SYSTEM. IF THIS OCCURS, DO NOT USE UNTIL PERFORMANCE HAS RETURNED TO NORMAL.

The Mask-Mounted TIC attaches to the outside of the facepiece and transmits the thermal image to the IMD viewer inside the facepiece. The IMD receives the data transferred from the TIC camera and displays the thermal image onto the IMD viewer inside the facepiece. The IMD and TIC units are pre-programmed to pair at the factory. If units are unable to pair or a new pairing is required, contact Scott Technical Support.

### NOTE:

BOTH THE TIC AND THE IMD MUST BE TURNED ON AND PAIRED FOR SCOTT SIGHT TO WORK PROPERLY.

### ***POWERING ON THE TIC AND IMD***

To turn on the Scott Sight imaging system proceed as follows:

1. The power button for the IMD is accessible FROM THE INSIDE of the facepiece, opposite the display viewer. Press and release the power button on the IMD to turn the IMD **ON**. See FIGURE 23.



**FIGURE 23**  
TURNING ON THE IMD

The Scott Safety splash screen will appear in the viewer followed by a spinning cursor indicating that the IMD is searching for a paired TIC device. The IMD battery icon will populate with current battery status. The TIC battery icon will not show status until the IMD and the TIC have established a connection. See FIGURE 24.



**FIGURE 24**  
SPINNING CURSOR INDICATES THE  
IMD IS SEARCHING FOR A PAIRED  
DEVICE.

2. Turn the mask over to view the front of the TIC. Push and hold the TIC power button for three (3) seconds then release to turn the TIC **ON**. See FIGURE 24.
3. The LED on the front of the TIC will flash RED to indicate that the power is on and flash GREEN once it has successfully paired to the IMD. The TIC battery icon will populate with the current battery status and the IMD display screen in the facepiece will show the image captured from the TIC. See “READING THE IMD DISPLAY” on page 27. See FIGURE 25.



**FIGURE 25**  
TURN ON THE TIC

#### **POWERING OFF THE TIC AND IMD**

1. Push and hold the TIC power button for 5 seconds and then release. See FIGURE 26.  
When you release the button, the spinning cursor on the IMD display flashes while the system unpairs.



**FIGURE 26**  
TURN OFF THE TIC

The green power light on the front of the mask is now turned off. See FIGURE 27.



**FIGURE 27**  
GREEN POWER LIGHT

The spinning wait cursor is visible on the IMD display, signifying the camera is not powered on. See FIGURE 28.



**FIGURE 28**  
SPINNING WAIT CURSOR

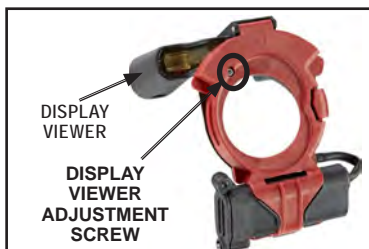
2. Push and hold the IMD power button for 1 second and then release. When you release the button, the IMD display turns off. See FIGURE 29.



**FIGURE 29**  
IMD POWER BUTTON

### **ADJUSTING THE DISPLAY**

The angle of the display viewer on the IMD can be adjusted if needed, from the front of the facepiece without removing the IMD from the facepiece. Use 1.5 mm Allen wrench (supplied on universal tool) to gently turn the adjustment screw until optimal angle has been reached. See FIGURE 30. DO NOT use force to adjust the display viewer.



**FIGURE 30**  
ADJUSTING THE DISPLAY

### **CAUTION**

**DO NOT OVERTIGHTEN THE ADJUSTMENT SCREW. THE DISPLAY VIEWER HAS LIMITED ARTICULATION. OVERTIGHTENING THE SCREW OR USING FORCE MAY CAUSE DAMAGE TO THE DISPLAY VIEWER.**

**IF THE DISPLAY VIEWER IS DAMAGED, DO NOT USE. RETURN TO AUTHORIZED SCOTT REPAIR CENTER FOR SERVICE.**

### **WARNING**

**TRAINING IS REQUIRED BEFORE USE OF THIS EQUIPMENT IN A HAZARDOUS SITUATION. THE TRAINING MUST INCLUDE EXTENSIVE PRACTICE WITH THE THERMAL IMAGING SYSTEM IN A VARIETY OF ENVIRONMENTS AND A COMPLETE UNDERSTANDING OF HOW TO INTERPRET THE THERMAL IMAGE. BECAUSE DIFFERENT BRANDS AND MODELS OF THERMAL IMAGING SYSTEMS MAY OPERATE DIFFERENTLY, ALWAYS UPDATE TRAINING WITH EACH NEW PIECE OF EQUIPMENT. USE OF A THERMAL IMAGING SYSTEM WITHOUT PROPER TRAINING MAY RESULT IN SERIOUS INJURY OR DEATH.**

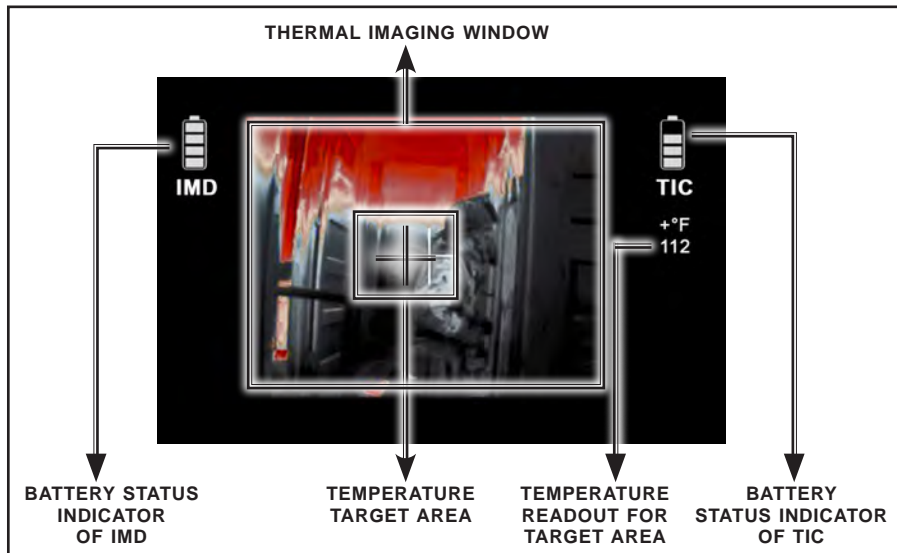


## READING THE IMD DISPLAY

The IMD display screen provides information on the scene being viewed as well as the status of the camera. Information includes:

- Thermal Imaging Window
- Temperature Target Area (Cross Hair)
- Battery Status Indicator for the TIC
- Battery Status Indicator for the IMD

**TRAINING IS REQUIRED BEFORE USE. DO NOT** use the temperature indicator readings as exact measurements. Be aware that different materials and different surface textures will not register temperature readings in the same way. Use the readings from the temperature indicator **only** to determine relative temperature differences. Training for this feature must include experience using the temperature indicator in actual incident situations. **DO NOT** make a critical decision based solely on a temperature reading.



**FIGURE 31**  
IMD DISPLAY SCREEN

- **Thermal Imaging Window:** The thermal imaging window shows the entire field of vision received from the mask-mounted TIC. The entire range of temperatures within the viewing screen is represented on screen as a gradient color scale showing BLACK at the lowest temperatures on the screen to WHITE at the higher temperatures. The highest temperatures on the screen will show RED.
- **Temperature Target Area (Cross Hair)/Temperature Readout:** The temperature target area provides a small target area in the center of the display screen and a readout of the approximate temperature of the object contained by the target area. The temperature of the target area appears in Fahrenheit in the upper right of the display screen under the TIC battery status icon.
- **Battery Status Indicators:** The battery status indicators are color coded to approximate the remaining battery charge of the IMD and the TIC batteries.
  - Four GREEN bars indicate that the battery is full
  - Three GREEN bars indicate that the battery is 3/4 full
  - Two YELLOW bars indicate that the battery is 1/2 full
  - One RED bar indicates that the battery is 1/4 full.

TIC battery indicator will only show bars when the unit is turned ON and paired with the IMD unit.

# CLEANING AND STORAGE OF THE SCOTT SIGHT

## CLEANING

See “CLEANING AND STORAGE OF THE AV-3000 HT” on page 14.

## STORAGE

Scott Sight components must be stored in temperatures between -4° F and 158° F (-20° C to +70° C) where relative humidity (RH) remains under 75%.

## MAINTENANCE

Except for cleaning, replacing the battery, and replacement parts listed in this manual, **no attempt shall be made to do maintenance or repairs beyond the scope of this instruction manual without proper training.**

## IMD REPLACEMENT PARTS

### BATTERY DOOR REPLACEMENT

If the Scott Sight IMD battery door is damaged, replace with Battery Door Replacement Kit – Scott P/N 201590-01. This kit contains a battery door assembly and hinge screw. See FIGURE 32.

Supplies needed:

- Battery Door Replacement Kit
- T8 Torx driver with 5/16" bit (not supplied)

To replace the IMD battery door assembly.

1. Using a Phillips screwdriver, loosen the retaining screw from the battery door cover and open the battery door.
2. Using a T8 Torx driver, remove the screw from the existing battery door hinge and remove the battery door from the IMD.
3. Place the new battery door in position and secure with the new hinge screw. **DO NOT OVERTIGHTEN.**



**FIGURE 32**  
BATTERY DOOR  
REPLACEMENT KIT (P/N 201590-01)

### TIC REPLACEMENT PARTS

The following replacement parts and assemblies are available for the Scott Sight TIC. See FIGURE 33.

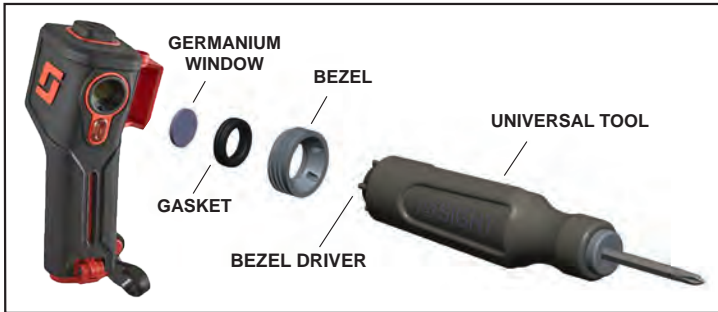
- Germanium Window Replacement Kit – Scott P/N 201587:
- TIC to Mask Bracket Spares Kit (Lower Bezel Bracket) – Scott P/N 201588-XX
  - BF (AV-3000 HT no gallet) P/N 201588-01
  - EN (AV-3000 HT w/gallet) – P/N 201588-02
- TIC Battery Door Replacement Kit - Scott P/N 201589.



**FIGURE 33**  
REPLACEMENT KITS FOR SCOTT SIGHT TIC

## GERMANIUM WINDOW REPLACEMENT

If the Scott Sight Germanium Window becomes damaged, it can be replaced with the Germanium Window Replacement Kit –Scott P/N 201587. This replacement must be performed in a clean work area. Be sure the camera is OFF before beginning any work. Clean the Thermal Imaging Camera according to the CLEANING section of this instruction, prior to installing new parts. This kit contains a germanium window, gasket, window bezel and the Scott Sight universal tool with bezel driver. See FIGURE 34.



**FIGURE 34**  
GERMANIUM WINDOW REPLACEMENT KIT (P/N 201587)

Supplies needed:

- Germanium Window Replacement Kit with Universal Tool

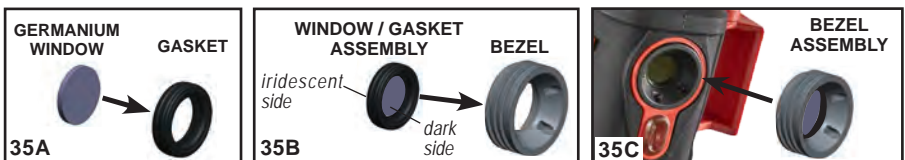
Replace the TIC Germanium Window as follows:

1. Using the bezel driver on the end of the universal tool, unscrew the existing window bezel from the TIC. Remove the existing bezel, gasket, and the germanium window. Discard.
2. Carefully insert the new window into the gasket. See FIGURE 35A. Check to ensure it is seated properly between the flanges on the inside of the gasket.

### NOTE

THE GERMANIUM WINDOW HAS A DARK SIDE AND AN IRIDESCENT BLUE COATED SIDE. THE IRIDESCENT BLUE SIDE OF THE WINDOW MUST BE FACING INTO THE CAMERA, THE DARK SIDE MUST BE FACING OUT FROM THE CAMERA. THE COLOR IS BEST DETERMINED WHEN ALLOWING LIGHT TO REFLECT OFF THE SURFACE OF THE WINDOW.

3. Gently press the window/gasket assembly into the new bezel. See FIGURE 35B. Ensure that the iridescent blue side of the window is facing in, towards the camera, and the dark side of the window is facing out.
4. Insert the new window assembly into the TIC. See FIGURE 35C.
5. Using window bezel driver on the end of the universal tool, tighten the window bezel until it is snug. DO NOT OVERTIGHTEN.



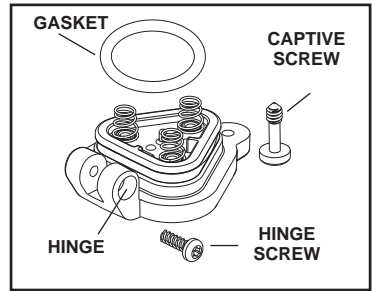
**FIGURE 35**  
ASSEMBLING THE WINDOW

## TIC BATTERY DOOR REPLACEMENT

If the Scott Sight TIC battery door becomes damaged, it can be replaced with Battery Door Replacement Kit – Scott P/N 201589. This kit contains a battery door assembly, hinge screw, captive screw and O-ring. See Figure 36.

Supplies needed:

- TIC Battery Door Replacement Kit
- T8 Torx driver with 5/16" bit (not supplied)
- Parker Super-O-Lube<sup>7</sup> (not supplied)



**FIGURE 36**  
BATTERY DOOR KIT  
(P/N 201589-01)

Replace the TIC battery door assembly as follows:

1. Using a Phillips screwdriver, loosen the captive screw from the battery door cover and open the battery door.
2. Using a T8 Torx driver, remove the screw from the existing battery door hinge and discard. See FIGURE 37.
3. Remove the battery door from the TIC and discard. See FIGURE 38.
4. Apply a thin film of Parker Super-O-Lube<sup>6</sup> lubricant to the new battery door O-ring and install it on the new battery door. Check to make sure that the gasket is seated properly in the groove. See FIGURE 39.
5. Using a Phillips screwdriver, apply pressure while turning the screw in order to bore the captive screw into the aperture on the battery door. See FIGURE 40.
6. Align the hinge knuckles of the cover door and the TIC and secure with new hinge screw (T8 Torx). DO NOT OVERTIGHTEN. See FIGURE 41.



**FIGURE 37**  
OPEN BATTERY  
DOOR COVER



**FIGURE 38**  
REMOVE HINGE  
SCREW



**FIGURE 39**  
INSTALL O-RING



**FIGURE 40**  
INSTALL CAPTIVE  
SCREW



**FIGURE 41**  
ALIGN HINGE  
AND INSTALL

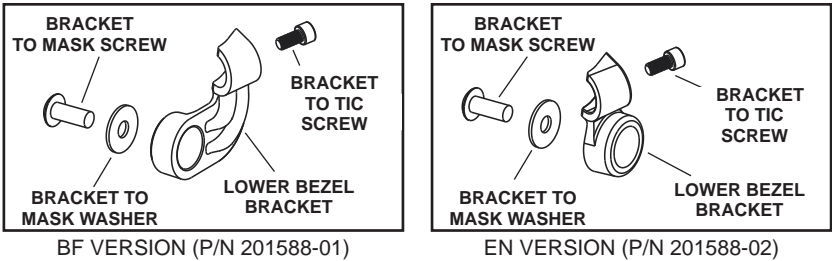
<sup>7</sup> Super-O-Lube is a registered trademark of Parker Hannifin Co.

### TIC LOWER BEZEL BRACKET REPLACEMENT

If the Scott Sight Lower bezel bracket becomes damaged, it can be replaced with TIC to Mask Bracket Spares Kit. This kit contains a lower bezel bracket, bracket to TIC screw, bracket to mask screw, and bracket to mask washer. See FIGURE 42.

Supplies needed:

- TIC to Mask Bracket Spares Kit (Lower Bezel Bracket) – Scott P/N 201588-XX
  - BF (AV-3000 HT no gallet) P/N 201588-01
  - EN (AV-3000 HT w/gallet) – P/N 201588-02
- Hex driver with 3/32" hex bit (not supplied)
- Phillips screwdriver.



**FIGURE 42**  
LOWER BEZEL BRACKET KIT

Replace the lower bezel bracket as follows:

1. Remove TIC from the facepiece. See *“REMOVE THE MASK-MOUNTED TIC AS FOLLOWS:”* on page 20.
2. Using the hex driver, remove the screw connecting the bracket to the TIC. Remove the bracket and discard. See FIGURE 43.
3. Place the new bracket in place and secure with the new bracket screw.
4. Reinstall the TIC onto the facepiece using the new mask screw and washer provided with the kit. See *“INSTALLING THE MASK-MOUNTED TIC ASSEMBLY”* on page 19.



**FIGURE 43**  
REMOVE BRACKET FROM TIC

### EXPORT AND IMPORT

The international transport of this equipment and portions thereof is regulated under United States export regulations and may be regulated by the import regulations of other countries. Failure to follow applicable export and import laws can result in civil and criminal prosecution. If you have any questions or concerns regarding these regulations, contact Scott at 1-800-247-7257 (or 704-291-8300 outside the continental United States).

### QUESTIONS OR CONCERNS

If you have any questions or concerns regarding use of this equipment, contact your authorized Scott distributor, or contact Scott at 1-800-247-7257 (or 704-291-8300 outside the continental United States) or visit our web site at [www.scottsafety.com](http://www.scottsafety.com).

# SCOTT SIGHT WARRANTY INFORMATION

## SCOTT SAFETY LIMITED WARRANTY FOR SCOTT SIGHT IMAGING SYSTEM

Scott Safety (Scott) warrants all Scott Sight devices, associated accessories, and unused consumables supplied with the product to be free from defects in workmanship and material under reasonable/ordinary conditions, use, and service for a period of two (2) years from the date of original manufacture by Scott. Scott's obligation under this warranty is limited to replacing or repairing (at Scott's option) or components shown to be defective in either workmanship or materials.

Only Scott or, when directed by Scott, authorized Scott agents are authorized to perform warranty obligations. This Warranty does not apply to defects or damage caused by any repairs of or alterations to made by the owner or any third party unless expressly permitted by Scott product manuals or by written authorization from Scott, defects or damage caused by failure to use and/or maintain the product and/or its accessories in accordance with Scott product manuals, defects or damage caused by use of a non-approved battery, non-service related defects or damages, and defects or damage cause by improper storage or transportation. To obtain performance under this warranty, and as a condition precedent to any duty of Scott, the purchaser must return such products to Scott, a Scott authorized distributor, or a Scott authorized service center. Any product returned to Scott shall be sent to: Scott Safety, (Attn: Warranty Claim Dept.), 4320 Goldmine Road, Monroe, NC 28110

THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN ADDITION, Scott EXPRESSLY DISCLAIMS ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN ANY WAY CONNECTED WITH THE SALE OR USE OF SCOTT PRODUCTS, AND NO OTHER FIRM OR PERSONS IS AUTHORIZED TO ASSUME ANY SUCH LIABILITY.

User acknowledges that User's acceptance and use of involves certain risks and that injury, death, or other harm could occur to User, User's employees or User's clients. User agrees that product and/or its accessories shall not be used by User or any of User's employees or User's clients without proper training. User accepts and voluntarily incurs all risks of any injuries, damages or harm which arise during or result from User's use of, regardless of whether or not caused in whole or in part by the negligence or other fault of Scott Safety, and/or its affiliates, employees, officers, agents, or attorneys (hereinafter "Released Parties").

User waives all claims against any of the Released Parties for any injuries, damages, losses or claims, whether known and unknown, which arise during or result from User's use of, regardless of whether or not caused in whole or part by the negligence or other fault of any of the Released Parties. User releases and forever discharges Released Parties from all such claims.

### **YOUR ATTENTION IS DRAWN TO THE IMPORTANT CLAUSE BELOW**

User agrees to indemnify and hold the Released Parties harmless from all losses, liabilities, damages, cost or expenses, including but not limited to attorneys' fees and other litigation costs and expenses) incurred by any of the Released Parties as a result of any claims or suits User (or anyone claiming by, under or through User) may bring against any of the Released Parties to recover any losses, liabilities, costs, damages, or expenses which arise during or result from User's use of, regardless of whether or not caused in whole or part by the negligence or other fault of any of the Released Parties.



# EU DECLARATION OF CONFORMITY

Models	Model references	ATEX markings and ambient ranges	EC type examination certificates	CB test certificates
Scott Sight Thermal Imaging Camera (TIC)	201450-01	Ex ia IIB T3 Ga Ta = -30°C to +60°C	Sira 16ATEX2250X	GB-EMT 0870
Scott Sight Thermal Imaging Camera (TIC) EN	201451-01	Ex ia IIB T3 Ga Ta = -30°C to +60°C	Sira 16ATEX2250X	GB-EMT 0870
Scott Sight In-Mask Display (IMD)	201455-01	Ex ia IIB T4 Ga Ta = -30°C to +60°C	Sira 16ATEX2249X	GB-EMT 0871

**EUROPEAN DIRECTIVES:** 2014/34/EU, 2014/53/EU

**NOTIFIED BODIES:** Element Materials Technology (0891)

**STANDARDS:** EN 60079-0:2012+A11:2013, EN 60079-11:2012,

IEC 60950-1:2005 (with AMD1:2009, AMD2:2013, and EU Group Differences, EU Special national Conditions, EU A-Deviations, CA, KR, US)

**IP RATING:** IP 66/67

**MARKING:**  0891  II 1G

We, Scott Safety, declare under our sole responsibility that the listed Scott Sight models conform with the ATEX Directive (2014/34/EU) and standards listed herein, when properly installed and maintained and when used for the purpose for which they are intended.

Hereby, Scott Safety declares that BT-121 Bluetooth module conforms to essential and other relevant requirements of Radio Equipment Directive 2014/53/EU.

(Contains IC: 5123A-BGTBT121, FCC ID# QOQBT121)

**AUTHORIZED BY:**



Name: Michael Powers

Title: Quality Manager

Date: 18 January 2017

**EC DECLARATION OF CONFORMITY**

The manufacturer or his authorised representative established in the Community:

**SCOTT SAFETY LTD**

**PIMBO ROAD, WEST PIMBO,**

**SKELMERSDALE, LANCASHIRE. WN8 9RA**

declares that the new PPE described hereafter:

**AV3000HT approved with EPIC and SCOTT SIGHT accessories:**

AV3000HT\_STANDARD

AV3000HT\_OPTIONAL EPIC

AV3000HT\_OPTIONAL SCOTT SIGHT

AV3000HT\_OPTIONAL EPIC & SCOTT SIGHT

is in conformity with the provisions of Council Directive 89/686/EEC and, where such is the case, with the national standard transposing harmonized standard No EN 136:1998: **AC: 2003, CL3, EN 137:2006 & BS 8468-1:2006** (for the PPE referred to in Article 8(3)) and is identical to the PPE which is the subject of EC Type Examination Certificate **CE 644274** issued by:

**BSI Group (NB0086), Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes, MK5 8PP, United Kingdom**

is subject to the procedure set out in Article 11b (**CE 01547**) of Directive 89/686/EEC under the supervision of the approved body:

**BSI Group (NB0086), Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes, MK5 8PP, United Kingdom**

Done at **SCOTT SAFETY** , on **20<sup>th</sup> February 2017**



Mark Saxon  
Regulatory Manager



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