

Typical configurations of SCOTT AIR-PAK NxG<sub>2</sub> SCBA's with various optional equipment illustrated above. Appearance of respirators will vary by model. Not all respirators include all features illustrated. Copyright © 2006 SCOTT Health and Safety, All Rights Reserved.

# **SCOTT AIR-PAK NxG<sub>2</sub>** *Pressure-Demand Self Contained Breathing Apparatus (SCBA)*

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# WARNING

IMPROPER USE OF THIS RESPIRATOR MAY RESULT IN PERSONAL INJURY OR DEATH. IMPROPER USE INCLUDES, BUT IS NOT LIMITED TO, USE WITHOUT ADEQUATE TRAINING, DISREGARD OF THE WARN-INGS AND INSTRUCTIONS CONTAINED HEREIN, AND FAILURE TO INSPECT AND MAINTAIN THIS RESPIRATOR. READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE ATTEMPTING TO OPERATE OR SERVICE THIS EQUIP-MENT.

THIS RESPIRATOR IS INTENDED TO BE USED ONLY IN CONJUNCTION WITH AN ORGANIZED RESPIRA-TORY PROTECTION PROGRAM WHICH COMPLIES WITH THE REQUIREMENTS OF "PRACTICES FOR RESPIRATORY PROTECTION," Z88.2 AVAILABLE FROM AMERICAN NATIONAL STANDARDS INSTITUTE INC., 1430 BROADWAY, NEW YORK, N.Y., 10018, OR THE REQUIREMENTS OF OSHA SAFETY AND HEALTH STANDARD 29 CFR 1910 PARAGRAPH 134 AVAILABLE FROM THE U. S. DEPARTMENT OF LABOR, OC-CUPATIONAL SAFETY AND HEALTH ADMINISTRATION, OR OTHER PERTINENT NATIONALLY RECOGNIZED STANDARDS, SUCH AS THOSE PROMULGATED BY THE US COAST GUARD OR THE DEPARTMENT OF DEFENSE.

# **GENERAL DESCRIPTION**

The SCOTT AIR-PAK  $NxG_2$  self contained breathing apparatus (SCBA) is a respirator which, when properly maintained and properly used, is intended to provide respiratory protection to an individual when entering into, working in and exiting an objectionable, an oxygen deficient and/or unbreathable (toxic) atmosphere.

The SCOTT AIR-PAK  $NxG_2$  SCBA is to be used **only** by persons trained in the use of the respirator and **only** in conjunction with an organized respiratory protection program. The SCBA is not to be used for purposes other than authorized by your respiratory protection program. For example, this respirator must not be used underwater.

The SCOTT AIR-PAK NxG<sub>2</sub> SCBA consists of, at a minimum, a cylinder and valve assembly to store a supply of breathing air under pressure, a backframe and harness assembly to support the cylinder and valve assembly and pressure reducer on the body, a backframe mounted pressure reducer to supply air to the breathing regulator, a facepiece mounted pressure demand breathing regulator, an approved SCOTT full facepiece and a head harness to secure the facepiece to the face. All SCOTT AIR-PAK NxG<sub>2</sub> SCBA's described in this instruction are equipped with an end of service indicator, a remote pressure gauge mounted on the wearer's right shoulder strap and an air saver switch located on top of the breathing regulator. All model respirators described by these instructions are equipped with shoulder straps, waist straps and head harnesses made of Kevlar<sup>1</sup>.

The typical facepiece design incorporates a nose cup, two inhalation valves and dual voicemitter assemblies which are integral parts of the approved respirator assembly. The facepiece may be readily detached from the breathing regulator to allow for utilization of the best fitting facepiece for an individual user.

The approved facepiece utilized by the SCBA's described by this instruction is available in a variety of models and sizes. Users of this respirator must be properly fitted to a facepiece and trained in the use of that facepiece with the respirator. The facepiece must be fitted using qualitative or quantitative fit testing procedures in accordance with OSHA Standard 29 CFR Part 1910 (Occupational Safety and Health Standards). See also ANSI Standard Z88.2. For testing in the negative pressure mode using equipment such as a Portacount<sup>®</sup> Plus<sup>2</sup> Respirator Fit Tester, SCOTT facepieces require use of SCOTT Fit Test Adapter P/N 804057-01. Mask Seal Kit P/N 805655-01 may also be required to attain a proper fit.

#### WARNING

DO NOT OPERATE THIS EQUIPMENT WHILE UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR ANY MEDICATIONS OR SUBSTANCES WHICH MAY AFFECT VI-SION, DEXTERITY, OR JUDGMENT. USERS OF THIS EQUIPMENT MUST BE IN GOOD PHYSICAL AND MENTAL HEALTH IN ORDER TO OPERATE SAFELY. DO NOT USE THIS EQUIPMENT WHEN FATIGUE PREVENTS SAFE OPERATION. STAY ALERT WHEN **OPERATING THIS EQUIPMENT. INATTEN-**CARELESSNESS WHILE TION OR OPERATING THIS EQUIPMENT MAY RE-SULT IN SERIOUS INJURY OR DEATH.

#### WARNING

THIS RESPIRATOR, IS INTENDED TO PROTECT THE USER ONLY FROM THE EFFECTS OF AN OXYGEN DEFICIENT AT-MOSPHERE AND/OR ATMOSPHERES CONTAINING TOXIC OR HAZARDOUS SUBSTANCES BY PROVIDING A SUPPLY OF RESPIRABLE BREATHING AIR TO A FACEPIECE SEALED TO THE USER'S FACE. SOME TOXIC OR HAZARDOUS ATMO-SPHERES CONTAIN SUBSTANCES WHICH CAN POISON BY ABSORPTION THROUGH EXPOSED SKIN. FAILURE TO TAKE ALL NECESSARY PRECAUTIONS WHEN ENTER-ING A HAZARDOUS ATMOSPHERE MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

FIT TESTING IN ACCORDANCE WITH OSHA STANDARD 29 CFR PART 1910 IS RE-QUIRED AS PART OF THE REQUIRED TRAINING BEFORE USE OF THIS RESPIRA-TOR. FAILURE TO PROPERLY FIT AND TRAIN THE USER IN USE OF THE FACE-PIECE AND RESPIRATOR MAY RESULT IN EXPOSURE TO THE HAZARDOUS ATMO-SPHERE WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

<sup>&</sup>lt;sup>1</sup> Kevlar is a registered trademark of E.I. du Pont de Nemours, Inc.

<sup>&</sup>lt;sup>2</sup> Portacount<sup>®</sup> Plus is a registered trademark of TSI Incorporated

The regulator utilized by the SCOTT SCBA is a pressure-demand breathing regulator mounted directly to the facepiece. The regulator may be removed from the facepiece by operating a spring loaded thumb latch, rotating the regulator 90 degrees and lifting it from the facepiece. The breathing regulator is equipped with an air saver/donning switch which can be activated by depressing the rubber covered switch. Activation of the air saver/donning switch will prevent the rapid loss of air supply when the system is turned on prior to donning the facepiece, if the facepiece is removed from the face or the regulator is removed from the facepiece while the cylinder valve is open. The regulator is also equipped with a red purge knob. The purge knob is an emergency control which allows air to flow into the facepiece without breathing on the respirator. The purge control is also used to release residual air from the respirator after the cylinder valve is turned off.

The SCOTT AIR-PAK NxG<sub>2</sub> SCBA is supplied with a stamped aluminum frame assembly (P/N 805846-01). The backframe assembly uses a unique SNAP-CHANGE<sup>™</sup> mechanism to engage the cylinder valve assembly to the pressure reducer. The upper part of the cylinder is retained in the backframe assembly by a cylinder retention system. Refer to the CYLINDER REPLACEMENT PROCEDURE section of this instruction.

The backframe mounted pressure reducing regulator is a redundant dual path reducing system. During normal use, air is supplied from the cylinder and valve assembly to the mask mounted breathing regulator through the primary air path of the pressure reducer. In the event that the primary air path of the pressure reducer becomes blocked or fails closed, the secondary pressure reducing air path will automatically begin supplying air to the breathing regulator. When the secondary path is in operation, the VIBRALERT<sup>®</sup> end of service indicator alarm will be actuated to warn the user that the primary pressure reducer path has malfunctioned. Whenever the VIBRALERT end of service indicator alarm actuates, the user must leave the area requiring respiratory protection at once.

AIR-PAK respirators in compliance with NFPA 1981 (edition 2002) are fitted with a Rapid Intervention Crew/Company Universal Air Connection (RIC UAC) System which permits emergency replenishment of an approved SCBA breathing air supply cylinder from an approved air supply source while in use. This is not a Quick Charge attachment and must not be used for routine recharging of the cylinder, for "buddy breathing", for transferring air from another SCBA cylinder, or any unapproved use. The RIC UAC is for <u>emergency use only</u> when the respirator user is incapacitated within the hazardous atmosphere.

#### WARNING

RESPIRATORS SHALL NOT BE WORN WHEN CONDITIONS PREVENT A GOOD FACE TO FACEPIECE SEAL. SUCH CONDI-TIONS MAY INCLUDE, BUT ARE NOT LIMITED TO, GROWTH OF BEARDS, SIDE-BURNS, A SKULL CAP THAT PROJECTS UNDER THE FACEPIECE, OR TEMPLE PIECES ON GLASSES. ALSO, THE AB-SENCE OF ONE OR BOTH DENTURES CAN SERIOUSLY EFFECT THE FIT OF THE FACEPIECE. USE OF THE RESPIRATOR WITHOUT A GOOD FACE TO FACEPIECE SEAL MAY REDUCE THE DURATION OF USE AND/OR EXPOSE THE USER TO THE ATMOSPHERE THE RESPIRATOR IS IN-TENDED TO PROTECT AGAINST WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

CERTAIN ENVIRONMENTS MAY REQUIRE THAT PROTECTIVE MATERIAL COVER SOME OR ALL OF THE RESPIRATOR IN AD-DITION TO COVERING THE USER. THE USER MUST BE ABLE TO ACCESS THE CONTROLS OF THE RESPIRATOR AT ALL TIMES. INABILITY TO ACCESS CONTROLS OF THE RESPIRATOR WHEN THE RESPIRA-TOR IS NEEDED FOR ESCAPE MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

USE OR MISUSE OF THIS RESPIRATOR IN SUCH A MANNER AS TO EXPOSE THE USER TO THE ATMOSPHERE THE RESPI-RATOR IS INTENDED TO PROTECT AGAINST MAY RESULT IN SERIOUS INJURY OR DEATH.

GENERAL DESCRIPTION CONTINUED ON NEXT PAGE...

# GENERAL DESCRIPTION CONTINUED...

There are two independent end of service indicator alarms: the VI-BRALERT alarm mounted inside the breathing regulator and the electronic HEADS-UP DISPLAY end of service time indicator. When actuated, the VIBRALERT alarm vibrates the breathing regulator and facepiece to warn the user of diminishing air supply by both an audible and a tactile warning. The HEADS-UP DISPLAY provides a visual monitor of the air supply with four lights that appear just below the facepiece field of vision. A separate low battery light warns the user that the battery must be changed. The HEADS-UP DISPLAY lights indicate the cylinder air supply is full to three-quarters with constant green lights, one-half cylinder with a slowly flashing yellow light, and warns the user that approximately one guarter or 25% of full cylinder pressure remains with a rapidly flashing red light. The HEADS-UP DISPLAY detects cylinder pressure directly and is totally independent **REMAINS IN THE AIR SUPPLY CYLINDER** of the VIBRALERT.

Both the VIBRALERT and the electronic HEADS-UP DISPLAY end of service time indicator alarms actuate to warn the user that approximately 25% of full cylinder pressure remains in the cylinder and valve assembly. In other words, the alarms actuate when approximately 3/ 4 of the total air supply has been used. Although both the VIBRALERT and electronic HEADS-UP DISPLAY end of service indicator alarms are set to actuate at the US Government mandated set point of approximately 25% of full rated service pressure, they are completely independent of each other and therefore may not actuate at precisely the same moment. As stated above, the VIBRALERT end of service indicator alarm will also actuate if the primary pressure reducer malfunctions or becomes blocked. In this case, the VIBRALERT alarm alone will actuate and the HEADS-UP DISPLAY will not. Whenever any alarm actuates, the VIBRALERT end of service indicator alarm or the HEADS-UP DISPLAY, the user must immediately leave the area requiring respiratory protection.

#### WARNING

THE RESPIRATOR USER MUST IMMEDI-ATELY LEAVE THE AREA REQUIRING **RESPIRATORY PROTECTION WHEN AN** END OF SERVICE INDICATOR ALARM AC-TUATES. ACTUATION OF AN END OF SERVICE INDICATOR ALARM WARNS THAT APPROXIMATELY 25% OF FULL PRESSURE (THAT IS, APPROXIMATELY 3/4 OF THE TOTAL AIR SUPPLY HAS BEEN USED) OR THAT THERE IS A MALFUNCTION IN THE **RESPIRATOR. A DELAY IN LEAVING THE** AREA AFTER ALARM ACTUATION MAY RE-SULT IN SERIOUS INJURY OR DEATH.

# **OPTIONS AND ACCESSORIES**

In order to increase the utility of the respirator and/or to configure the respirator for specific applications, the SCOTT AIR-PAK NxG<sub>2</sub> SCBA may be equipped with one or more options and/or accessories. The user of the respirator must determine which optional components are installed on the particular respirator to be used and become thoroughly familiar with their operation as explained in this instruction and in all other instructions provided with this respirator. The user must also identify any accessories installed on the SCOTT AIR-PAK NxG<sub>2</sub> SCBA and consult the separate instruction manual provided with the accessory for information on the operation and maintenance of that accessory.

The SCOTT full facepiece used with the SCOTT AIR-PAK NxG<sub>2</sub> SCBA is available in a variety of models and sizes. The organized respiratory protection program under which this respirator is to be used shall provide for fit testing to determine the correct size facepiece for the user of this respirator as well as the appropriate model facepiece for the application. The user of this respirator must receive training in the use of the respirator including, but not limited to, training in the procedure of donning the facepiece and checking the face to facepiece seal before use of the respirator. See USE OF RESPIRATOR section of this instruction.

When the use of corrective eye lenses are required during respirator use, the corrective lenses must not interfere with a good seal between the face and the facepiece. For example, spectacles with temple bars or straps which pass between the face and the seal of the facepiece must not be used. Each size facepiece may be equipped with a lens kit if corrective spectacles are required.

Contact lenses will not interfere with the face to facepiece seal, however, only individuals who regularly use contact lenses without difficulty should use contact lenses with a respirator. The use of contact lenses may be restricted, may be limited to certain types of lenses or may be forbidden by your respiratory protection program or by the regulations under which your respiratory protection program operates. Notify your respiratory protection director or your employer and obtain specific limitations and instructions before using contact lenses with a SCOTT AIR-PAK NxG<sub>2</sub> SCBA.

The mask mounted breathing regulator may be supplied with a quick disconnect fitting in the low pressure air hose leading to the regulator. The quick disconnect permits disconnection of the breathing regulator from the respirator without the use of tools. If the regulator is equipped with a quick disconnect fitting, see step 7 of the REGULAR OPERATIONAL INSPECTION section of this instruction and the STANDBY INSPECTION, CLEANING AND STORAGE section of this instruction for operation of the quick disconnect.

The respirator may be equipped with an integrated PASS DEVICE distress alarm which monitors the motion of a respirator user and emits an audible signal when motion has ceased for a period of time. If the respirator is equipped with a PASS DEVICE distress alarm see the instructions provided with the PASS DEVICE accessory for details of operation and maintenance. The SCOTT part number for the required instructions appears on the PASS DEVICE label on the backframe.

In addition to the options explained above, the respirator may be supplied with accessory components such as various electronic communications devices

Consult with your SCOTT Health and Safety distributor for details of available approved accessories for your SCOTT AIR-PAK NxG<sub>2</sub>. Refer to the operation and maintenance instructions provided with these and other optional components for details of the operation and maintenance of the option.

#### WARNING

THE USER OF THIS RESPIRATOR MUST RECEIVE TRAINING IN THE OPERATION OF THE RESPIRATOR INCLUDING THE OPERA-TION OF ALL OPTIONS AND/OR ACCESSO-RIES INCORPORATED IN THE RESPIRA-TOR. USE WITHOUT PROPER TRAINING MAY RESULT IN SERIOUS INJURY OR DEATH. SEE WARNING AT THE BEGINNING OF PAGE TWO OF THIS INSTRUCTION.

#### WARNING

ONLY THOSE OPTIONS AND/OR ACCESSO-RIES AUTHORIZED BY SCOTT AND APPROVED BY NIOSH MAY BE INSTALLED IN THIS RESPIRATOR. THE USE OF UNAU-THORIZED AND/OR UNAPPROVED OPTIONS OR ACCESSORIES COULD CAUSE PARTIAL OR COMPLETE FAILURE OF THE RESPIRATOR WHICH MAY RESULT IN INJURY OR DEATH.

#### WARNING

THE ATTACHMENT OF COMPONENTS, AC-CESSORIES, OR DEVICES TO THE SCOTT AIR-PAK NXG<sub>2</sub> SCBA WHICH ARE NOT LISTED ON THE COMPLETE NIOSH LABEL MAY VOID THE NIOSH APPROVAL AND MAY DEGRADE THE PERFORMANCE OF THE RESPIRATOR.

#### WARNING

**RESPIRATORS SHALL NOT BE WORN** WHEN CONDITIONS PREVENT A GOOD FACE TO FACEPIECE SEAL. SUCH CONDI-TIONS MAY INCLUDE, BUT ARE NOT LIMITED TO, GROWTH OF BEARDS, SIDE-BURNS, A SKULL CAP THAT PROJECTS UNDER THE FACEPIECE, OR TEMPLE PIECES ON GLASSES. ALSO, THE AB-SENCE OF ONE OR BOTH DENTURES CAN SERIOUSLY EFFECT THE FIT OF THE FACEPIECE. USE OF THE RESPIRATOR WITHOUT A GOOD FACE TO FACEPIECE SEAL MAY REDUCE THE DURATION OF USE AND/OR EXPOSE THE USER TO THE ATMOSPHERE THE RESPIRATOR IS IN-TENDED TO PROTECT AGAINST WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

THE RESPIRATOR USER MUST IMMEDIATELY LEAVE THE AREA REQUIRING RESPIRATORY PROTECTION WHEN AN END OF SERVICE INDICATOR ALARM ACTUATES. ACTUATION OF AN END OF SERVICE INDICATOR ALARM WARNS THAT APPROXIMATELY 25% OF FULL PRESSURE REMAINS IN THE AIR SUP-PLY CYLINDER (THAT IS, APPROXIMATELY 3/4 OF THE TOTAL AIR SUPPLY HAS BEEN USED) OR THAT THERE IS A MAL-FUNCTION IN THE RESPIRATOR. A DE-LAY IN LEAVING THE AREA AFTER ALARM ACTUATION MAY RESULT IN SERIOUS INJURY OR DEATH.

# APPROVALS AND CERTIFICATIONS

All models of the SCOTT AIR-PAK NxG<sub>2</sub> SCBA conform to the requirements of Title 42 Part 84 of the Code of Federal Regulations and are certified by the National Institute of Occupational Safety and Health (NIOSH) under the appropriate approval number for the respirator configuration. See the complete NIOSH approval label, SCOTT document P/N 10012360, included with these instructions. Also see the CAU-TIONS AND LIMITATIONS SECTION and the SPECIFIC LIMITATIONS SECTION of this instruction for the cautions and limitations which apply to NIOSH certified respirators of this type.

The SCOTT AIR-PAK NxG<sub>2</sub> respirator is a modular design and is composed of replaceable subassemblies. The SCOTT AIR-PAK NxG<sub>2</sub> respirator may also include certain accessories. Each major subassembly and accessory is labeled with its SCOTT part number. In order to maintain the NIOSH approved status of the respirator, only those subassemblies and/or accessories listed by part number as applicable to a particular NIOSH approval number on the complete NIOSH approval label may be used in conjunction with the particular AIR-PAK NxG<sub>2</sub> respirator approved under that approval number. The complete NIOSH Approval Label, SCOTT document P/N 10012360, is included with these instructions.

All models of the SCOTT AIR-PAK NxG<sub>2</sub> SCBA described in these instructions are certified by NIOSH for use in ambient temperatures down to -25° F /-32° C. See LOW TEMPERATURE OPERATION section of this instruction. To maintain NIOSH certification, AIR-PAK NxG<sub>2</sub> SCBA cylinders must be refilled with compressed air which meets the requirements for Grade D or higher compressed air as specified in the Compressed Gas Association publication CGA G-7.1 entitled *Commodity Specification for Air*, available from the Compressed Gas Association, Inc., 1725 Jefferson Davis Hwy., Suite 1004, Arlington, VA 22202. In addition to meeting the requirements of Grade D or higher, the air must be dry to a dew point of -65° F / -54° C or less. Special training is required to fill the cylinder and valve assemblies used with this SCOTT AIR-PAK NxG<sub>2</sub> SCBA. Contact your SCOTT representative for additional information on refilling SCOTT SCBA cylinders.

In addition to meeting the requirements of NIOSH, the SCOTT AIR-PAK NxG<sub>2</sub> SCBA meets the requirements of the National Fire Protection Association (NFPA) 1981 (Edition of 2002) Standard on Open-Circuit Self-Contained Breathing Apparatus for the Fire Service when configured in accordance with the NFPA approval. Due to the difference between the NIOSH approval requirements and the NFPA Standard 1981, not all subassemblies and/or accessories which are approved by NIOSH are certified under the NFPA standard. Included with this instruction is the NFPA Compliant Components Listing, SCOTT document P/N 89508-01, which lists the major subassemblies and/or accessories which may be used to configure a SCOTT respirator as compliant in accordance with the requirements of NFPA Standard 1981. When compliance with NFPA Standard 1981 is required, care must be taken during maintenance and refurbishment of the respirator to install only subassemblies and/or accessories that are listed on SCOTT document P/N 89424-01 as appropriate for use on a "certified model" SCOTT respirator. To maintain NFPA compliance, the SCOTT AIR-PAK NxG<sub>2</sub> SCBA must be used only in accordance with NFPA standard 1500, entitled Standard on Fire Department Occupational Safety and Health Program.

Specific combinations of respirator subassemblies may also qualify for Chemical, Biological, Radiological, and Nuclear (CBRN) Approval Status under the NIOSH standard. A complete list of the approved components is provided on the NIOSH CBRN Approval Label, SCOTT document P/N 595056-01. Before using a respirator for a CBRN application, the user must verify that the respirator is comprised of only CBRN approved components. An approved mask mounted breathing regulator can be identified by its orange background label. An approved backframe assembly can be identified by a CBRN sticker. However, other components must be identified by individual part number as listed on the NIOSH CBRN Approval Label, SCOTT document P/N 595056-01. Certain facepieces, such as those with silicone face seals, are not approved for CBRN applications. Regular Operational Inspection and Use of a CBRN equipped SCOTT AIR-PAK NxG<sub>2</sub> SCBA are essentially the same as for a standard SCOTT AIR-PAK NxG<sub>2</sub> SCBA. There may be differences defined by the user's respiratory protection program or organization procedures for use in CBRN hazardous environments. It is the responsibility of the respirator user's respiratory protection program to properly identify and maintain respirator equipment for CBRN applications.

- The attachment of components, accessories, or devices to the SCOTT AIR-PAK NxG<sub>2</sub> SCBA which are not listed on the complete NIOSH label may void the NIOSH approval and may degrade the performance of the respirator.
- The attachment of components, accessories or devices not listed on the NFPA listing, even if they are listed on the NIOSH approval label, may void the NFPA certification and may degrade respirator performance with respect to the NFPA certification requirements.
- The attachment of components, accessories or devices not listed on the CBRN Approval Label, even if they are listed on the NIOSH approval label or NFPA listing, may void the CBRN approval and may degrade respirator performance with respect to the CBRN approval requirements.

#### WARNING

ONLY THOSE RESPIRATOR COMPONENTS APPROVED UNDER THE NIOSH CBRN STAN-DARD MAY BE USED FOR A CBRN APPLICA-TION. THE USE OF UNAUTHORIZED AND/OR UNAPPROVED COMPONENTS OR ACCESSO-RIES FOR A CBRN APPLICATION COULD CAUSE PARTIAL OR COMPLETE FAILURE OF THE RESPIRATOR WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

# INTRINSICALLY SAFE LISTING

The SCOTT AIR-PAK NxG<sub>2</sub> SCBA is listed by SGS U. S. TESTING COMPANY, Inc. as intrinsically safe per ANSI/UL Std. UL-913 for use in Class I Division 1 Groups A, B, C, and D hazardous locations. To maintain the Intrinsic Safety Listing, the respirator must be inspected regularly per the following Regular Operational Inspection procedures. Do not tamper with or substitute components in any manner. Use only batteries of the type indicated in the Battery Replacement instructions. Open the battery compartments <u>only</u> in an area known to be free of flammable or explosive hazards.

**WARNING** – Substitution of Components May Impair Intrinsic Safety. To reduce the risk of ignition of a flammable atmosphere, batteries must only be changed in an area known to be nonflammable, and do not mix old batteries with unused batteries, or mix batteries from different manufacturers.

#### WARNING

FAILURE TO REGULARLY INSPECT THE **RESPIRATOR, INCLUDING ALL ELEC-**TRONIC COMPONENTS, AS DESCRIBED IN THIS INSTRUCTION OR FAILURE TO COR-RECT DAMAGE TO THE ELECTRONIC COMPONENTS, MAY IMPAIR THE INTRINSIC SAFETY OF THE UNIT. THE INSTALLATION OF INCORRECT BATTERIES OR SUBSTITU-TION OF ANY OTHER COMPONENTS MAY IMPAIR THE INTRINSIC SAFETY OF THE UNIT. IF THE RESPIRATOR IS USED IN AN EXPLOSIVE OR FLAMMABLE ATMO-SPHERE. IMPAIRING THE INTRINSIC SAFETY OF THE UNIT MAY LEAD TO A FIRE OR AN EXPLOSION WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

# SERVICE LIFE

Each configuration of self-contained breathing apparatus (SCBA) certified by NIOSH is assigned a "service life" classification by NIOSH. The "service life" classification is determined by a breathing machine test conducted by NIOSH. The tests are conducted on a breathing machine which is designed to simulate an average adult user performing work at a "moderate work rate" as defined by NIOSH.

The user should not expect to obtain the NIOSH rated service life from this respirator on each use. The work being performed may be more or less strenuous than that used in the NIOSH test. Where work is more strenuous, the duration may be less than one half the NIOSH rated service time. Likewise, the time remaining after any end of service indicator alarm actuates may be similarly reduced. The end of service indicator alarms actuate when approximately 25% of full cylinder pressure remains in the cylinder and valve assembly. The VIBRALERT will continue to operate until the cylinder is nearly depleted. The HEADS-UP DISPLAY end of service time indicator will continue to operate until it is manually turned off.

- The duration of the respirator will depend on such factors as:
- 1. the degree of physical activity of the user;
- 2. the physical condition of the user;
- 3. the degree to which the user's breathing is affected by excitement, fear or other emotional factors;
- 4. the degree of training or experience which the user has with this or similar equipment;
- 5. whether or not the cylinder is fully charged at the start of the work period;
- 6. the possible presence in the compressed air of carbon dioxide concentrations greater than .04% normally found in atmospheric air;
- the atmospheric pressure; for example, if used in a pressurized tunnel or caisson at 2 atmospheres (15 psi gauge or approximately 30 psi absolute) the duration will be one-half as long as when used at 1 atmosphere; and at 3 atmospheres will be one-third as long;
- 8. loose or improperly fitting facepiece;
- 9. the condition of the respirator.

# **QUESTIONS OR CONCERNS**

If you have any questions or concerns regarding use of this equipment, contact your authorized SCOTT dealer or 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.scotthealthsafety.com.

#### WARNING

ONLY THOSE RESPIRATOR COMPONENTS APPROVED UNDER THE NIOSH CBRN STAN-DARD MAY BE USED FOR A CBRN APPLICA-TION. THE USE OF UNAUTHORIZED AND/OR UNAPPROVED COMPONENTS OR ACCESSO-RIES FOR A CBRN APPLICATION COULD CAUSE PARTIAL OR COMPLETE FAILURE OF THE RESPIRATOR WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

# **HEADS-UP DISPLAY OPERATION**

The HEADS-UP DISPLAY provides a visual monitor of the air supply in the cylinder and valve assembly. The display is fitted to the facepiece mounted regulator and appears across the bottom of the user's field of view through the facepiece. The HEADS-UP DISPLAY consists of four rectangular lights to represent the cylinder pressure at FULL, THREE-QUARTERS, ONE-HALF, and ONE-QUARTER. A fifth round red light indicates LOW BATTERY. The HEADS-UP DISPLAY operates as follows:

 When respirator use begins, the HEADS-UP DISPLAY will initialize and display either one (1) red light for 2216 psi system or one (1) green light for a 4500 psi system. If the installed cylinder pressure is above 200 psi, this will be followed by the illumination of all five lights for twenty (20) seconds. Operation of all five lights must be verified every time respirator use is begun and with every REGULAR OPERATIONAL INSPECTION.

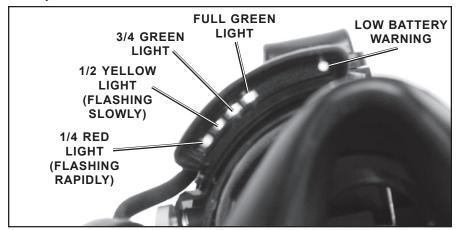


FIGURE 1 HEADS-UP DISPLAY

- 2. After initialization, the rectangular indicator lights will show the level of the air supply in the cylinder as follows:
  - a) FULL cylinder is indicated by the two green lights glowing near the center of the display.
  - b) THREE-QUARTERS cylinder is indicated by a single green light glowing.
  - c) ONE-HALF cylinder is indicated by the yellow light flashing slowly at once a second.
  - d) ONE-QUARTER cylinder end of service time indicator is indicated by the red light at the far left flashing rapidly at ten times a second. WHEN THIS WARNING LIGHT IS FLASHING RAP-IDLY, THE USER MUST LEAVE THE HAZARDOUS ATMO-SPHERE IMMEDIATELY.
- 3. When the batteries require changing, the round LOW BATTERY indicator at the far right of the display will light for twenty (20) seconds and then begin to flash slowly at once a second. When the LOW BATTERY indicator is actuated, the batteries still have sufficient life to operate the HEADS-UP DISPLAY longer than the longest duration cylinder installed on the respirator. However, the batteries must be changed immediately upon termination of use of the respirator, or before reentry into a hazardous atmosphere. See the BATTERY REPLACEMENT section of this instruction.

#### WARNING

THE RESPIRATOR USER MUST IMMEDI-ATELY LEAVE THE AREA REQUIRING RES-PIRATORY PROTECTION WHEN AN END OF SERVICE INDICATOR ALARM ACTUATES. ACTUATION OF ANY END OF SERVICE IN-DICATOR ALARM WARNS THAT APPROXI-MATELY 25% OF FULL PRESSURE RE-MAINS IN THE AIR SUPPLY CYLINDER (THAT IS, APPROXIMATELY 3/4 OF THE TOTAL AIR SUPPLY HAS BEEN USED) OR THAT THERE IS A MALFUNCTION IN THE RESPIRATOR. A DELAY IN LEAVING THE AREA AFTER ALARM ACTUATION MAY RE-SULT IN SERIOUS INJURY OR DEATH.

INDICATOR LIGHTS	WHAT THEY MEAN	WHAT YOU SHOULD DO	
TWO LIGHTS GLOWING	FULL CYLINDER		
ONE LIGHT GLOWING	3/4 CYLINDER	CONTINUE USING RESPIRATOR	
ONE LIGHT FLASHING SLOWLY	1/2 CYLINDER		
ONE LIGHT FLASHING RAPIDLY	1/4 CYLINDER	LEAVE HAZARDOUS AREA IMMEDIATELY	

## **HEADS-UP DISPLAY QUICK GUIDE**

# WARNING

THE INFORMATION BELOW IS MEANT TO SUPPLEMENT, NOT REPLACE, THE INSTRUCTIONS, TRAINING, SUPERVISION, MAINTENANCE, AND OTHER ELEMENTS OF YOUR ORGANIZED RESPI-RATORY PROTECTION PROGRAM. SEE WARNING ON THIRD PAGE OF THIS DOCUMENT. FAILURE TO HEED ANY WARNINGS IN THIS INSTRUCTION MAY RESULT IN SERIOUS INJURY OR DEATH.

# **REGULAR OPERATIONAL INSPECTION**

The following procedure shall be used when you first receive the respirator and for daily or periodic inspection of the respirator. Respirators in regular use must be inspected at the start of each use period and during cleaning after each use. Respirators maintained for emergency use must be inspected at least monthly or as frequently as required to assure the respirator will function properly when required. The US Labor Department (OSHA) requires, pursuant to 29 CFR 1910.134, at least monthly inspection of respirators maintained for emergency use. NIOSH recommends an inspection for cylinder pressure at least weekly.

The condition of storage at your location or the regulations which apply to your respiratory protection program may require more frequent periodic inspections.

All respirators shall be inspected after each use. If any discrepancy or malfunction is noted during the inspection, do not use the respirator. Remove the respirator from service and tag it for repair by authorized personnel.

Refer to the OPERATION AND MAINTENANCE INSTRUCTIONS for the PASS DEVICE distress alarm installed on this respirator for additional inspection procedures. The required instructions are identified by part number on the PASS DEVICE distress alarm label located on the respirator backframe.

- 1. Visually inspect the complete respirator for worn or aging rubber parts which exhibit cracking, splitting, or brittleness. Also inspect for worn or frayed harness webbing and for other damaged components.
- 2. Check the latest cylinder hydrostatic test date to ensure it is current. All cylinders used with SCOTT AIR-PAK NxG<sub>2</sub> SCBA's must be visually inspected regularly and hydrostatically tested by a licensed cylinder re-tester in accordance with the appropriate US Department of Transportation (DOT) specification or the applicable DOT exemption. For a complete listing of retest date requirements, refer to the current revision of Safety Precautions for AIR-PAK Cylinders, SCOTT P/N 89080-01, available on request from SCOTT Health and Safety. Composite cylinders (those cylinders utilizing fiber over wrap) must be tested in accordance with the DOT exemption status up to the maximum life of fiber overwrapped cylinders which, at the time of the publication of this instruction, is 15 years from the date of manufacture. The date of manufacture marked on the cylinder is also the date of the first hydrostatic test. It is the responsibility of your organized respiratory protection program to arrange for visual inspection and hydrostatic testing of cylinders by a licensed re-tester.
- 3. Visually inspect cylinder and valve assembly for physical damage such as dents or gouges in metal or in composite wrapping. Cylinders which show physical damage or exposure to high heat or flame, such as paint turned brown or black, decals charred or missing, pressure gauge lens melted or elastomeric bumper distorted, and cylinders which show evidence of exposure to chemicals such as discoloration, cracks in the cylinder or the composite wrapping, peeling of the outer layers of the composite wrapping and/or bulging of the cylinder wall, shall be removed from service

## WARNING

FOLLOW THE REGULAR OPERATIONAL IN-SPECTION PROCEDURE EXACTLY. IF THE END OF SERVICE INDICATOR ALARMS DO NOT ACTUATE AS DESCRIBED IN THIS IN-STRUCTION, THE PURGE DOES NOT ACTUATE AS DESCRIBED IN THIS IN-STRUCTION OR ANY OTHER OPERATIONAL MALFUNCTION IS NOTED, DO NOT USE THE RESPIRATOR. REMOVE THE RESPIRA-TOR FROM SERVICE AND TAG IT FOR REPAIR BY AUTHORIZED PERSONNEL. FAILURE TO PROPERLY IDENTIFY MAL-FUNCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

DAMAGED CYLINDERS MAY SUDDENLY LEAK OR RUPTURE IF LEFT CHARGED WITH COMPRESSED AIR. FAILURE TO IN-SPECT FOR DAMAGE AND TO EMPTY THE AIR FROM DAMAGED CYLINDERS MAY RE-SULT IN SERIOUS INJURY OR DEATH. and emptied of compressed air. Refer to current applicable publications on compressed gas cylinder inspection available from Compressed Gas Association Inc., 1725 Jefferson Davis Hwy., Suite 1004, Arlington, VA 22202, (703-412-0900) for a detailed explanation of cylinder inspection procedures.

- 4. Check cylinder pressure gauge for "FULL" indication. If cylinder pressure is less than "FULL," replace with a fully charged cylinder.
- 5. Check to ensure reducer coupling is secure to the cylinder valve outlet.
- 6. Check that the breathing regulator purge valve (red knob on regulator) is closed (full clockwise and pointer on knob upward).



# WARNING

FAILURE TO CHECK ENGAGEMENT OF THE COUPLING AS DESCRIBED MAY LEAD TO HOSE SEPARATION AND LOSS OF BREATH-ING AIR RESULTING IN SERIOUS INJURY OR DEATH.

#### FIGURE 2 PULL-BACK SLEEVE QUICK DISCONNECT

- 7. If the hose to the breathing regulator is equipped with a quick disconnect (See STANDBY INSPECTION, CLEANING AND STOR-AGE Section for instruction on operation of the quick disconnect coupling on regulator assemblies), check that the quick disconnect is engaged properly by tugging on the coupling. The Pull-back Sleeve Quick Disconnect is shown in FIGURE 2.
- 8. Fully depress the center of the air saver/donning switch on the top of the regulator and release.
- 9. Slowly open the cylinder valve by fully rotating knob counterclockwise. VIBRALERT alarm shall actuate and then stop. The HEADS-UP DISPLAY will initialize with all five lights on for twenty seconds followed by display of cylinder supply level. If the LOW BATTERY light at the far right of the display remains lit or begins to flash, replace the battery according to the BATTERY REPLACEMENT section of this instruction before proceeding.

If the respirator is equipped with the PASS DEVICE distress alarm, the distress alarm will be actuated when the cylinder valve is opened. Refer to operating and maintenance instructions of the PASS DEVICE distress alarm for the operational inspection of the PASS DEVICE distress alarm.

- 10. Don the facepiece or hold the facepiece to the face to effect a good seal. Inhale sharply to automatically start the flow of air. Breathe normally from the facepiece to ensure proper operation.
- 11. Remove facepiece from face. Air shall freely flow from the facepiece.
- 12. Fully depress the center of the air saver/donning switch on the top of regulator and release. The flow of air from the facepiece shall stop. Examine the complete respirator for air leaks. There shall be no leakage of air from any part of the respirator.
- 13. Rotate purge valve 1/2 turn counterclockwise (pointer on knob downward). Air shall freely flow from the regulator.
- 14. Rotate purge valve 1/2 turn clockwise to full closed position (pointer on knob upward). Air flow from regulator shall stop.

# REGULAR OPERATIONAL INSPECTION CONTINUED ON NEXT PAGE...

## CAUTION

DO NOT USE TOOLS TO OPEN OR CLOSE THE PURGE VALVE. OPEN OR CLOSE BY USING FINGER-PRESSURE ONLY. ROTA-TION OR THE PURGE VALVE IS LIMITED TO 1/2 TURN. USE OF TOOLS TO OPEN OR CLOSE PURGE VALVE MAY RESULT IN DAMAGE TO THE PURGE VALVE.

# **REGULAR OPERATIONAL INSPECTION CONTINUED...**

15. Push in and rotate cylinder valve knob clockwise to close. When cylinder valve is fully closed, open purge valve slightly to vent residual air pressure from system. As the residual air pressure vents from the system, the remote pressure gauge needle will swing from "FULL" and move towards "EMPTY." Observe the lights of the HEADS-UP DISPLAY and verify that they light properly in descending order. Close the purge valve when the gauge needle crosses the "¼" mark but before the beginning of the red "EMPTY" band (see FIGURE 4).

The VIBRALERT end of service indicator alarm shall actuate. The red light on the far left of the HEADS-UP DISPLAY shall flash rapidly at ten (10) times per second. After verifying that all alarms are functioning (rapid clicking of the VIBRALERT Alarm and rapid flashing of the HEADS-UP DISPLAY red light) open the purge valve slightly to vent the remaining residual air pressure from the system. All alarms shall cease operation when the system pressure drops to zero. When air flow stops completely, return purge valve to the fully closed position (pointer on knob upward).

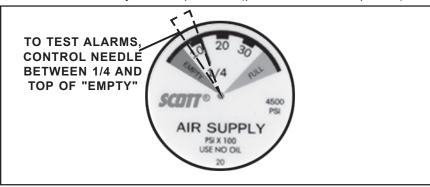


FIGURE 3 REMOTE GAUGE

#### WARNING

AIR LEAKAGE MAY REDUCE THE DURA-TION OF USE AND/OR THE TIME REMAINING AFTER AN END OF SERVICE ALARM ACTUATES OR MAY PREVENT AN END OF SERVICE ALARM FROM ACTUAT-ING. THE USE OF A RESPIRATOR EXHIBITING AN AIR LEAK MAY RESULT IN SUDDEN TERMINATION OF THE AIR SUP-PLY WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

IF ANY END OF SERVICE INDICATOR ALARM DOES NOT ACTUATE AS DE-SCRIBED IN THIS INSTRUCTION, DO NOT USE THE RESPIRATOR. REMOVE THE RES-PIRATOR FROM SERVICE AND TAG IT FOR REPAIR BY AUTHORIZED PERSONNEL. USE OF AN IMPROPERLY OPERATING END OF SERVICE INDICATOR MAY RESULT IN SERIOUS INJURY OR DEATH.

# **OPERATION OF BACKFRAME LIGHTS**

When performing the REGULAR OPERATIONAL INSPECTION, verify that the Backframe Lights are operating as described below:

ACTION	BACKFRAME LIGHTS WILL
Normal Operation	Flash GREEN
Install Cylinder	Flash BLUE
Remove Cylinder	Flash RED
Respirator Low air (1/4 cylinder)	Flash ORANGE (alternately)
Low Battery while ON	Flash ORANGE once a second
Shut down	Lights OFF

If the respirator is equipped with an integrated PASS device, verify that the Backframe Lights are operating as described below:

ACTION	BACKFRAME LIGHTS WILL
Press RESET w/unit OFF (BATTERY TE	EST) Bright Light then:
	Flash GREEN if Good/Flash RED if Low
Press MANUAL ALARM with unit OFF	Flash GREEN then Full Alarm Flash RED
Press RESET from manual alarm	Returns to Flash GREEN
Start up PASS device	Bright Light then Flash GREEN
PASS Pre-Alarm	Flash RED (alternately)
PASS Full alarm	Flash RED (simultaneously)

## NOTE

THE ORANGE LIGHT IS A COMBINATION OF THE RED, GREEN, AND WHITE LIGHTS THAT APPEARS ORANGE FROM A DISTANCE. AT CLOSE RANGE THE INDIVIDUAL LIGHTS MAY BE VISIBLE.

# **BATTERY TEST**

On respirators equipped with a PASS DEVICE distress alarm, the battery condition can be tested manually as follows:

- 1. Make sure the PASS DEVICE distress alarm is in the off condition (cylinder valve closed with no flashing green lights)
- 2. Press and hold the RESET button on the console. Observe the FINAL light color in the sequence to determine the status.

#### NOTE

THE BACKFRAME LIGHTS WILL DISPLAY A BRIGHT LIGHT FOL-LOWED BY THE FINAL STATUS COLOR.

- a) GREEN lights illuminated on the control console and backframe lights indicate sufficient battery power remaining
- b) RED lights on the control console and backframe lights indicate that the batteries are **low** must be replaced before the respirator is to be used again. See BATTERY REPLACEMENT section of these instructions.

If a **low** battery message occurs, SCOTT recommends that ALL batteries be changed before the respirator is used. See the BATTERY REPLACE-MENT section of this instruction for details.

# PREPARATION FOR USE

- 1. If carrying case is used for storage, proceed as follows:
- Place carrying case on ground or level surface, open lid (hard case) or top flap (soft case). Check cylinder gauge for "FULL" indication. If not full, replace cylinder before use. A gauge indication of other than full may indicate an air leak in the cylinder and valve assembly or a malfunction of the gauge assembly. Ensure that the cylinder is firmly locked in position by the cylinder retention assembly. Stand the respirator on the cylinder valve with cylinder toward you and the shoulder straps away from you. Grasp both shoulder straps by the top, one in each hand. Pick up the respirator and swing it around behind you. Release your grasp while sliding your arms under the shoulder straps. Ensure that the shoulder straps fall into place on the shoulders. Pull down on the side straps to adjust the harness to fit your body.

If storage bracket is used, proceed as follows:

Check the cylinder gauge for "FULL" indication. If not full, replace cylinder before use. A gauge indication of other than full may indicate an air leak in the cylinder and valve assembly or a malfunction of the gauge assembly. Ensure that the cylinder is firmly locked in position by the cylinder retention assembly. Follow the instructions of the bracket manufacturer for placing arms through shoulder straps and freeing the respirator from the bracket.

- 2. Connect the waist belt buckle and adjust by pulling forward on the two (2) side-mounted belt ends. Tuck belt ends into waistband.
- 3. Readjust shoulder straps to ensure the weight is carried on the hips. Tuck in ends of shoulder straps.
- 4. Fully depress center of the air saver/donning switch on top of regulator and release. The regulator may be, but does not have to be, installed in the facepiece at this time (see step 6 below).
- 5. Slowly open cylinder valve fully by turning the valve knob counterclockwise until it stops (approximately 2 1/2 full turns of the knob). The VIBRALERT end of service indicator alarm will actuate and then stop. The HEADS-UP DISPLAY shall initialize for twenty (20) seconds and then display the cylinder level.

The respirator is equipped with a PASS DEVICE distress alarm which will actuate when the cylinder valve is opened and will sound three quick audible chirps accompanied by a green flashing on the PASS DEVICE control console. Refer to the operating and maintenance instructions for PASS DEVICE distress alarm for complete information on the distress alarm operation.

If the air saver/donning switch has not been depressed prior to opening the cylinder valve, the VIBRALERT Alarm will not actuate due to the air flowing freely on the facepiece.

6. The user of the respirator is now in "standby" condition. The respirator is in place on the user's body but the facepiece is not donned (sealed to the face) and the respirator is not being used. The regulator is retained in the facepiece by a 1/4 turn port and is locked in the facepiece retainer with a lock tab. To detach the regulator from the facepiece while in "standby" condition, place your right hand over the cover with your thumb on the lock tab. Pull the lock tab toward the cover and rotate the regulator 1/4 turn clockwise (viewed from inside of facepiece). When the red purge valve is in the 12 o'clock position remove regulator from the facepiece neck strap are available for use during "standby" condition. See the ACCESSORIES section of this instruction.

#### WARNING

USE OF THE RESPIRATOR WITHOUT FAS-TENING AND ADJUSTING THE SHOULDER STRAPS AND THE WAIST BELT AND SE-CURING LOOSE ENDS OF BELT AS DESCRIBED IN THIS INSTRUCTION MAY **RESULT IN SHIFTING OF THE RESPIRATOR** ON THE USER'S BODY, SNAGGING THE BELT, OR IN SEPARATION OF THE RESPI-RATOR FROM THE USER'S BODY WHICH COULD DISTURB THE FACE TO FACEPIECE SEAL AND WHICH MAY RESULT IN EXPO-SURE OF THE USER TO THE ATMOSPHERE THE RESPIRATOR IS INTENDED TO PRO-TECT AGAINST RESULTING IN SERIOUS INJURY OR DEATH.

#### WARNING

THE CYLINDER VALVE MUST BE FULLY OPENED FOR PROPER OPERATION OF THE RESPIRATOR. USE OF A RESPIRATOR WITH THE CYLINDER VALVE PARTIALLY OPENED MAY CAUSE A REDUCTION OF THE AIR SUPPLIED TO THE USER AND/OR A SUDDEN AND COMPLETE LOSS OF AIR SUPPLIED TO THE USER. A REDUCTION OR LOSS OF AIR TO THE USER MAY RE-SULT IN SERIOUS INJURY OR DEATH.

#### WARNING

IF THE END OF SERVICE INDICATOR ALARMS DO NOT ACTUATE AS DESCRIBED IN THIS INSTRUCTION, DO NOT USE THE RESPIRATOR. REMOVE THE RESPIRATOR FROM SERVICE AND TAG IT FOR REPAIR BY AUTHORIZED PERSONNEL. USE OF A RESPIRATOR WITH A MALFUNCTIONING END OF SERVICE INDICATOR MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

IF PASS DEVICE DISTRESS ALARM FAILS TO FUNCTION IN ACCORDANCE WITH THE INSTRUCTIONS SUPPLIED WITH THE DIS-TRESS ALARM, DO NOT USE THE RESPIRATOR. REMOVE IT FROM SERVICE AND TAG FOR REPAIR BY AUTHORIZED PERSONNEL. USE OF A RESPIRATOR WITH A MALFUNCTIONING DISTRESS ALARM MAY RESULT IN SERIOUS INJURY OR DEATH.

# **USE OF RESPIRATOR**

Training and fit testing are required before use of this equipment. If respirator use is expected at temperatures near or below freezing, or if respirator is to be used after being kept at temperatures near or below freezing, refer to LOW TEMPERATURE OPERATION Section for additional information and supplemental procedures.

If regulator is not attached to facepiece, be sure the regulator gasket is in place around the outlet port of the regulator and not damaged. With the red purge valve in the 12 o'clock position, align the two flats of the outlet port with corresponding flats in the facepiece port and insert. Rotate the regulator counterclockwise (viewed from inside of facepiece) so that the red purge valve knob is situated on the left side of the facepiece. The lock tab on the mask-mounted regulator will lock into the facepiece retainer with a "click." If properly engaged, the regulator will not rotate.

To begin use of respirator, don the facepiece (i.e., place facepiece on face and obtain a proper seal) as follows:

- Examine the facepiece assembly to be certain the nose cup inhalation valves are installed, the nose cup is correctly positioned inside the face seal chin cup, and nose cup is properly seated between the flanges of the voicemitter ducts. See FIGURES 9 and 10 in the STANDBY INSPECTION, CLEANING AND STORAGE section of this instruction.
- 2. Adjust the head straps to the full outward position.
- 3. Hold the head harness out of the way with one hand while placing the facepiece on the face with the other hand.

#### NOTE

ENSURE THAT THE CHIN IS PROPERLY LOCATED IN THE CHIN POCKET OF THE FACEPIECE.

4. Pull the head harness over the head and ensure that straps are lying flat against the head and neck with no twists.

#### NOTE

IF THE FACEPIECE IS EQUIPPED WITH A RUBBER HEAD HAR-NESS, POSITION THE TOP CENTER PORTION OVER THE CROWN OF THE HEAD. MAINTAIN THE HEAD HARNESS IN THIS POSITION WHILE TIGHTENING THE STRAPS.

- 5. Tighten the neck straps by pulling the two lower strap ends toward the rear of the head.
- 6. Verify that the head harness is lying flat against the back of the head using one or both hands. Retighten neck straps.
- 7. Adjust the temple straps by pulling the two upper strap ends toward the rear of the head. Use caution pulling temple straps as overtightening may cause discomfort.
- 8. Retighten the neck straps if required. On subsequent use by the same wearer, release and retightening of the temple straps may not be required.
- With facepiece sealed to face, inhale sharply to actuate respira- SERIOUS INJURY OR DEATH. tor. Air will then be supplied during inhalation.

#### NOTE

IF AIR IS NOT SUPPLIED ON FIRST INHALATION, CHECK THAT CYLINDER VALVE IS FULLY OPEN, REMOTE GAUGE INDICATES PRESSURE IN CYLINDER, AND FACEPIECE IS SEALED TO FACE.

# WARNING

FIT TESTING IN ACCORDANCE WITH OSHA STANDARD 29 CFR PART 1910 IS RE-QUIRED AS PART OF THE REQUIRED TRAINING BEFORE USE OF THIS RESPIRA-TOR. FAILURE TO PROPERLY FIT AND TRAIN THE USER IN USE OF THE FACE-PIECE AND RESPIRATOR MAY RESULT IN EXPOSURE TO THE HAZARDOUS ATMO-SPHERE WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

# WARNING

FAILURE TO DON THE FACEPIECE AND/OR FAILURE TO ADJUST THE HEAD HARNESS AS DESCRIBED IN THIS INSTRUCTION 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 FACE-PIECE SEAL MAY REDUCE THE DURATION OF USE OF THE RESPIRATOR AND/OR EX-POSE THE USER TO THE HAZARDOUS ATMOSPHERE WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

# USE OF THE RESPIRATOR CONTINUED ON NEXT PAGE...

# **USE OF RESPIRATOR CONTINUED...**

- 10. Check face to facepiece seal and end of service indicator alarm operation by pushing in on the cylinder valve and rotating it clockwise to completely close it. Breathe on respirator. As the air pressure falls in the respirator, one of the end of service indicator alarms will actuate. Immediately on actuation of an end of service indicator alarm, hold breath momentarily and make certain that the VIBRALERT and HEADS-UP DISPLAY both actuate (rapid clicking of the VIBRALERT Alarm, rapid flashing of the HEADS-UP DISPLAY red light). Resume breathing on the respirator until all air stops flowing from the breathing regulator. Inhale slowly and hold breath momentarily. No leakage of air shall be detected into the facepiece and the facepiece shall be drawn slightly to the face. Open cylinder valve and breathe normally. If the environment is suitably guiet, leakage from the facepiece can also be detected by listening for a flow of air while holding your breath. Inhale and hold your breath momentarily after donning the facepiece. Do not depress air saver/donning switch. Air should not be heard flowing into the facepiece from the regulator and no flow of air shall be detected outward from the facepiece. If leakage of air is detected during either of the above procedures. depress the air saver/donning switch on the top of the regulator, doff the facepiece and repeat donning steps 1 through 8 above. If a user seal check is unsatisfactory either per the user instructions above or the OSHA fit testing process, the use of Mask Seal Kit P/N 805655-01 is required. The Mask Seal Kit is provided with the full facepiece. Refer to the INSTALLATION AND USE INSTRUCTIONS, SCOTT P/N 89462-01, included with the Mask Seal Kit. This is a NIOSH approved kit to enhance the fit of the facepiece. If leakage persists, do not use the respirator.
- 11. Put on, or replace, helmet or other required protective head gear and put on or properly position and close any required protective clothing such as turn out gear. The user of the respirator must make certain that any protective head gear, helmet or protective clothing does not interfere with the use of the respirator and that the head can move freely without dislodging the facepiece or disturbing the face to facepiece seal. See ANSI Standard Z88.2 entitled *Practices for Respiratory Protection* for additional information. When the respirator is used in conjunction with fire fighting, see NFPA Standard 1500, entitled *Standard on Fire Department Occupational Safety and Health Program* for additional information.

#### NOTE

DO NOT ATTACH ANYTHING TO, OR CARRY ANYTHING ON, THE AIR-PAK NXG<sub>2</sub> SCBA SHOULDER STRAP BUCKLES AS THIS COULD CAUSE THE SHOULDER STRAPS TO LOOSEN DURING USE OF THE RESPIRATOR.

#### WARNING

IF THE END OF SERVICE INDICATOR ALARMS DO NOT ACTUATE AS DESCRIBED IN THIS INSTRUCTION, DO NOT USE THE RESPIRATOR. REMOVE THE RESPIRATOR FROM SERVICE AND TAG IT FOR REPAIR BY AUTHORIZED PERSONNEL. USE OF A RESPIRATOR WITH A MALFUNCTIONING END OF SERVICE INDICATOR MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

CHECK THE FACE TO FACEPIECE SEAL BEFORE USE. A POOR FACE TO FACE-PIECE 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 CAUSE SERIOUS INJURY OR DEATH.

#### WARNING

IF LEAKAGE OF AIR INTO THE FACEPIECE IS DETECTED DURING CHECK OF THE FACE TO FACEPIECE SEAL, DO NOT USE THE RESPIRATOR. REMOVE FACEPIECE AND REPEAT THE DONNING PROCEDURE. IF FACEPIECE CANNOT BE ADJUSTED TO SEAL TO FACE, A FACEPIECE FIT TEST AND/OR A DIFFERENT SIZE FACEPIECE MAY BE REQUIRED BEFORE USE OF THE RESPIRATOR. USE OF A RESPIRATOR WITH A POORLY FITTING FACEPIECE MAY EXPOSE THE USER TO THE HAZARDOUS ATMOSPHERE AND RESULT IN SERIOUS INJURY OR DEATH. 12. Proceed with use of respirator in accordance with your respiratory protection program.

EVERY ENTRY INTO A CONTAMINATED OR UNKNOWN ATMO-SPHERE SHOULD BE PLANNED TO ENSURE THAT THERE IS SUFFICIENT AIR SUPPLY TO ENTER, CARRY OUT THE TASKS REQUIRED AND RETURN TO A SAFE BREATHING AREA. THE USER SHOULD CHECK THE REMOTE READING PRESSURE GAUGE ON THE SHOULDER STRAP PERIODICALLY TO DETER-MINE THE RATE OF AIR CONSUMPTION. IN ANY EVENT, THE USER MUST BE CERTAIN TO ALLOW SUFFICIENT AIR FOR EGRESS FROM THE CONTAMINATED AREA. IF ENTRY IS AT-TEMPTED AFTER THE AIR HAS BEEN PARTIALLY CONSUMED (CYLINDER LESS THAN FULL), THE USER MUST BE CERTAIN THAT THE REMAINING AIR WILL BE SUFFICIENT FOR SAFETY. If either end of service indicator alarm, the VIBRALERT alarm or the HEADS-UP DISPLAY actuates either individually or together, leave the area requiring respiratory protection immediately. When in a safe area where you are certain that respiratory protection is not required, terminate the use of the respirator, (see TERMINATION OF USE section of this instruction) and determine the cause of the alarm. Where the cause of the alarm activation is determined to be a depleted air supply cylinder, replace the cylinder in accordance with the CYLIN-DER REPLACEMENT PROCEDURE section of this instruction. Do not resume the use of a respirator where any end of service indicator alarm has actuated for an unknown reason. Remove such a respirator from service and tag it for repair by authorized personnel.

#### WARNING

ALWAYS START WITH A FULL AIR SUPPLY CYLINDER. PARTIALLY FILLED CYLIN-DERS SHOULD ONLY BE USED IN **EMERGENCY CONDITIONS IF FULL CYLIN-**DERS ARE NOT AVAILABLE. BEFORE ENTERING A POTENTIALLY HAZARDOUS ATMOSPHERE, THE USER MUST DETER-MINE THAT THE CYLINDER CONTAINS SUFFICIENT AIR TO ALLOW TIME FOR COMPLETION OF THE TASK INVOLVED AND RETURN TO A SAFE ATMOSPHERE WITH AN ADEQUATE MARGIN FOR SAFETY. ENTERING A HAZARDOUS ATMO-SPHERE WITH INSUFFICIENT AIR OR AFTER THE END OF SERVICE TIME INDI-CATOR HAS ACTUATED MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

THE RESPIRATOR USER MUST IMMEDI-ATELY LEAVE THE AREA REQUIRING RESPIRATORY PROTECTION WHEN AN END OF SERVICE INDICATOR ALARM ACTU-ATES. ACTUATION OF ANY END OF SERVICE INDICATOR ALARM WARNS THE USER THAT APPROXIMATELY 25% OF FULL PRESSURE REMAINS IN THE AIR SUPPLY CYLINDER (THAT IS, APPROXIMATELY 3/4 OF THE TOTAL AIR SUPPLY HAS BEEN USED) OR THAT THERE IS A MALFUNCTION IN THE RESPIRATOR. A DELAY IN LEAVING THE AREA AFTER ALARM ACTUATION MAY RESULT IN SERIOUS INJURY OR DEATH.

# LOW BATTERY

As the batteries begin to approach the end of their useful life, the low battery condition will be signified by the following:

- 1. The backframe module will begin to sound a chirp approximately every two seconds.
- 2. The round LOW BATTERY indicator at the far right of the HEADS-UP display will light for twenty (20) seconds and then begin to flash slowly at once a second.

 If the respirator is equipped with a PASS DEVICE distress alarm, the green lights on the control module and backframe will go out.
While in low battery condition, the HEADS-UP display and the PASS DE-VICE distress alarm will continue to operate for a period of time greater then the longest duration cylinder available for the respirator. However, the batteries must be replaced before the respirator is used again. See BATTERY REPLACEMENT section of these instructions.

#### WARNING

FAILURE TO REPLACE THE BATTERIES AND/ OR CONTINUING WITH MULTIPLE USES OF THE RESPIRATOR AFTER THE LOW BAT-TERY CONDITION HAS BEEN INDICATED BY THE PASS DEVICE DISTRESS ALARM MAY RESULT IN FAILURE OF THE PASS DEVICE DISTRESS ALARM DURING USE AND POS-SIBLE INJURY OR DEATH OF THE USER.

# **TERMINATION OF USE**

To doff the facepiece (i.e., remove the facepiece and terminate respiratory protection), proceed as follows:

- 1. Leave contaminated area or be certain that respiratory protection is no longer required.
- 2. Loosen the neck straps by simultaneously lifting the lower buckle release levers outward (away from the head) and lifting facepiece away from face. The buckle release levers are the "U-shaped" extensions of the facepiece buckle assemblies.

#### NOTE

THE USER MAY FIND IT MORE COMFORTABLE TO FIRST RELIEVE TENSION ON THE UPPER STRAP BY LIFTING THE UPPER BUCKLE RELEASE LEVERS.)

3. To stop the flow of air from the facepiece, fully depress the air saver/donning switch on top of the regulator and release.

#### NOTE

OPERATION OF THE AIR SAVER/DONNING SWITCH IS INTENDED TO PREVENT A FREE FLOW OF AIR AND THE DEPLETION OF THE AIR SUPPLY WHEN THE FACEPIECE DOFFED. WITH THE AIR SAVER/DONNING SWITCH ACTIVATED, THE PURGE VALVE AND VI-BRALERT WILL FUNCTION NORMALLY. IF THE PURGE VALVE HAS BEEN ADJUSTED TO PRODUCE A FLOW, OR IF THE VIBRALERT IS IN OPERATION, THE AIR WILL CONTINUE TO BE DEPLETED FROM THE RESPIRATOR CYLINDER UNTIL THE CYLINDER VALVE IS CLOSED.

4. Remove the facepiece by pulling it up and over the head.

#### NOTE

IF THE RESPIRATOR IS NOT GOING TO BE USED FOR A PERIOD OF TIME, CLOSE THE CYLINDER VALVE. LEAVING THE AIR SAVER/DONNING SWITCH ACTIVATED AND THE CYLINDER VALVE OPEN FOR AN EXTENDED PERIOD OF TIME, MAY RESULT IN IN-TERMITTENT ACTIVATION OF THE VIBRALERT EVEN WHEN MORE THAN 25% OF THE AIR SUPPLY REMAINS.

- 5. To resume use of the respirator, repeat the facepiece donning procedure (see USE OF RESPIRATOR Section). If respirator use is resumed, the user must make certain that the remaining air supply in the cylinder is sufficient to accomplish the purpose for which respirator use has been resumed. It is recommended that, whenever practical, partially depleted cylinders be replaced with full cylinders before respirator use is resumed. <u>Never</u> resume use of a respirator where termination of use has occurred because of the activation of an end of service indicator alarm without first determining and correcting the reason for the end of service indicator alarm activation.
- 6. When respirator operations are completed and only when in a safe breathing area, check that the cylinder valve is closed, and vent the residual air from the respirator by opening the purge valve. After waiting until the air flow stops, close the purge valve. Slightly loosen shoulder straps by lifting ends of shoulder strap slide buckles up, release waist belt by pressing release button in center of waist belt buckle, and remove the unit from your back. Proceed in accordance with the requirements of your respiratory protection program for service of the respirator. The respiratory protection program should include procedures for replacement of the cylinder with a fully charged cylinder (see the CYLINDER REPLACEMENT Section of this instruction) and for carrying out the instructions in the STANDBY INSPECTION, CLEANING AND STORAGE section of this instruction for respirator and accessories.

#### CAUTION

FAILURE TO RELEASE TENSION ON NECK STRAPS BEFORE REMOVING FACEPIECE MAY CAUSE PREMATURE WEAR OR DAM-AGE TO STRAPS AND/OR FACEPIECE AS-SEMBLY.

#### WARNING

AN IMPACT TO THE REGULATOR WHILE THE CYLINDER VALVE IS OPEN AND THE AIR SAVER SWITCH IS ACTIVATED MAY CAUSE AIR TO FLOW FROM THE REGULA-TOR AND DEPLETE THE AIR REMAINING IN THE CYLINDER. DEPLETION OF THE AIR SUPPLY MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

IF AIRFLOW FROM THE REGULATOR CAN-NOT BE STOPPED BY DEPRESSING THE AIR SAVER SWITCH, IMMEDIATELY CLOSE THE CYLINDER VALVE TO PREVENT DEPLETION OF THE AIR REMAINING IN THE CYLINDER. DEPLETION OF THE AIR SUPPLY MAY RESULT IN SERIOUS INJURY OR DEATH.

#### CAUTION

AN IMPACT TO THE REGULATOR WHILE THE CYLINDER VALVE IS OPEN AND THE AIR SAVER SWITCH IS ACTIVATED MAY CAUSE AIR TO FLOW FROM THE REGULA-TOR AND DEPLETE THE AIR REMAINING IN THE CYLINDER.

#### WARNING

IF RESPIRATOR USE IS RESUMED AFTER THE AIR HAS BEEN PARTIALLY CONSUMED (CYLINDER LESS THAN FULL), YOU MUST BE CERTAIN THAT THE REMAINING AIR WILL BE SUFFICIENT FOR YOUR SAFETY. USE OF A RESPIRATOR WITH INSUFFI-CIENT AIR SUPPLY MAY RESULT IN SERIOUS INJURY OR DEATH.

#### CAUTION

DO NOT LEAVE CYLINDER VALVE OPEN WHEN RESPIRATOR IS NOT IN USE.

#### CAUTION

FAILURE TO RELEASE TENSION ON SHOULDER STRAPS BEFORE REMOVING RESPIRATOR MAY CAUSE PREMATURE WEAR OR DAMAGE TO STRAPS AND/OR RESPIRATOR ASSEMBLY.

#### WARNING

DO NOT ALLOW RESPIRATOR TO DROP WHEN HANDLING. DROPPING OF RESPIRA-TOR MAY CAUSE DAMAGE TO RESPIRATOR THAT MAY RESULT IN INJURY OR DEATH.

# **EMERGENCY OPERATION**

The respirator is automatic in function requiring only the opening of the cylinder valve and the proper donning of the facepiece to place into use and the closing of the cylinder valve at the end of use. In the event of a malfunction or a suspected malfunction, implement the appropriate emergency procedure listed below:

1. Should the VIBRALERT or HEADS-UP DISPLAY actuate during use, even if the air supply has not been depleted to approximately 25% of full rated capacity, LEAVE THE CONTAMINATED AREA AT ONCE.

#### NOTE

ACTUATION OF THE VIBRALERT BEFORE THE AIR SUPPLY IS DE-PLETED TO APPROXIMATELY 25% OF FULL RATED CAPACITY, MAY INDICATE A FAILURE OF THE PRIMARY REDUCER PATH IN THE PRESSURE REDUCER. ACTIVATION OF THE END OF SERVICE IN-DICATOR ALARM BEFORE THE REMOTE AIR SUPPLY GAUGE INDI-CATORS APPROXIMATELY 25% OR LESS OF FULL CAPACITY COULD INDICATE A MALFUNCTIONING REMOTE AIR SUPPLY GAUGE OR FAILURE OF THE END OF SERVICE INDICATOR ALARM. LEAVE THE AREA REQUIRING RESPIRATORY PROTECTION IMMEDIATELY ON THE ACTUATION OF ANY ALARM.

- 2. Should the air supply be partially or completely cut off during use, fully open the purge valve (red knob on regulator) by turning it counterclockwise, (pointer on knob downward) and check to be certain the cylinder valve is fully opened (turned fully counterclockwise). LEAVE THE CONTAMINATED AREA AT ONCE AFTER OPENING THE PURGE VALVE.
- 3. Should the air supply begin to flow freely into the facepiece during use, fully open the purge valve (red knob on regulator) by turning it counterclockwise (pointer on knob downward), partially close the cylinder valve by pushing in and rotating clockwise to regulate the flow of air to satisfy the requirements of the user. Do not close the cylinder valve completely. LEAVE THE CONTAMINATED AREA AT ONCE AFTER PARTIALLY CLOSING CYLINDER VALVE.
- 4. In the unlikely event of the blockage of air flow or sudden and complete loss of the system air supply such that there is total irreversible loss of respiratory protection, LEAVE THE CONTAMI-NATED AREA AT ONCE USING ALL PRECAUTION AND FOLLOW EMERGENCY PROCEDURES PRESCRIBED BY USER ESTAB-LISHED RESPIRATORY PROTECTION PROGRAM.

If the above procedures are implemented during use, REMOVE THE RESPIRATOR IN A SAFE AREA, tag the respirator and hold it for service and repair by Authorized Personnel.

#### WARNING

THESE EMERGENCY OPERATION PROCE-DURES ARE FOR EMERGENCY USE ONLY AND ARE MEANT TO SUPPLEMENT, NOT REPLACE, THE EMERGENCY PROCE-DURES PRESCRIBED BY YOUR **RESPIRATORY PROTECTION PROGRAM. IF** THEIR USE IS REQUIRED, LEAVE THE CON-TAMINATED AREA AT ONCE. USE OF THESE EMERGENCY PROCEDURES WILL INCREASE THE RATE OF CONSUMPTION OF THE AIR SUPPLY AND MAY CAUSE THE END OF SERVICE INDICATOR ALARMS TO DIMINISH IN INTENSITY OR STOP COM-PLETELY. FAILURE TO RECOGNIZE THE **RISKS OF THESE EMERGENCY PROCE-**DURES MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

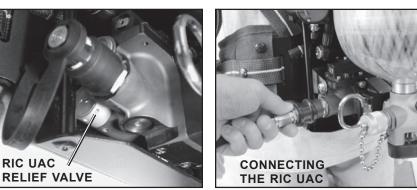
THE AIRFLOW THROUGH THE RESPIRATOR WHEN THE PURGE VALVE IS IN USE CAN EXCEED 200 LITERS PER MINUTE. TO RE-DUCE AIR CONSUMPTION, THE AIRFLOW MAY BE REDUCED BY PARTIALLY CLOSING THE PURGE VALVE. FAILURE TO CON-SERVE THE BREATHING AIR SUPPLY MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

EMERGENCY PROCEDURE #3 IS THE ONLY TIME THE RESPIRATOR MAY BE OPER-ATED WITH THE CYLINDER VALVE LESS THAN FULLY OPENED. USE OF A RESPIRA-TOR WITH THE CYLINDER VALVE LESS THAN FULLY OPENED OTHER THAN FOR EMERGENCY PURPOSES MAY RESULT IN SERIOUS INJURY OR DEATH.

# **RIC UAC EMERGENCY USE**

AIR-PAK NxG<sub>2</sub> respirators in compliance with NFPA 1981 (edition 2002) are fitted with a Rapid Intervention Crew/Company Universal Air Connection (RIC UAC) System which permits emergency replenishment of an approved SCBA breathing air supply cylinder on a user's respirator from an approved air supply source while in use. This is not a Quick Charge attachment and must not be used for routine recharging of the cylinder, for "buddy breathing", for transferring air from another SCBA, or any unapproved use. The RIC UAC is for **emergency use only** when the respirator user is incapacitated within the hazardous atmosphere. The RIC UAC manifold is equipped with a relief valve which will open if the supply pressure of the emergency air supply exceeds the maximum pressure rating of the complete respirator. See FIGURE 5. However, the supply pressure of the emergency air supply to be connected to the RIC UAC must not exceed 4500 psig.



#### **FIGURE 4**

**FIGURE 5** 

- To use the RIC UAC system proceed as follows:
- A member of the Rapid Intervention Crew/Company must visually inspect the respirator user's cylinder and cylinder valve for dents or gouges in the metal or fiber wrapping. If the cylinder and valve assembly shows damage or evidence of exposure to high heat or flame, such as paint turned brown or black, decals charred or missing, gauge lens melted or elastomeric bumper distorted, the decision must be made whether the cylinder is suitable for recharging by this method. If there is any suspicion that the cylinder is not safe, find another method of supplying air to the respirator user.
- 2. Be certain that the cylinder which you are charging is compatible with the complete respirator it is installed on, (i.e.: there must be a 2216 psig cylinder installed on a Model 2.2 respirator; there must be a 4500 psig cylinder installed on a Model 4.5 respirator, etc.). Verify by inspecting the cylinder and reducer labels to ensure that they are rated at the same pressure. NEVER ATTEMPT TO CHARGE A CYLINDER TO MORE THAN THE RATED PRESSURE MARKED ON THE CYL-INDER.
- 3. The RIC UAC filling hose assembly must be regulated to a **maximum** supply pressure of 4500 psig.
- Verify that the cylinder valve on the user's respirator is fully open by turning the cylinder valve knob fully counterclockwise (approximately 2 1/2 full turns).
- Remove the dust cap from the RIC UAC coupling on the respirator and from the matching coupling on the RIC UAC filling hose assembly. Visually inspect both couplings for dirt or damage. Remove any dirt or contamination from the couplings.
  - a) If the RIC UAC filling hose assembly coupling appears damaged, do not attempt to connect the RIC UAC filling hose assembly to the respirator. Find an alternate RIC UAC filling hose assembly.
  - b) If the RIC UAC coupling on the respirator appears damaged, do not attempt to connect the RIC UAC filling hose assembly to the respirator. Find an alternate method of supplying air to the respirator user.

#### WARNING

THE RIC UAC SYSTEM IS FOR EMER-GENCY USE ONLY. IMPROPER USE OF THIS SYSTEM MAY LEAD TO A MALFUNC-TION OF THE EQUIPMENT WHICH COULD CAUSE SERIOUS INJURY OR DEATH. DO NOT USE THE SCOTT RIC UAC ASSEMBLY TO CHARGE AN SCBA AIR CYLINDER WHILE THE SCBA IS BEING WORN UNLESS THERE IS A COMPELLING REASON TO ASSUME THE RISK OF INJURY IF THERE IS A COMPONENT FAILURE DURING THE FILL PROCESS. A COMPONENT FAILURE DUR-ING OR AFTER THE FILL PROCESS MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

DO NOT USE THE SCOTT QUICK CHARGE ASSEMBLY TO CHARGE AN SCBA AIR CYL-INDER WHILE THE SCBA IS BEING WORN IN A HAZARDOUS OR AN IDLH ATMO-UNLESS THERE SPHERE IS COMPELLING REASON TO ASSUME THE **RISK OF INJURY IF THERE ARE ANY IR-REGULARITIES IN THE FILL PROCESS** WHICH MAY RESULT IN A NEED TO RE-MOVE THE RESPIRATOR. REMOVAL OF THE RESPIRATOR IN A HAZARDOUS OR AN IDLH ATMOSPHERE MAY RESULT IN SE-**RIOUS INJURY OR DEATH.** 

#### WARNING

IF THE SCBA OR THE CYLINDER TO BE CHARGED IS KNOWN OR SUSPECTED OF HAVING BEEN DROPPED, EXPOSED TO DI-RECT FLAME IMPINGEMENT OR DAMAGED IN ANY WAY, DO NOT USE THE RIC UAC SYSTEM. FIND ANOTHER METHOD OF SUP-PLYING BREATHING AIR THE то **RESPIRATOR USER. ATTEMPTING TO FILL** A CYLINDER WHICH IS KNOWN OR SUS-PECTED OF DAMAGE IN ANY WAY MAY **RESULT IN CYLINDER FAILURE WHICH** COULD CAUSE SERIOUS INJURY OR DEATH.

#### WARNING

NEVER CHARGE A CYLINDER TO MORE THAN THE RATED PRESSURE MARKED ON THE CYLINDER. OVERCHARGING A CYLIN-DER MAY CAUSE A FAILURE RESULTING IN RAPID RELEASE OF HIGH PRESSURE AIR WHICH COULD CAUSE SERIOUS INJURY OR DEATH.

- Connect the RIC UAC filling hose assembly by pushing the quick disconnect coupling on the RIC UAC filling hose assembly on to the coupling on the respirator until the quick disconnect sleeve "clicks" into place. See FIGURE 6.
- 7. Slowly open the RIC UAC filling hose assembly valve to pressurize the supply line and begin air flow to the cylinder.

#### NOTE

WHEN THE REGULATED FILLING PRESSURE IS HELD CONSTANT AT THE CYLINDER RATED PRESSURE THROUGHOUT THE CHARGING CYCLE THE FLOW MUST BE MONITORED TO NOT EXCEED 1500 PSIG/MINUTE FOR MOST CYLINDER AND VALVE ASSEMBLIES.

NOTE

IF AT ANY TIME DURING THE FILLING PROCESS A LEAK IS DE-TECTED, IMMEDIATELY DISCONTINUE THE FILLING PROCEDURE AND LEAVE THE IDLH ATMOSPHERE.

- 8. Continually monitor the pressure gauge on the respirator user's cylinder while filling. When the pressure gauge on the user's cylinder reads "FULL," immediately terminate filling and disconnect the air supply source. A check valve in the RIC UAC coupling on the respirator will prevent air from flowing out of the respirator user's cylinder.
  - a) If the respirator user's cylinder is being filled from a portable air supply cylinder (such as a SCOTT RIT-PAK<sup>™</sup> portable air supply), the air from the supply cylinder will stop flowing when the pressure in the respirator user's cylinder equals the remaining pressure in the portable air supply (pressures will balance). Disconnect the RIC UAC filling hose assembly.
  - b) If the respirator user's cylinder is being filled from a supply hose connected to a high pressure air supply source, extra care is required to prevent over filling the respirator user's cylinder. If the supply pressure exceeds the pressure rating for the complete respirator, the RIC UAC relief valve will open when the respirator user's cylinder is full and will reset after the high pressure air supply is disconnected. The cylinder pressure gauge should indicate "full" at this time. Disconnect the RIC UAC filling hose assembly.

#### NOTE

THE RIC UAC MANIFOLD IS FITTED WITH A RELIEF VALVE TO VENT AIR IF THE RATED PRESSURE OF THE RESPIRATOR IS EXCEEDED. IF THIS OCCURS, SHUT OFF THE AIR FROM THE RIC UAC FILLING HOSE ASSEMBLY AND DISCONNECT THE AIR SUPPLY. THE RELIEF VALVE WILL RESET AFTER EXCESS PRESSURE IS RELEASED.

#### NOTE

THE RIC UAC ASSEMBLY IS DESIGNED WITH INTEGRAL PROTEC-TION DEVICES. DO NOT DISASSEMBLE OR MODIFY ANY PART OF THIS ASSEMBLY.

- 9. When charging is complete, disconnect the RIC UAC filling hose assembly from the RIC UAC coupling on the respirator. To disconnect RIC UAC filling hose assembly, pull the coupling sleeve away from the respirator until the coupling disengages. Install the dust caps on the RIC UAC coupling and on the RIC UAC filling hose assembly coupling.
- 10. Charging the cylinder will increase the temperature of the air within the cylinder. When charging is complete and the cylinder cools to ambient temperature, the pressure within the cylinder will fall slightly. If practical in the situation, top off the cylinder to ensure optimum service time.

#### NOTE

IF CHARGING IN COLD AMBIENT CONDITIONS WHERE THE TEMPERA-TURES ARE BELOW FREEZING, SEE THE **USE OF THE RIC UAC IN LOW TEMPERATURE** SECTION OF THIS INSTRUCTION.

11. After charging is complete, monitor the cylinder pressure on the respirator and repeat the above procedure as needed until the respirator user can be removed from the hazardous atmosphere.

## WARNING

IF AT ANY TIME DURING THE FILLING PRO-CESS A LEAK IS DETECTED, IMMEDIATELY DISCONTINUE THE FILLING PROCEDURE AND LEAVE THE IDLH ATMOSPHERE. CONTINUING TO FILL A RESPIRATOR THAT HAS EXHIBITED A LEAK MAY CAUSE IN A FAILURE OF THE EQUIPMENT WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

# LOW TEMPERATURE OPERATION

Respirators intended for routine use and respirators not routinely used but kept for emergency use shall be located in areas where the temperature is maintained above freezing  $32^{\circ}$  F /  $0^{\circ}$  C.

If a respirator may be unavoidably kept at a temperature below freezing before the next use, special care **MUST** be exercised to be certain that all components of the respirator are **THOROUGHLY DRIED** after cleaning and before storage.

If a respirator has been unavoidably kept at a temperature below freezing and it is not possible to bring it to room temperature before it is to be used, do not exhale into the facepiece until the facepiece is completely donned and the nose cup is properly in place against the face.

If, after using the respirator, the facepiece is doffed in a safe breathing area which is at temperatures near or below freezing, place the facepiece with regulator connected under outerwear to keep it warm next to the body in case respirator reuse is required.

Whenever the respirator is in place but not in use ("STANDBY" CON-DITION) in areas at or below freezing, the facepiece and regulator **MUST** be protected against exposure to water.

# USE OF THE RIC UAC IN LOW TEMPERATURE

Keep the high pressure air inlet of the RIC UAC coupling dry at all times. Water on the inlet may freeze preventing connection to the RIC UAC filling hose assembly or preventing removal of the RIC UAC filling hose assembly once connected.

If the RIC UAC filling hose assembly is used to fill a respirator cylinder in temperatures less than 32° F / 0° C and the full respirator is then moved indoors to warmer temperatures, the pressure in the cylinder **MUST BE CHECKED FOR EXCESS PRESSURE** within two hours after the respirator is moved indoors. If the pressure gauge on the cylinder is reading above "full", excess pressure must be removed from the cylinders by releasing air from the respirator until the pointer of the gauge is reading "full".

#### WARNING

USE OF THIS RESPIRATOR AT TEMPERA-TURES AT OR BELOW FREEZING (32° F / 0° C) WITHOUT FOLLOWING THE LOW TEMPERATURE OPERATION INSTRUC-TIONS MAY RESULT IN OBSCURED VISION AND/OR PARTIAL OR COMPLETE BLOCK-AGE OF THE AIRFLOW. IF THIS SHOULD OCCUR, THE AIR SUPPLY MAY BE PAR-TIALLY OR COMPLETELY CUT OFF AND THE EMERGENCY OPERATION PROCE-DURE MAY NOT BE ABLE TO RESTART THE AIRFLOW RESULTING IN SERIOUS INJURY OR DEATH.

#### WARNING

USE OF THIS RESPIRATOR AT TEMPERA-TURES AT OR BELOW FREEZING (32° F / 0° C) WITH THE NOSE CUP OR NOSE CUP INHALATION VALVES DAMAGED OR MISS-ING MAY RESULT IN THE FORMATION OF VISION IMPAIRING MIST OR ICE ON THE FACEPIECE VISION AREA WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

IF A RESPIRATOR CYLINDER IS FILLED IN TEMPERATURES LESS THAN 32° F / 0° C AND THE FULL RESPIRATOR IS THEN MOVED INDOORS TO WARMER TEMPERA-TURES, THE PRESSURE IN THE CYLINDER MUST BE CHECKED FOR EXCESS PRES-SURE WITHIN TWO HOURS AFTER THE RESPIRATOR IS MOVED INDOORS. FAILURE TO VERIFY THAT CYLINDER PRESSURE DOES NOT EXCEED THE RECOMMENDED MAXIMUM FOR THE CYLINDER MAY RE-SULT IN A SUDDEN RELEASE OF HIGH PRESSURE AIR WHICH COULD CAUSE SE-RIOUS INJURY OR DEATH.

# CYLINDER REPLACEMENT PROCEDURE

Depleted or partially depleted SCBA cylinders should be replaced with full cylinders as soon as possible. The cylinder replacement procedure can be carried out by the user of the respirator provided the user removes the backframe assembly and places it on solid support. See CHANGING THE CYLINDER BY THE RESPIRATOR USER section of this instruction. Cylinder replacement may be performed while the user is wearing the backframe assembly, if the user is assisted by a second individual. See CHANGING THE CYLINDER WITH AN ASSISTANT section of this instruction.

Only cylinders of the correct rated pressure may be used as replacement cylinders. SCOTT AIR-PAK NxG<sub>2</sub> model 2.2 SCBA's <u>must use</u> <u>only</u> cylinder and valve assemblies marked for 2216 psig service. SCOTT AIR-PAK NxG<sub>2</sub> model 4.5 SCBA's <u>must use only</u> cylinder and valve assemblies marked for 4500 psig service.

When replacing cylinders on SCOTT AIR-PAK NxG<sup>2</sup> model 2.2 SCBA's, there is one 30-minute rated cylinder capacity which may be used on in the model 2.2 SCBA. When replacing cylinders on SCOTT AIR-PAK NxG<sup>2</sup> model 4.5 SCBA's, there are three different capacity cylinders which may be used interchangeably in the model 4.5 SCBA: the 30-minute rated cylinder, the 45-minute rated cylinder, and the one hour rated cylinder. Always inspect the cylinder valve assembly and the SNAP-CHANGE connector on the cylinder valve assembly before connecting to the pressure reducer coupling. Never use a cylinder with a damaged cylinder valve assembly or a cylinder valve assembly with damaged SNAP-CHANGE connector.

# CHANGING THE CYLINDER BY THE RESPIRATOR USER

To replace a depleted or partially depleted cylinder proceed as follows:

- 1. Leave the area requiring respiratory protection and be certain that respiratory protection is no longer required. Doff the facepiece. (See TERMINATIONS OF USE section of this instruction.)
- Push in and rotate the cylinder valve knob clockwise and completely close the cylinder valve. Release residual air pressure in the respirator system by opening the purge valve slightly. When the flow of air from the facepiece stops, close the purge valve fully.
- 3. Release the waist belt, loosen the backframe harness, and remove the respirator. Lay the respirator on a solid support with the cylinder facing up.
- 4. Disengage the cylinder retention strap by gripping the latch plate as shown in FIGURE 6 and lifting on the end of the latch.

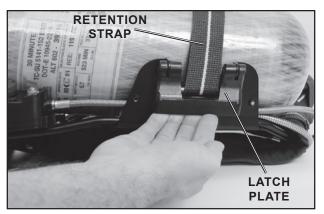


FIGURE 6 CYLINDER RETENTION

# WARNING

SEE THE COMPLETE NIOSH APPROVAL LABEL (SCOTT DOCUMENT P/N 10012360) SUPPLIED WITH THESE INSTRUCTIONS FOR CYLINDER AND VALVE ASSEMBLIES APPROVED FOR USE WITH SPECIFIC SCOTT AIR-PAK MODELS.

THE USE OF ANY AIR CYLINDER OTHER THAN A CYLINDER AND VALVE ASSEMBLY APPROVED FOR USE WITH THE SPECIFIC SCOTT AIR-PAK RESPIRATOR MODEL BE-ING SERVICED MAY RESULT IN LOSS OF AIR FROM THE CYLINDER OR IMPROPER OPERATION OF THE RESPIRATOR WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

## WARNING

NEVER USE A CYLINDER WITH A DAM-AGED CYLINDER VALVE ASSEMBLY OR A CYLINDER VALVE ASSEMBLY WITH DAM-AGED THREADS. LEAKAGE MAY OCCUR WHICH COULD CAUSE A LOSS OF BREATHING AIR OR A SUDDEN RELEASE OF HIGH PRESSURE AIR RESULTING IN SERIOUS INJURY OR DEATH.

CYLINDER REPLACEMENT CONTINUED ON NEXT PAGE...

# CYLINDER REPLACEMENT CONTINUED...

5. Pull both SNAP-CHANGE locks horizontally away from the pressure reducer to release the cylinder connector. See FIGURE 7. The unit will sound a series of descending tones and flash the backframe lights to indicate the cylinder has been released.

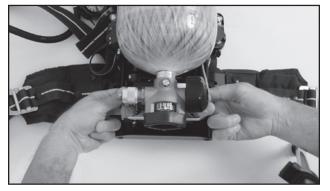


FIGURE 7 SNAP CHANGE LOCKS

6. Grasp the cylinder below the retention strap and lift the cylinder free from the backframe and remove. See FIGURE 8.

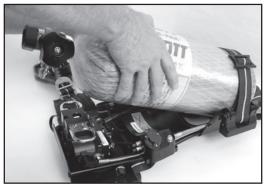


FIGURE 8 REMOVING CYLINDER AND VALVE ASSEMBLY

7. Inspect the High Pressure Seal in the high pressure inlet. If high pressure seal is damaged or missing, remove the respirator from service and tag for repair by authorized personnel. See FIGURE 9.

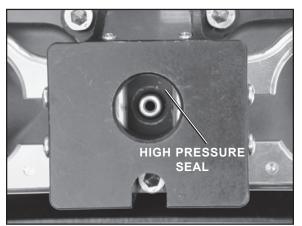


FIGURE 9 HIGH PRESSURE SEAL

## WARNING

USE OF A RESPIRATOR WITH A MISSING OR DAMAGED HIGH PRESSURE SEAL MAY RESULT IN AIR LEAKAGE WHICH MAY RE-DUCE THE DURATION OF USE AND/OR THE TIME REMAINING AFTER AN END OF SER-VICE ALARM ACTUATES OR MAY PREVENT THE END OF SERVICE ALARM FROM ACTU-ATING. THE USE OF A RESPIRATOR WITH SUCH AN AIR LEAK MAY RESULT IN EX-POSING THE USER OF THE RESPIRATOR TO THE ATMOSPHERE THE RESPIRATOR IS INTENDED TO PROTECT AGAINST AND MAY LEAD TO SERIOUS INJURY OR DEATH. 8. Replace with a fully charged cylinder and valve assembly of the appropriate pressure rating. Verify that replacement cylinder has protective cap installed on the CGA fitting on the valve. See FIGURE 10.

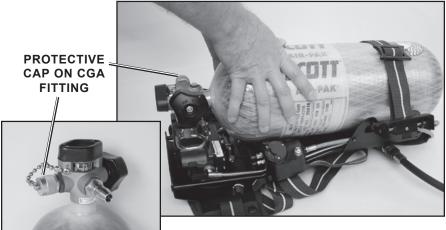


FIGURE 10 REPLACING CYLINDER AND VALVE ASSEMBLY

- 9. Slide the top of the cylinder up under the cylinder retention strap. Orient the SNAP-CHANGE connector over the high pressure inlet of the pressure reducer.
- 10. Engage the cylinder SNAP-CHANGE by pushing the cylinder connector into the pressure reducer firmly until both SNAP-CHANGE locks click and lock. See FIGURE 10. The unit will sound a series of ascending tones and flash the backframe lights to indicate the cylinder has been properly engaged.
- 11. Secure the cylinder in place by pushing the latch toward the backframe to lock the cylinder latch and fully engage the cylinder latch assembly.

#### NOTE

ENSURE THAT THE CYLINDER IS SECURELY HELD IN PLACE ON THE BACKFRAME BY THE CYLINDER RETENTION ASSEMBLY. DO NOT USE EXCESSIVE FORCE TO LOCK THE LATCH MECHANISM. IF THE RETENTION STRAP IS TOO TIGHT OR TOO LOOSE, USE THE TRI-SLIDE BUCKLE TO ADJUST THE RETENTION STRAP EN-GAGEMENT LENGTH, THEN RE-ATTEMPT TO ENGAGE THE LATCH ASSEMBLY.

# CHANGING THE CYLINDER WITH AN ASSISTANT

A depleted cylinder may also be changed with the assistance of a second individual. Proceed as follows:

- 1. Leave the area requiring respiratory protection and be certain that respiratory protection is no longer required. Doff the facepiece. (See TERMINATIONS OF USE section of this instruction.)
- Push in and rotate the cylinder valve knob clockwise and completely close the cylinder valve. Release residual air pressure in the respirator system by opening the purge valve slightly. When the flow of air from the facepiece stops, close the purge valve fully.
- 3. The assistant will stand behind the respirator user and disengage the cylinder retention strap by gripping the latch plate as shown in FIGURE 6 and lifting on the end of the latch.

## WARNING

DO NOT USE THE RESPIRATOR IF THE BACKFRAME LIGHTS DO NOT FLASH OR THE SERIES OF ASCENDING TONES IS NOT HEARD WHEN ENGAGING THE CYLIN-DER ON THE BACKFRAME. LIGHTS AND SOUND MUST OCCUR TO VERIFY PROPER ENGAGEMENT OF THE CYLINDER ON THE BACKFRAME. USE OF A RESPIRATOR WITHOUT A PROPERLY ENGAGED CYLIN-DER SNAP CHANGE CONNECTOR MAY RESULT IN LOSS OF AIR SUPPLY AND SE-RIOUS INJURY OR DEATH.

CYLINDER REPLACEMENT CONTINUED ON NEXT PAGE... 4. The assistant will pull both SNAP-CHANGE locks horizontally away from the pressure reducer to release the cylinder connector <u>while</u> <u>supporting the cylinder to prevent it from falling</u>. See FIGURE 11. The unit will sound a series of descending tones and flash the backframe lights to indicate the cylinder has been released.



#### FIGURE 11

#### ASSISTANT REMOVING CYLINDER AND VALVE ASSEMBLY

- 5. The assistant will lift the cylinder free from the backframe and remove.
- 6. The assistant must inspect the High Pressure Seal in the high pressure inlet. If high pressure seal is damaged or missing, remove the respirator from service and tag for repair by authorized personnel. See FIGURE 9.
- 7. The assistant will install a fully charged cylinder and valve assembly of the appropriate pressure rating and verify that replacement cylinder has protective cap installed on the CGA fitting on the valve. See FIGURE 10.
- 8. The assistant will slide the top of the cylinder up under the cylinder retention strap and orient the SNAP-CHANGE connector over the high pressure inlet of the pressure reducer.
- The assistant will engage the cylinder SNAP-CHANGE by pushing the connector into the pressure reducer firmly until both SNAP-CHANGE locks click and lock. See FIGURE 10. The unit will sound a series of ascending tones and flash the backframe lights to indicate the cylinder has been properly engaged.
- 10. The assistant must secure the cylinder in place by pushing the latch toward the backframe to lock the cylinder latch and fully engage the cylinder latch assembly.

#### NOTE

ENSURE THAT THE CYLINDER IS SECURELY HELD IN PLACE ON THE BACKFRAME BY THE CYLINDER RETENTION ASSEMBLY. DO NOT USE EXCESSIVE FORCE TO LOCK THE LATCH MECHANISM. IF THE RETENTION STRAP IS TOO TIGHT OR TOO LOOSE, USE THE TRI-SLIDE BUCKLE TO ADJUST THE RETENTION STRAP EN-GAGEMENT LENGTH, THEN RE-ATTEMPT TO ENGAGE THE LATCH ASSEMBLY.

With a properly installed full cylinder, the respirator is ready for continued use. See the PREPARATION FOR USE section of this instruction and USE OF THE RESPIRATOR section of this instruction.

If respirator use is not continued, the respirator must be cleaned and inspected. See the STANDBY INSPECTION, CLEANING AND STOR-AGE section of this instruction.

The removed cylinder shall be inspected and refilled by authorized personnel. Special training is required to fill the cylinder and valve assemblies used with this SCOTT AIR-PAK NxG2 SCBA. Contact your SCOTT representative for additional information on refilling SCOTT SCBA cylinders.

#### WARNING

USE OF A RESPIRATOR WITH A MISSING OR DAMAGED HIGH PRESSURE SEAL MAY RESULT IN AIR LEAKAGE WHICH MAY RE-DUCE THE DURATION OF USE AND/OR THE TIME REMAINING AFTER AN END OF SER-VICE ALARM ACTUATES OR MAY PREVENT THE END OF SERVICE ALARM FROM ACTU-ATING. THE USE OF A RESPIRATOR WITH SUCH AN AIR LEAK MAY RESULT IN EX-POSING THE USER OF THE RESPIRATOR TO THE ATMOSPHERE THE RESPIRATOR IS INTENDED TO PROTECT AGAINST AND MAY LEAD TO SERIOUS INJURY OR DEATH.

#### WARNING

DO NOT USE THE RESPIRATOR IF THE BACKFRAME LIGHTS DO NOT FLASH OR THE SERIES OF ASCENDING TONES IS NOT HEARD WHEN ENGAGING THE CYLIN-DER ON THE BACKFRAME. LIGHTS AND SOUND MUST OCCUR TO VERIFY PROPER ENGAGEMENT OF THE CYLINDER ON THE BACKFRAME. USE OF A RESPIRATOR WITHOUT A PROPERLY ENGAGED CYLIN-DER SNAP CHANGE CONNECTOR MAY RESULT IN LOSS OF AIR SUPPLY AND SE-RIOUS INJURY OR DEATH.

#### CAUTION

DO NOT LEAVE THE CYLINDER VALVE OPEN WHEN THE RESPIRATOR IS NOT IN USE.

#### CAUTION

THE CYLINDER VALVE ON "EMPTY" CYLIN-DERS MUST BE CLOSED. AN OPEN VALVE MAY ALLOW MOISTURE OR OTHER CON-TAMINANTS TO ENTER THE CYLINDER.

# STANDBY INSPECTION, CLEANING AND STORAGE

Do not attempt any repair or alteration of this respirator beyond the scope of this instruction without proper training.

NOTE

IF DURING USE, THE RESPIRATOR IS SUSPECTED OF BEING CONTAMINATED BY HAZARDOUS SUBSTANCE, THE CONTAMI-NATE MUST BE IDENTIFIED AND PROPERLY REMOVED OR THE CONTAMINATED COMPONENT(S) MUST BE REPLACED BEFORE NEXT USE. DISPOSE OF THE CONTAMINANTS OR THE CONTAMI-NATED COMPONENT(S) IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS.

After each use of the respirator, inspect and clean according to these instructions. If any damage is found, remove the respirator from service and tag for repair by authorized personnel.

# **REMOVAL OF QUICK DISCONNECT REGULATORS**

Breathing regulators equipped with a quick disconnect use a Pull-back Sleeve Coupling (FIGURE 12A). Refer to the following instructions and illustrations:

1. While pushing the plug "D" into the socket, pull the locking sleeve "E" back toward the guard. The plug "D" will separate.

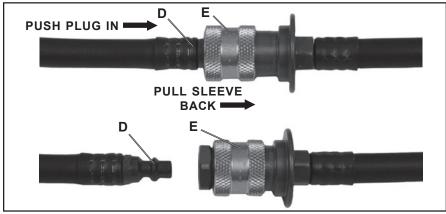


FIGURE 12A Pull-back Sleeve Quick Disconnect

 To reconnect, align the HEADS-UP DISPLAY plug with the mating connector (See FIGURE 12B) and push plug "D" into socket until the locking sleeve "E" pops forward. Test for proper engagement by tugging on the coupling.



FIGURE 12B Heads-Up Display Connector

## WARNING

DO NOT ATTEMPT ANY REPAIR OR ALTER-ATION OF THIS RESPIRATOR BEYOND THE SCOPE OF THIS INSTRUCTION. TRAINING IS REQUIRED FOR FURTHER SERVICE OR REPAIR OF THIS RESPIRATOR. THIS RESPI-RATOR MAY SUPPORT LIFE IN HAZARDOUS ATMOSPHERES. FAILURE TO PROPERLY SERVICE THIS RESPIRATOR MAY RESULT IN SERIOUS INJURY OR DEATH.

STANDBY INSPECTION, CLEANING AND STORAGE CONTINUED NEXT PAGE...

# STANDBY INSPECTION, CLEANING AND STORAGE CONTINUED... <u>CLEANING THE RESPIRATOR</u>

- Damp sponge dirt accumulations from the exterior of the respirator.
- 2. If respirator has been exposed to potentially hazardous materials, decontaminate in accordance with established procedures.
- 3. Clean the facepiece and mask mounted regulator as described below.

# **CLEANING THE FACEPIECE**

Supplies needed:

- SCOTT recommended sanitizing or disinfecting cleaner

**NOTE** DO NOT USE A QUARTERNARY AMMONIA (AMMONIUM CHLO-RIDE) TYPE OF CLEANER.

- 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 MSDS (MATERIAL SAFETY DATA SHEET) PROVIDED WITH THE SANITIZING OR DIS-INFECTING CLEANER.

With the regulator removed, carefully wash the facepiece assembly with SCOTT recommended cleaner according to the instructions provided with the cleaner and thoroughly rinse in clean water. 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 / 44° C maximum).

## NOTE

A NOSE CUP IS DESIGNED TO BE AN INTEGRAL PART OF THE FACEPIECE AND DOES NOT NEED TO BE DISASSEMBLED FOR CLEANING.

2. 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 KEVLAR AND NYLON HEAD HARNESSES ARE MADE OF PO-ROUS MATERIAL. SCOTT RECOMMENDED CLEANER MAY NOT BE EFFECTIVE ON POROUS MATERIAL.

- 3. Rinse with drinking water using a spray bottle or running water.
- 4. 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.

# CLEANING THE MASK MOUNTED REGULATOR

#### NOTE

AFTER CLEANING THE REGULATOR, VERIFY THAT ALL MOIS-TURE HAS BEEN REMOVED FROM THE REGULATOR AS DESCRIBED IN THE **REGULATOR CHECK** SECTION OF THIS IN-STRUCTION.

- 1. Remove the breathing regulator from the facepiece by pulling back on the locking clip and rotating the regulator 1/4 turn clockwise.
- 2. Remove any obvious dirt from the external surfaces of the regulator using SCOTT recommended sanitizing or disinfecting cleaner with a sponge or soft cloth.
- 3. Inspect the inside of the regulator assembly through the regulator opening (see FIGURE 13). If excessive dirt or soil is present, forward regulator assembly to SCOTT trained authorized personnel for thorough cleaning.

# CAUTION

CERTAIN CLEANING AND DISINFECT-ING AGENTS SUCH AS QUATERNARY AMMONIUM COMPOUNDS (AMMONIUM CHLORIDES) MAY CAUSE DAMAGE, DETERIORATION OR ACCELERATED AGING TO PARTS OF THE RESPIRATOR. USE ONLY THE RECOMMENDED CLEANING AND DISINFECTING AGENTS.

## WARNING

KEEP ALL SANITIZING OR DISINFECTING CLEANERS OUT OF REACH OF CHILDREN. USE THE CLEANER ONLY IN A MANNER CONSISTENT WITH THE PRODUCT LABEL-ING AND USE INSTRUCTIONS. IMPROPER USE OR HANDLING OF THIS PRODUCT MAY RESULT IN SERIOUS INJURY OR DEATH.

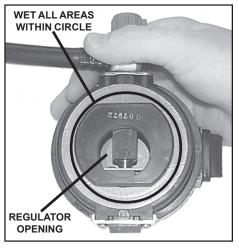


FIGURE 13

- 4. Depress the donning/air saver switch, close the purge knob by turning fully clockwise. Use the SCOTT recommended sanitizing or disinfecting cleaner in the regulator opening and the immediate area around the opening (see FIGURE 13). Be sure to cover internal components completely.
- 5. Follow the user instructions for the SCOTT recommended cleaner. A specific contact time may be required for sanitizing or disinfecting before rinsing.
- 6. Rinse the regulator with drinking water using a spray bottle or gently running tap water.
- 7. Shake excess water out of regulator. Completely air dry the regulator before use.

#### NOTE

TO SPEED DRYING OF THE REGULATOR, GENTLY BLOW DRY WITH CLEAN, DRY BREATHING AIR OF 30 PSIG MAXIMUM. DO NOT USE SHOP AIR OR ANY OTHER AIR CONTAINING LUBRI-CANTS OR MOISTURE.

- 8. If regulator was disconnected from air supply for cleaning, reconnect and open purge valve to remove any moisture from regulator spray bar. Close purge valve.
- 9. Perform REGULATOR CHECK as detailed on the next page.

## **REGULATOR CHECK**

#### NOTE

THIS REGULATOR CHECK IS NOT INTENDED TO BE A COMPLETE FUNCTIONAL CHECK OF THE RESPIRATOR. **BEFORE NEXT USE**, **PERFORM A REGULAR OPERATIONAL INSPECTION AS DE-SCRIBED IN THESE INSTRUCTIONS.** 

- 1. Check to make sure the respirator cylinder is at least 1/4 full.
- 2. Verify that the donning/air saver switch is fully depressed.
- 3. Close the purge knob.
- 4. Reattach the regulator to the respirator, (if removed for cleaning).
- 5. Slowly open the cylinder valve at least one (1) full turn.
- 6. If air flow from the regulator is heard, close the cylinder valve, repeat steps 1, 2 and 3. If air flow is still heard, close the cylinder valve fully, tag unit for repair and remove from service.
- 7. Open the purge valve and observe the air flow from the regulator spray bar. Droplets of water indicate the regulator is not dry. Dry the regulator according to Step 7 of PROCEDURE FOR CLEAN-ING THE MASK MOUNTED REGULATOR section and repeat the REGULATOR CHECK.

#### WARNING

FOLLOW THE REGULAR OPERATIONAL IN-SPECTION PROCEDURE EXACTLY. IF THE RESPIRATOR DOES NOT OPERATE AS DE-SCRIBED OR ANY OTHER OPERATIONAL MALFUNCTION IS NOTED, DO NOT USE THE RESPIRATOR. REMOVE IT FROM SER-VICE AND TAG FOR REPAIR BY AUTHORIZED PERSONNEL. FAILURE TO PROPERLY INSPECT THE RESPIRATOR MAY RESULT IN SERIOUS INJURY OR DEATH.

# STANDBY INSPECTION, CLEANING AND STORAGE CONTINUED NEXT PAGE...

# STANDBY INSPECTION, CLEANING AND STORAGE CONTINUED... INSPECTION OF THE RESPIRATOR

# Inspect the equipment for worn or aging rubber parts which exhibit cracking, splitting, or brittleness.

- Inspect for worn or frayed harness webbing and for other damaged components.
- Remove the breathing regulator from the facepiece by pulling back on the regulator retaining latch and rotating the regulator <sup>1</sup>/<sub>4</sub> turn. Inspect the gasket on the breathing regulator that seals against the facepiece for rips or damage that may break the seal.

NOTE

IF THE BREATHING REGULATOR IS EQUIPPED WITH A QUICK DIS-CONNECT, SEE THE INSTRUCTIONS ON PAGE 27 FOR REMOVAL OF QUICK DISCONNECT REGULATORS.

- 4. Inspect both the male and female quick disconnects. Pay special attention to the following:
  - a) Inspect the operation of the locking sleeve on the female quick disconnect. If any damage is noted, do not use the apparatus. Remove it from service and tag for repair.
  - b) Inspect the condition of the male quick disconnect for signs of wear. Particularly look for wear on the locking ridge as shown in FIGURE 14. If the coating is worn through and bare metal is showing, do not use the regulator assembly. Remove it from service and tag for replacement.

# FIGURE 14 Inspecting Male Quick Disconnects



## WARNING

RESPIRATORS MUST BE CLEANED AND INSPECTED BEFORE STORAGE FOR RE-USE. RESPIRATORS WITH WORN OR DAMAGED COMPONENTS SHALL NOT BE STORED FOR REUSE. REPLACE WORN OR DAMAGED COMPONENTS DURING INSPECTION OR REMOVE THE RESPIRATOR FROM SERVICE AND TAG IT FOR REPAIR BY AUTHORIZED PER-SONNEL. USE OF A RESPIRATOR WITH WORN OR DAMAGED COMPONENTS MAY RESULT IN SERIOUS INJURY OR DEATH.

# WARNING

IF THE COATING IS WORN THROUGH AND BARE METAL IS SHOWING ON THE MALE QUICK DISCONNECT LOCKING RIDGE, RE-MOVE THE REGULATOR ASSEMBLY FROM SERVICE AND TAG FOR REPLACEMENT. USE OF A WORN QUICK DISCONNECT MAY RESULT IN A MALFUNCTION LEADING TO A LOSS OF BREATHING AIR WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

- 5. The facepiece must be complete and in serviceable condition with no worn, loose, or damaged components. Inspect the facepiece as follows:
  - a) Inspect the facepiece seal and other rubber components for deformation, wear, damage, or cracks.
  - Inspect the lens for cracks, gouges, scratches, or any condition that could impair the operation of the facepiece or the user's vision.
  - c) Inspect the lens frame for damage such as cracks or distortion.
  - d) Check that all lens frame retainers are present and installed correctly.
  - e) Check that all harness anchors are present pivot freely.
  - f) Inspect the head harness for correct installation with all straps oriented correctly.
  - g) Inspect the head harness for damage or worn components.
  - h) Inspect the nose cup. Check that the nose cup is properly seated between the flanges of the voicemitter ducts. See FIG-URE 15. See also the NOSE CUP INSPECTION section of this instruction.
- 6. If any damage is found, remove the respirator from service and tag for repair by authorized personnel.

CAUTION IF THE NOSE CUP IS REMOVED FOR IN-SPECTION, MAKE CERTAIN IT IS REASSEMBLED CORRECTLY FOR THE MODEL FACEPIECE AND STYLE OF NOSE CUP. SEE THE NOSE CUP INSPECTION SECTION OF THIS INSTRUCTION.

FIGURE 15

**Checking Voicemitter Ducts** 

# NOSE CUP INSPECTION

All SCOTT facepieces used with this respirator may be fitted with a nose cup. Verify that the Nose Cup is properly installed for the model of facepiece being used. A Nose Cup is standard on the SCOTT AV-2000<sup>®</sup> and AV-3000<sup>™</sup> full facepieces and optional on the SCOTT-O-VISTA<sup>®</sup> full facepiece. The **BLACK** Nose Cup fits *behind* the face seal.

The BLACK Nose cup must be fitted BEHIND the Face Seal as shown in FIGURE 16.



FIGURE 16 BLACK Nose Cup BEHIND FACE SEAL

# STORAGE OF THE RESPIRATOR

- 1. Check to ensure gasket is present between facepiece and maskmounted regulator and is not damaged.
- 2. Connect the regulator to the facepiece. With the red purge valve in the 12 o'clock position, align the two flats of the outlet port with corresponding flats in the facepiece port and insert. Rotate the regulator counterclockwise (viewed from inside of facepiece) so that the red purge valve knob is situated on the left side of the facepiece. The lock tab on the mask-mounted regulator will lock into the facepiece retainer with a "click." If properly engaged, the regulator will not rotate.
- 3. To reattach a breathing regulator equipped with a quick disconnect to the respirator, see FIGURE 11.
- 4. Verify that the respirator is thoroughly dry before placing in storage.
- 5. Place the clean and dry facepiece in a sealable enclosure to protect until next use. Store in a manner that will not distort the face seals.
- 6. Place the respirator in the carrying case, protective container, or in a suitable storage location.
- 7. If any damage or deterioration is noted, remove the respirator from service and tag for repair.
- 8. Where an SCBA, its spare components or related equipment are stored or carried within a vehicle, such items shall be secured by either a positive mechanical means designed to hold the item in its stowed position, in a compartment with a positive latching door, or in a closed container suitable to transport and contain the SCBA and/or its spare components and associated equipment. The mechanical means of holding the SCBA, its spare components and associated equipment or the closed container shall be designed to contain the SCBA, its spare components and associated equipment or the closed container shall be designed to contain the SCBA, its spare components and associated equipment and thereby minimize the possibility of injury to persons in or near the vehicle during movement of the vehicle, especially during rapid deceleration or rapid acceleration of the vehicle, sharp turns or an accident.

## WARNING

PLACING RESPIRATORS IN STORAGE WITHOUT THOROUGHLY DRYING THEM MAY RESULT IN <u>CORROSION OR OTHER</u> <u>DAMAGE</u> WHICH COULD CAUSE A MAL-FUNCTION OF THE RESPIRATOR. SUCH A MALFUNCTION MAY RESULT IN SERIOUS INJURY OR DEATH.

## WARNING

PLACING RESPIRATORS IN STORAGE WITHOUT THOROUGHLY DRYING THEM MAY RESULT IN <u>RESIDUAL MOISTURE</u> <u>WHICH MAY FREEZE</u> IN COLD TEMPERA-TURES AND CAUSE A MALFUNCTION OF THE RESPIRATOR. SUCH A MALFUNCTION MAY RESULT IN SERIOUS INJURY OR DEATH.

# BATTERY REPLACEMENT

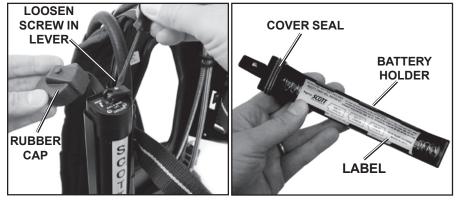
The AIR-PAK NxG<sub>2</sub> respirator requires three "C" cell batteries in the backframe assembly to operate the HEADS-UP electronic end of service time indicator and, if installed, the PASS DEVICE distress alarm. **Always replace all batteries at the same time.** To change batteries, place the respirator in a clean, nonhazardous area. Close respirator cylinder valve, open regulator purge valve letting out all the trapped air, close regulator purge valve, press the reset button twice. A fifteen second beep sequence occurs as the residual air bleeds off. Unit will sound a two tone chirp and green light will go out. To cancel the electronic end of service time indicator, press the RESET button twice and twice again.

NOTE

BE SURE THE CYLINDER VALVE IS OFF AND PASS DEVICE DISTRESS ALARM IS COMPLETELY INACTIVE BEFORE CHANGING BATTERIES. NEVER REMOVE OR REPLACE BATTERIES WITH SYSTEM PRESSUR-IZED OR DAMAGE MAY OCCUR TO ELECTRONIC COMPONENTS.

# **BACKFRAME ASSEMBLY**

1. To replace the batteries in the Backframe, position the respirator so the top of the backframe battery compartment is accessible as shown in FIGURE 17. Remove the protective rubber cap from the top of the battery compartment.



# FIGURE 17

**FIGURE 18** 

- 1. Use a small screw driver to loosen the screw in the battery compartment lever. Lift and turn the lever one quarter turn clockwise to release. Pull the lever to remove battery holder.
- 3. Remove any used batteries from battery holder. Be careful not to damage battery contacts.
- 4. Clean the surface around battery compartment and seal around the cover of the battery holder. Wipe with a clean damp cloth to remove any dirt or foreign matter which might prevent a proper seal. Check the seal for tears or cuts. The battery holder must be installed so that it is water tight after replacement. If damage is found, remove respirator from service and tag for repair by authorized personnel.

# WARNING

IF A RESPIRATOR INCORPORATING THE PASS DEVICE DISTRESS ALARM IS USED IN AN EXPLOSIVE OR FLAMMABLE ATMO-REGULARLY SPHERE, FAILURE TO INSPECT THE RESPIRATOR, INCLUDING THE PASS DEVICE DISTRESS ALARM, AS DESCRIBED IN THIS INSTRUCTION, FAIL-URE TO CORRECT DAMAGE TO THE PASS DEVICE DISTRESS ALARM, OR THE IN-STALLATION OF INCORRECT BATTERIES OR SUBSTITUTION OF ANY OTHER COM-PONENTS MAY IMPAIR THE INTRINSIC SAFETY OF THE UNIT. IMPAIRING THE IN-TRINSIC SAFETY OF THE UNIT MAY LEAD TO A FIRE OR AN EXPLOSION WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

# WARNING

BATTERIES MUST ONLY BE CHANGED IN AN AREA KNOWN TO BE NONFLAMMABLE. CHANGING THE BATTERIES IN A FLAM-MABLE ATMOSPHERE MAY CAUSE AN IGNITION WHICH COULD RESULT IN SERI-OUS INJURY OR DEATH.

- The battery holder is marked with the style and orientation of the batteries required. See FIGURE 18. Install three (3) fresh new "C" cell batteries of the same type. Use three each of one of the following:
  - Duracell Alkaline PC1400.
  - Duracell Alkaline MX1400
  - Duracell Alkaline MN1400
  - Eveready Energizer Alkaline EN93
  - Eveready Energizer Alkaline E93
  - Eveready Energizer Alkaline X93

**Do not mix batteries.** Verify correct orientation of batteries as shown on label inside the battery holder.

- 6. Slide the battery holder back into the battery compartment, with the contact end first. The battery holder will only fit in one way. When contact is made, the lights on the backframe shall flash once. Verify that the battery holder is fully seated in the battery compartment.
- 7. Turn the lever one quarter turn counterclockwise to lock and fold the lever down flat. Tighten snug the screw in the lever. If screw does not line up easily, verify that the battery holder is fully seated into the battery compartment. Replace the protective rubber cap over the top of the battery compartment.
- 8. AFTER REPLACEMENT OF BATTERIES, PERFORM A REGULAR OPERATIONAL INSPECTION BEFORE RETURNING RESPIRA-TOR TO SERVICE.

WARNING

FOLLOW THE REGULAR OPERATIONAL IN-SPECTION PROCEDURE EXACTLY. IF THE END OF SERVICE INDICATOR ALARMS DO NOT ACTUATE AS DESCRIBED IN THIS IN-STRUCTION, THE PURGE DOES NOT ACTUATE AS DESCRIBED IN THIS IN-STRUCTION OR ANY OTHER OPERATIONAL MALFUNCTION IS NOTED, DO NOT USE THE RESPIRATOR. REMOVE THE RESPIRA-TOR FROM SERVICE AND TAG IT FOR REPAIR BY AUTHORIZED PERSONNEL. FAILURE TO PROPERLY IDENTIFY MAL-FUNCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.

<sup>&</sup>lt;sup>3</sup> Duracell is a registered trademark of The Gillette Company, Boston, MA.

<sup>&</sup>lt;sup>4</sup> Energizer is a registered trademark of Eveready Battery Company, Inc., St. Louis, MO.

# **RESPIRATOR MARKINGS**

Do not alter or permanently cover over any labels on the SCOTT AIR-PAK NxG<sub>2</sub> SCBA or SCOTT AIR-PAK NxG<sub>2</sub> SCBA cylinder and valve assembly. If user applied identification markings are added to the SCOTT AIR-PAK NxG<sub>2</sub> SCBA or SCBA cylinder and valve assembly, do not obscure any labels supplied on the AIR-PAK NxG<sub>2</sub> SCBA or AIR-PAK NxG<sub>2</sub> SCBA cylinder and valve assembly. Any user applied markings must be applied in such a way as will not weaken or damage the AIR-PAK NxG<sub>2</sub> SCBA or AIR-PAK NxG<sub>2</sub> SCBA cylinder and valve assembly, will not interfere with the proper function of these assemblies and will not add flammable materials to these assemblies.

# PERIODIC TESTING

SCOTT recommends that this respirator be checked, both visually and functionally, by a SCOTT Authorized Service Center using SCOTT Authorized Test Equipment at least every two years. However, heavy use and/or severe service conditions may require more frequent testing. This recommendation is in addition to all other cleaning and maintenance procedures. The SCOTT *Specialist Level Maintenance Modules* containing additional maintenance information is available on request from SCOTT Health Safety.

In addition to the visual and functional test of the respirator by a SCOTT Authorized Service Center, all air cylinders used with SCOTT respirators must be periodically visually inspected and hydrostatically tested by a licensed cylinder re-tester. The cylinder inspection and test must be done in accordance with the appropriate US Department of Transportation (DOT) specification or the applicable DOT exemption. See step 2 of the REGULAR OPERATIONAL INSPECTION section of this instruction.

Because this respirator may be used to support human life in a hazardous atmosphere, the user should not attempt maintenance beyond that described in this instruction or in the SCOTT *Specialist Level Maintenance Modules*. If disassembly or adjustment other than described in this instruction or the SCOTT *Specialist Level Maintenance Modules* is found to be required, the respirator must be serviced by a SCOTT Authorized Service Facility in accordance with the appropriate SCOTT Service Manuals. Service by a SCOTT Authorized Service Facility can be arranged through your authorized SCOTT Distributor or by contacting SCOTT Health and Safety.

# **RETIREMENT CRITERIA AND CONSIDERATIONS**

Retirement criteria and considerations to be determined by SCOTT trained and Certified Overhaul Technicians.

#### WARNING

APPLYING ANY MARKINGS OR LABELS THAT DAMAGE OR OBSCURE THE EXIST-ING LABELING MAY VOID THE APPROVAL OF THE CERTIFYING AGENCY BY INTER-FERING WITH PROPER IDENTIFICATION OF ASSEMBLIES. IMPROPER IDENTIFICATION OF ASSEMBLIES MAY RESULT IN ERRORS IN MAINTENANCE CAUSING FAILURE OF THE RESPIRATOR WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

#### WARNING

DO NOT APPLY ANY MARKINGS OR LA-BELS THAT DAMAGE OR INTERFERE WITH THE OPERATION OF THE RESPIRATOR. ANY USER APPLIED MARKINGS THAT IN-TERFERE WITH THE OPERATION OF THE RESPIRATOR MAY CAUSE A FAILURE OF THE RESPIRATOR AND MAY RESULT IN SE-RIOUS INJURY OR DEATH.

#### WARNING

FAILURE TO REGULARLY INSPECT AND MAINTAIN THIS RESPIRATOR AS IN-STRUCTED HEREIN MAY RESULT IN A FAILURE OF THE RESPIRATOR LEADING TO SERIOUS INJURY OR DEATH.

#### WARNING

MAINTAIN ONLY WITH APPROVED PARTS AND IN ACCORDANCE WITH APPROVED METHODS. THE USE OF NON-SCOTT AU-THORIZED COMPONENTS DURING MAINTENANCE, OR ATTEMPTING MAINTE-NANCE BEYOND THE SCOPE OF THIS INSTRUCTION WITHOUT THE PROPER TRAINING, EQUIPMENT, AND AUTHORIZA-TION MAY RESULT IN A FAILURE OF THE RESPIRATOR LEADING TO SERIOUS IN-JURY OR DEATH.

# CAUTIONS AND LIMITATIONS

- D AIRLINE RESPIRATORS CAN BE USED ONLY WHEN THE RESPIRATORS ARE SUPPLIED WITH RESPIRABLE AIR MEETING THE REQUIREMENTS OF CGA G-7.1 GRADE D OR HIGHER QUALITY.
- E USE ONLY THE PRESSURE RANGES AND HOSE LENGTHS SPECIFIED IN THE USER'S INSTRUCTIONS.
- CONTAINS ELECTRICAL PARTS WHICH HAVE NOT BEEN EVALUATED AS AN IGNITION SOURCE IN FLAM-MABLE OR EXPLOSIVE ATMOSPHERES BY MSHA/NIOSH.
- J FAILURE TO PROPERLY USE AND MAINTAIN THIS PRODUCT COULD RESULT IN INJURY OR DEATH.
- M ALL APPROVED RESPIRATORS SHALL BE SELECTED FITTED, USED AND MAINTAINED IN ACCORDANCE WITH MSHA, OSHA AND OTHER APPLICABLE REGULATIONS.
- N NEVER SUBSTITUTE, MODIFY, ADD OR OMIT PARTS. USE ONLY EXACT REPLACEMENT PARTS IN THE CONFIGURATION AS SPECIFIED BY THE MANUFACTURER.
- O REFER TO USER'S INSTRUCTIONS AND/OR MAINTENANCE MANUALS FOR INFORMATION ON USE AND MAINTENANCE OF THESE RESPIRATORS.
- S SPECIAL OR CRITICAL USER'S INSTRUCTIONS AND/OR SPECIFIC USE LIMITATIONS APPLY. REFER TO INSTRUCTION MANUAL BEFORE DONNING.

# CAUTIONS AND LIMITATIONS OF USE FOR CBRN SCBA

- Q USE IN CONJUNCTION WITH PERSONAL PROTECTIVE ENSEMBLES THAT PROVIDE APPROPRIATE LEVELS OF PROTECTION AGAINST DERMAL HAZARDS.
- R SOME CBRN AGENTS MAY NOT PRESENT IMMEDIATE EFFECTS FROM EXPOSURE, BUT CAN RESULT IN DELAYED IMPAIRMENT, ILLNESS, OR DEATH.
- T DIRECT CONTACT WITH CBRN AGENTS REQUIRES PROPER HANDLING OF THE SCBA AFTER EACH USE AND BETWEEN MULTIPLE ENTRIES DURING THE SAME USE. DECONTAMINATION AND DISPOSAL PROCE-DURES MUST BE FOLLOWED. IF CONTAMINATED WITH LIQUID CHEMICAL WARFARE AGENTS, DISPOSE OF THE SCBA AFTER DECONTAMINATION.
- U THE RESPIRATOR SHOULD NOT BE USED BEYOND 6 HOURS AFTER INITIAL EXPOSURE TO CHEMICAL WAR-FARE AGENTS TO AVOID POSSIBILITY OF AGENT PERMEATION.

# S--SPECIAL OR CRITICAL USER'S INSTRUCTIONS

EXCEPT AS NOTED HEREIN, ALL MODELS OF THE SCOTT NxG<sub>2</sub> ARE APPROVED FOR RESPIRATORY PROTECTION DURING ENTRY INTO OR ESCAPE FROM OXYGEN DEFICIENT ATMOSPHERES, GASES AND VAPORS, AT TEMPERATURES ABOVE -25° F /-32° C.

SEE <u>LOW TEMPERATURE OPERATION</u> SECTION OF THIS INSTRUCTION MANUAL FOR ADDITIONAL INFORMATION.

ALL MODELS ARE APPROVED ONLY WHEN COMPRESSED AIR RESERVOIR IS FULLY CHARGED WITH AIR MEETING THE REQUIREMENTS OF THE COMPRESSED GAS ASSOCIATION SPECIFICATION G-7.1 FOR TYPE 1, GRADE D AIR OR EQUIVALENT SPECIFICATIONS, OR MEETING CE EUROPEAN STANDARD EN 132.

THE CONTAINER SHALL MEET APPLICABLE DOT SPECIFICATIONS.

SEE THE <u>REGULAR OPERATIONAL INSPECTION</u> SECTION OF THE INSTRUCTION MANUAL FOR ADDITIONAL INFORMATION.

# WARNING

IMPROPER USE OF A RESPIRATOR MAY RESULT IN SERIOUS INJURY OR DEATH. IMPROPER USE IN-CLUDES, BUT IS NOT LIMITED TO, USE WITHOUT TRAINING, DISREGARD OF THE WARNINGS AND INSTRUCTIONS SUPPLIED WITH THE RESPIRATOR AND ITS ACCESSORIES AND FAILURE TO INSPECT AND MAINTAIN THE RESPIRATOR. READ AND UNDERSTAND THE INSTRUCTION MANUAL AND ANY APPLICABLE ACCESSORY INSTRUCTIONS AND WARNINGS BEFORE ATTEMPTING TO USE A RESPIRATOR

tyco SCSTT<sup>®</sup> HEALTH & SAFETY

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