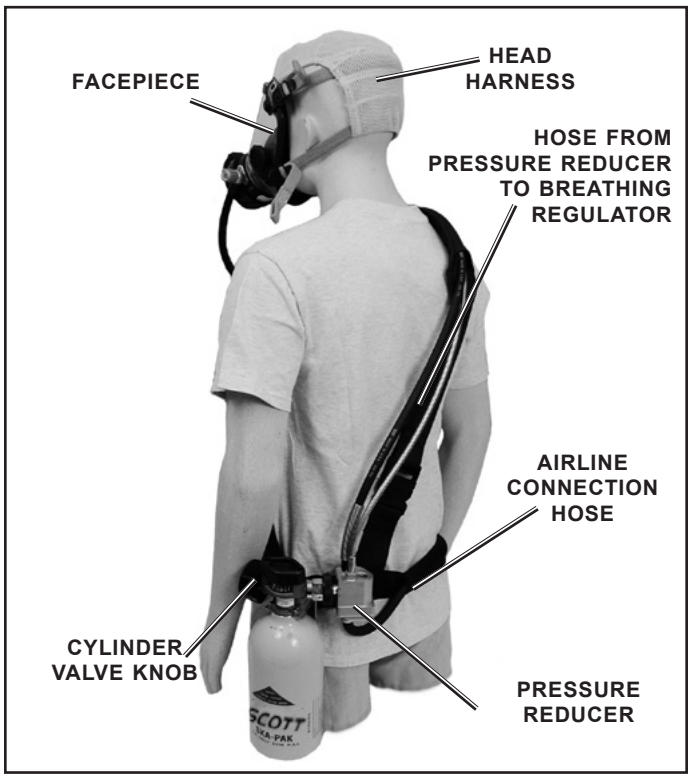
# SKA-PAK AT
# AUTO TRANSFER

COMBINATION SELF-CONTAINED BREATHING APPARATUS
FOR ESCAPE AND PRESSURE DEMAND TYPE C
SUPPLIED-AIR RESPIRATOR WITH AUTO TRANSFER


TYPICAL SKA-PAK AT RESPIRATOR
WITH STANDARD HARNESS
FRONT VIEW




TYPICAL SKA-PAK AT RESPIRATOR
WITH STANDARD HARNESS
REAR VIEW

**Scott SKA-PAK AT respirator units may vary in appearance, accessories and options.**

# WARNING

**<u>IMPROPER USE OF THIS RESPIRATOR MAY RESULT IN PERSONAL INJURY OR DEATH.</u>**
**IMPROPER USE INCLUDES, BUT IS NOT LIMITED TO, USE WITHOUT ADEQUATE TRAINING, DISREGARD OF THE WARNINGS AND INSTRUCTIONS CONTAINED HEREIN, AND FAILURE TO INSPECT AND MAINTAIN THIS RESPIRATOR.**

**THIS RESPIRATOR IS INTENDED TO BE USED ONLY IN CONJUNCTION WITH AN ORGANIZED RESPIRATORY 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, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; OR OTHER PERTINENT NATIONALLY RECOGNIZED STANDARDS, SUCH AS THOSE PROMULGATED BY THE US COAST GUARD OR THE DEPARTMENT OF DEFENSE.**

# SKA-PAK AT
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COMBINATION SELF-CONTAINED BREATHING APPARATUS WITH HARNESS
FOR ESCAPE AND PRESSURE DEMAND TYPE C
SUPPLIED-AIR RESPIRATOR WITH AUTO TRANSFER

## GENERAL DESCRIPTION

The Scott SKA-PAK AT respirator is approved by the National Institute for Occupational Safety and Health (NIOSH) as a pressure-demand, open circuit, combination self contained breathing apparatus for escape and Type C supplied-air respirator. The SKA-PAK AT respirator is designed to provide respiratory protection during entry into, work in and escape from an objectionable, oxygen deficient and/or unbreathable (toxic) atmosphere.

This respirator is to be used only by persons trained in the use of the respirator and only in conjunction with an organized respiratory protection program. This respirator is not to be used under water, for interior structural fire fighting or for any other purpose not authorized by the organized respiratory protection program that applies specifically to the user.

The SKA-PAK AT respirator is referred to as a “combination SCBA/hoseline” respirator because it operates as either a pressure-demand Type C supplied-air respirator when using air from a remote air supply system connected to the supply hose or as an escape only self-contained breathing apparatus when using air from the cylinder on the waist belt. The self-contained air supply may be used if the remote air supply system fails or when the air supply hose must be disconnected from the respirator for emergency escape from the work area. The SKA-PAK AT respirator offers the additional advantage of an Automatic Transfer pressure reducer which can detect an interruption in the supplied-airline air pressure and automatically switch to the breathing cylinder while warning the user through the VIBRALERT end of service time indicator in the facepiece mounted regulator.

The SKA-PAK AT respirator is available in five configurations for use with the following air supply cylinders: 2216 psi 3 minute, 3000 psi 5 minute, 10 minute and 15 minute, and 4500 psi 10 minute and 15 minute. These time durations represent NIOSH standards. Depending on activity and respiration rate, the actual duration may be much less than the NIOSH rating. Refer to the NIOSH approval label for the SKA-PAK AT respirator, SCOTT P/N 595014-01, for the list of approved component part numbers.

When used as a Type C supplied-air respirator, the SKA-PAK AT respirator must be supplied with clean, respirable air through the appropriate air supply hose.

The respirator consists of an adjustable harness to support the respirator on the body of the user, a cylinder and valve assembly for storing compressed breathing air, an automatic transfer pressure reducing regulator and coupling mounted on the cylinder valve, a cylinder pressure gauge with an ELECTRONIC alarm, an airline connection hose, one or more segments of air supply hose to connect the respirator to an air supply system, a hose assembly connecting the pressure reducer to the facepiece mounted pressure demand breathing regulator with VIBRALERT , and a full facepiece assembly.

### WARNING

**DO NOT OPERATE THIS EQUIPMENT WHILE UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR ANY MEDICATIONS OR SUBSTANCES WHICH MAY AFFECT VISION, 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. INATTENTION OR CARELESSNESS WHILE OPERATING THIS EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.**

### WARNING

**CERTAIN ENVIRONMENTS MAY REQUIRE THAT PROTECTIVE MATERIAL COVER SOME OR ALL OF THE RESPIRATOR IN ADDITION 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 RESPIRATOR IS NEEDED FOR ESCAPE MAY RESULT IN SERIOUS INJURY OR DEATH.**

### WARNING

**IF EITHER THE VIBRALERT END OF SERVICE TIME INDICATOR OR THE ELECTRONIC ALARM ACTUATES AT ANY TIME DURING RESPIRATOR USE, LEAVE THE AREA REQUIRING RESPIRATORY PROTECTION IMMEDIATELY. ACTUATION OF THE VIBRALERT MEANS THAT THE AIR SUPPLY HOSE HAS FAILED AND IS NO LONGER PROVIDING THE NECESSARY PRESSURE TO OPERATE THE RESPIRATOR. ACTUATION OF THE ELECTRONIC ALARM MEANS THAT THE AIR SUPPLY CYLINDER HAS BEEN DEPLETED TO 90% (+/-5%) OF FULL VOLUME. IN EITHER CASE, FAILURE TO LEAVE THE HAZARDOUS AREA IMMEDIATELY MAY RESULT IN SERIOUS INJURY OR DEATH.**

### WARNING

**DO NOT USE THE SELF-CONTAINED AIR SUPPLY FOR ANY PURPOSE OTHER THAN EMERGENCY ESCAPE. IF THE SELF-CONTAINED AIR SUPPLY HAS BEEN DEPLETED, THERE MAY BE INSUFFICIENT AIR SUPPLY FOR ESCAPE WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

The breathing regulator is equipped with a VIBRALERT alarm which warns the user with both sound and feel that the supplied-airline pressure has been interrupted and that the reducer has automatically transferred to the cylinder air supply. The ELECTRONIC alarm will be actuated when the cylinder pressure drops below 90% (+/- 5%) of full rating, whether caused by breathing down the cylinder or to indicate a malfunction or leak in the cylinder supply system. The ELECTRONIC alarm requires one 9V battery for operation. See the ELECTRONIC ALARM BATTERY REPLACEMENT section of this instruction.

The breathing regulator is also equipped with an air-saver/donning switch to prevent rapid loss of air if the air supply is turned on before donning the facepiece or if the facepiece is removed before disconnecting the supply hose or before turning off the air supply. The regulator is available with or without a quick disconnect fitting.

SCOTT full facepieces are available in a variety of styles and sizes. The facepieces may be readily detached from the breathing regulator to allow for the use of the best fitting and most comfortable size or style facepiece for an individual user. Fit testing per OSHA Standard 29 CFR Part 1910 or ANSI Standard Z88.2 requires testing in the negative pressure mode using equipment such as a Portacount Plus[1] Respirator Fit Tester. For this, SCOTT facepieces require use of SCOTT Fit Test Adapter P/N 804057-01 or equivalent and appropriate negative pressure testing equipment. Mask Seal Kit P/N 805655-01 may also be required to attain a proper fit. Each size facepiece may be equipped with a lens kit if the use of corrective spectacles is required.

Several self-contained air cylinders are available for use with the SKA-PAK AT respirator.

The airline air supply must be supplied with breathing air known to be suitable for human respiration at a pressure of 80 psig to 115 psig operation with a minimum flow rate of 200 liters per minute (lpm). Airline connection hoses used during Type C supplied-air respirator operation have one of five types of quick connect plugs and come in single- or dual-plug versions. Dual plug versions provide a facility for transition between redundant air supply hoses. On both the single and dual plug versions, a check valve in the pressure reducer prevents air flow from the respirator when the air supply hose is not in use or is disconnected from the respirator. On dual plug versions, each plug is individually checked to prevent depletion of the air supply when one (or both) of the air supply hoses is disconnected from the respirator or not in use.

Air supply hoses are available in several lengths. The maximum length and maximum number of segments of air supply hose allowed varies with the type of air supply hose. The air supply hoses and their limitations are covered in Table 1 and Table 2 of this instruction sheet.

**WARNING**

**RESPIRATORS SHALL NOT BE WORN WHEN CONDITIONS PREVENT A GOOD FACE TO FACEPIECE SEAL OR A GOOD SEAL AROUND THE NOSE CUP. SUCH CONDITIONS MAY INCLUDE, BUT ARE NOT LIMITED TO, GROWTH OF BEARDS, SIDEBURNS, A SKULL CAP THAT PROJECTS UNDER THE FACEPIECE, OR TEMPLE PIECES ON GLASSES. ALSO, THE ABSENCE OF ONE OR BOTH DENTURES CAN SERIOUSLY EFFECT THE FIT OF THE FACEPIECE. USE OF THE RESPIRATOR WITHOUT A GOOD FACE TO FACEPIECE SEAL OR A GOOD SEAL AROUND THE NOSE CUP SEAL MAY REDUCE THE DURATION OF USE AND/OR EXPOSE THE USER TO THE ATMOSPHERE THE RESPIRATOR IS INTENDED TO PROTECT AGAINST RESULTING IN SERIOUS INJURY OR DEATH.**

**WARNING**

**FAILURE TO PROPERLY FIT THE RESPIRATOR FACEPIECE TO THE USER MAY RESULT IN LITTLE OR NO RESPIRATORY PROTECTION AND MAY EXPOSE THE WEARER TO SUBSTANCES WHICH CAN CAUSE SERIOUS INJURY OR DEATH.**

**WARNING**

**USE ONLY BREATHING AIR KNOWN TO BE SUITABLE FOR HUMAN RESPIRATION. THE USE OF "TOOL AIR," "INSTRUMENT AIR," OR ANY AIR SUPPLY NOT SPECIFICALLY INTENDED FOR HUMAN BREATHING CAN RESULT IN SERIOUS INJURY OR DEATH.**

**WARNING**

**THE USE OF AIR SUPPLY HOSE OTHER THAN THOSE SPECIFICALLY INTENDED FOR USE WITH THE RESPIRATOR OR THE USE OF LENGTHS EXCEEDING THE MAXIMUM LENGTHS SPECIFIED MAY REDUCE THE ABILITY OF THE RESPIRATOR TO SUPPLY AIR AND MAY EXPOSE THE USER TO THE HAZARDOUS ATMOSPHERE WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.**

**WARNING**

**IF USE OF A HOSE IN THE WORK AREA WILL CREATE A HAZARD, DO NOT USE THIS RESPIRATOR. MAKE WHATEVER CHANGES ARE NECESSARY FOR SAFETY, SUCH AS SELECTING AN APPROPRIATE RESPIRATOR. FAILURE TO CONSIDER ALL POSSIBLE CIRCUMSTANCES IN THE USE OF THIS EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.**

**GENERAL DESCRIPTION CONTINUED ON NEXT PAGE...**

[1] Portacount Plus is a registered trademark of TSI Incorporated

## ADJUSTABLE HARNESSES

### *STANDARD HARNESSES*

Two versions of the standard harness are available: a flame resistant waist and shoulder harness made of Kevlar[2] black aramid webbing with yellow stripes and metallic buckles, and a corrosion resistant waist and shoulder harness made of black nylon webbing with nonmetallic buckles. If accidental exposure to heat and/or flame is possible, use only the Kevlar head harness and the Kevlar waist and shoulder harness on SKA-PAK AT respirators. The black-colored nylon webbing used on the corrosion resistant waist and shoulder harness and the black-colored polyester head harness will soften or melt if exposed to high temperatures and, if exposed to flame, may burn.

The SKA-PAK AT Retrofit Kit provides the SKA-PAK AT reducer assembly and the required VIBRALERT regulator to use the SKA-PAK AT respirator with an original SKA-PAK and SKA-PAK PLUS standard harnesses. To maintain compliance with the NIOSH approval, a service update of the associated cylinder and valve assemblies may have to be performed by an authorized SCOTT Service Center. Check the NIOSH approval label for the SKA-PAK AT respirator, SCOTT P/N 595014-01, for the list of approved component part numbers.

### *FULL BODY HARNESS*

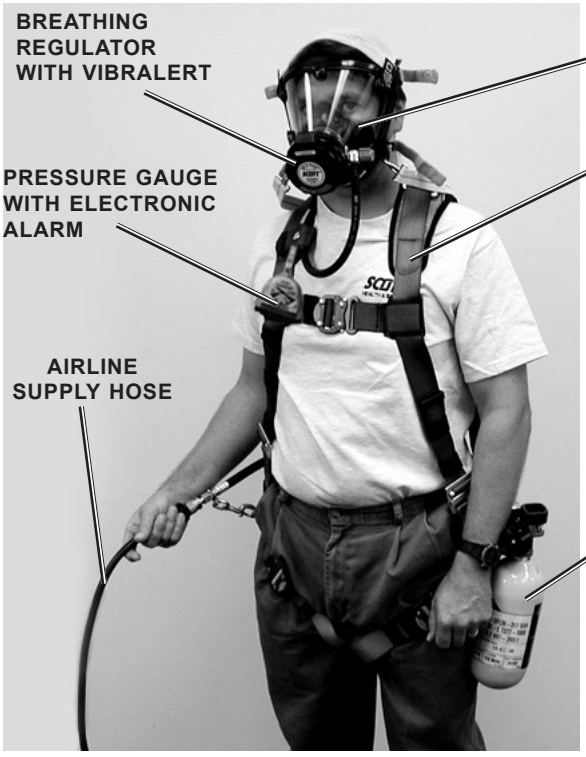
Where fall protection is required, the SKA-PAK AT respirator is available with a multipurpose Full Body Harness (P/N 805061-04). This harness is intended to be used only in accordance with both the user's respiratory protection program and fall protection program. For additional instructions on application, fitting, maintenance, and inspection of the Full Body Harness, see DBI/SALA document (SCOTT P/N 89497-01) provided with the Full Body Harness.

**WARNING**

**DO NOT USE THE BLACK POLYESTER HEAD HARNESS OR BLACK NYLON WAIST AND SHOULDER HARNESS WHEN ACCIDENTAL EXPOSURE TO HIGH HEAT OR FLAME IS A POSSIBILITY. IN THOSE CIRCUMSTANCES, THE POLYESTER MAY MELT OR BURN CAUSING INJURY OR MAY INTERFERE WITH RESPIRATORY PROTECTION RESULTING IN SERIOUS INJURY OR DEATH.**

**WARNING**

**MANUFACTURERS INSTRUCTIONS FOR THE FULL BODY HARNESS MUST BE FOLLOWED. DO NOT USE HARNESS IF WEAR OR DAMAGE IS PRESENT. IF BODY HARNESS HAS BEEN SUBJECTED TO FALL ARREST OR IMPACT FORCES IT MUST BE IMMEDIATELY REMOVED FROM SERVICE AND DESTROYED. CONNECTING SNAP AND D-RING MUST BE COMPATIBLE IN SIZE, SHAPE AND STRENGTH. FAILURE TO FOLLOW MANUFACTURER'S INSTRUCTIONS FOR HARNESS MAY RESULT IN SERIOUS INJURY OR DEATH.**




TYPICAL SKA-PAK AT respirator
WITH FULL BODY HARNESS
FRONT VIEW


TYPICAL SKA-PAK AT respirator
WITH FULL BODY HARNESS
REAR VIEW

[2] Kevlar is a registered trademark of E.I. du Pont de Nemours, Inc.

## DURATION OF THE RESPIRATOR

The SKA-PAK AT respirator is rated and approved by NIOSH as a combination self-contained breathing apparatus for escape and pressure demand Type C supplied-air respirator.

The duration of this respirator, when used as a Type C supplied-air respirator, is limited only by the capacity of the air-supply system.

The duration of this respirator during use as an escape only SCBA is limited by the capacity of the self-contained air supply cylinder on the waist belt. The cylinder's rated duration is marked on the cylinder. The user should not expect to obtain exactly the stated duration of breathing air during each use of the self-contained air supply cylinder. The user's breathing rate may be more or less than the 40 lpm respiration standard used in the NIOSH tests. Depending on activity and respiration rate, the actual duration may be less than 1/2 the rated duration of the air supply cylinder.

The length of time the self-contained air supply cylinder will continue to provide breathing air during any one use depends 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 the user has with this or similar equipment.
5. Whether or not the cylinder is fully charged at the start of the use period.
6. The possible presence in the compressed air of carbon dioxide concentrations greater than .04% normally found in atmospheric air.
7. The atmospheric pressure; for example, if used in a pressurized tunnel or caisson at 2 atmospheres (15 psig gauge) 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. Whether the purge valve is open.
10. The condition of the respirator.

**WARNING**

**THE HIGH PHYSICAL AND/OR EMOTIONAL LEVEL ASSOCIATED WITH EMERGENCY SITUATIONS TEND TO INCREASE BREATHING RATE AND TO DECREASE THE ACTUAL DURATION OF THE SELF-CONTAINED AIR SUPPLY. FAILURE TO CONSIDER THESE FACTORS MAY RESULT IN SERIOUS INJURY OR DEATH.**

**WARNING**

**DO NOT USE THIS RESPIRATOR IN A PRESSURIZED ENVIRONMENT. THE DURATION OF THE SELF-CONTAINED AIR CYLINDER ON THIS RESPIRATOR WILL BE SIGNIFICANTLY SHORTER IN A PRESSURIZED ATMOSPHERE AND MAY NOT PROVIDE ADEQUATE TIME FOR ESCAPE RESULTING IN SERIOUS INJURY OR DEATH.**

**WARNING**

**THE PURGE VALVE IS AN EMERGENCY CONTROL FOR USE ONLY IN THE EVENT OF A FAILURE OF THE MASK MOUNTED BREATHING REGULATOR. OPENING THE PURGE VALVE FOR ANY OTHER REASON WHILE THE RESPIRATOR IS BEING SUPPLIED WITH AIR FROM THE ESCAPE AIR SUPPLY CYLINDER COULD EXHAUST THE RESPIRATOR AIR SUPPLY IN AS LITTLE AS 2 MINUTES AND MAY RESULT IN SUDDEN TERMINATION OF BREATHING AIR WHICH COULD CAUSE SERIOUS INJURY OR DEATH.**

## INTRINSIC SAFETY

The SCOTT SKA-PAK AT respirator equipped with an electronic end of time indicator (ELECTRONIC alarm) is listed by SGS U. S. TESTING COMPANY INC. as intrinsically safe per ANSI/UL Std. UL-913 for use in Class I, II, III, Groups A, B, C, D, E, F, and G Hazardous Locations when powered by one of the following 9 volt batteries: Energizer[2] Alkaline No. 522 or EN22, Duracell[3] Alkaline No. PC 1604 or MN 1604, or for increased service life use Ultralife[4] Lithium Battery No. U9VL.

**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. To reduce the risk of explosion, do not mix old batteries with unused batteries, or mix batteries from different manufacturers.

The electronic end of service time indicator has not been evaluated as an ignition source in explosive or flammable atmosphere by MSHA/NIOSH.

**WARNING**

**REGULARLY INSPECT THE SKA-PAK AT RESPIRATOR INCLUDING THE ELECTRONIC ALARM AS DESCRIBED IN THIS INSTRUCTION. VERIFY THAT THE PROPER BATTERIES ARE USED AND THAT THERE IS NO DAMAGE TO OR MODIFICATION OF THE UNIT THAT WOULD IMPAIR THE INTRINSIC SAFETY. IF THE SKA-PAK AT RESPIRATOR IS USED IN AN EXPLOSIVE OR FLAMMABLE ATMOSPHERE, FAILURE TO CORRECT CONDITIONS THAT MAY IMPAIR THE INTRINSIC SAFETY OF THE EQUIPMENT MAY LEAD TO A FIRE OR AN EXPLOSION WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

## QUESTIONS OR CONCERNS

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

[3] Energizer is a registered trademark of Eveready Battery Company, Inc., St. Louis, MO.

[4] Duracell is a registered trademark of the Procter & Gamble Company, Cincinnati, OH .

[5] Ultralife is a registered trademark of Ultralife Batteries, Inc., Newark, NY.

## FACEPIECE FITTING AND FIT TESTING

A respirator Quantitative Fit Test must be performed to ensure the correct respirator facepiece size has been selected and assigned to the user. It is the responsibility of the Respiratory Protection Program Manager or Safety Coordinator to assist the user in selecting the correct respirator size relative to the user's facial features and dimensions. Fit Testing must be performed with any approved SCOTT accessories that will be used with the respirator installed, such as a communications device installed on the facepiece.

Respirator fit tests are explained fully in the American National Standard Practices for Respiratory Protection, ANSI Z88.10-2001 which is published by the American National Standards Institute (ANSI), 11 West 42nd Street, New York, New York, 10036, and in the Occupational Safety and Health Standards, OSHA 29 CFR 1910.134 Appendix A, which is published by the Occupational Safety and Health Administration (OSHA), 200 Constitution Avenue, NW, Washington DC, 20210.

Quantitative Fit Testing per OSHA Standard 29 CFR Part 1910.134 Appendix A, or ANSI Standard Z88.10-2001 requires testing in the negative pressure mode using equipment such as a Portacount [1] Respirator Fit Tester. For Quantitative Fit Testing, SCOTT facepieces require use of the appropriate negative pressure testing equipment such as the Portacount Respirator Fit Tester along with the following:

- SCOTT 40mm facepiece Adapter, P/N 200423-01,
- a new SCOTT P100 Cartridge, P/N 052683,
- SCOTT Probed Fit Test Adapter P/N 805628-01 or equivalent probed facepieces and the full range of sizes and styles
- Mask Seal Kit, P/N 805655-01
- the appropriate SCOTT communication device and mounting bracket properly installed on the facepiece, if such an accessory will be used with the respirator.
- any other optional hood, eyeglass, or other accessory that will be used with the respirator.

The size and style facepiece must be selected based on the user's measured face size. For initial fitting, carefully don the facepiece and conduct a NEGATIVE PRESSURE LEAK TEST according to the instructions provided with the 40mm Adapter. Refer to the DONNING PROCEDURE section of this instruction for the procedure. Follow the DONNING PROCEDURE **CAREFULLY**. If the selected facepiece does not pass the NEGATIVE PRESSURE LEAK TEST or does not fit securely without movement in the chin or chin cup area or the user experiences discomfort in the chin or throat, try the next nearest size, larger or smaller. After passing the NEGATIVE PRESSURE LEAK TEST, the facepiece size selected must be verified by successfully passing a respirator Quantitative Fit Test.

When fit testing for Open-Circuit, Pressure Demand Self-Contained Breathing Apparatus and/or Type C Pressure-Demand Supplied Air Respirator mode of operation (minimum Fit Factor equal to or greater than 500 minimum) appropriate negative pressure testing equipment must be used. You should use a P100 Filter, SCOTT P/N 052683 and the SCOTT P/N 805628-01 Fit Test Adapter.

When using a Portacount Respirator Fit Tester for Quantitative Fit Testing, TSI recommends that the level of particles in the ambient air must be between 5000 and 30000 particles/cm3. Refer to the Portacount Respirator Fit Tester user instructions for details including available Particle Generators to use with the Portacount Respirator Fit Tester if you have difficulty achieving the minimum level of ambient particle count required.

Test subjects must be in good health at the time of the fit testing. Smoking or eating less than 30 minutes prior to the test is prohibited. Any and all conditions that might interfere with a good face to facepiece seal must be addressed and corrected before performing the fit testing. Refer to the list of conditions in the DONNING PROCEDURES section of this instruction.

### WARNING

**THE USER MUST BE PROPERLY FITTED USING A RESPIRATOR QUANTITATIVE FIT TEST BEFORE USE AND FOLLOW ALL WARNINGS AND SPECIAL OR CRITICAL USER'S INSTRUCTIONS SPECIFIED DURING USE. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.**

### WARNING

**FIT TESTING IN ACCORDANCE WITH OSHA STANDARD 29 CFR PART 1910 IS REQUIRED AS PART OF THE REQUIRED TRAINING BEFORE USE OF THIS RESPIRATOR. FAILURE TO PROPERLY FIT AND TRAIN THE USER IN USE OF THE FACEPIECE AND RESPIRATOR MAY RESULT IN EXPOSURE TO THE HAZARDOUS ATMOSPHERE WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.**

### WARNING

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

To verify the fit factor of the respirator, testing must incorporate an exercise regimen of normal daily activities. SCOTT requires the following set of fit test exercises, which are based on OSHA Standard 29 CFR Part 1910.134 Appendix A, and ANSI Z88.10-2001 with modifications.

Exercises are to be performed each for 60 seconds (except as noted) in a standing position during the test:

- Normal Breathing
- Deep breathing
- Turning head side to side
- Moving head up and down (look up/look down)
- Talking (read the Rainbow Passage)
- Grimace (15 seconds)
- Bending Over (touch toes) / Reach up (toward the ceiling)
- Normal Breathing (repeat)

Fit test exercises must be performed carefully as if the respirator was being used in a hazardous atmosphere. DO NOT bump the facepiece, filter, or adapter into the body through exaggerated motions. DO NOT talk except when directed to by the test administrator.

SCOTT requires that users of this respirator with an approved SCOTT facepiece, must achieve a Fit Factor of at least 500 for Type C Pressure-Demand Supplied Air Respirator mode of operation for use with their assigned facepiece style and size using the fit test procedures and exercise regimen stated above. If a Fit Factor of at least 500 cannot be achieved with any facepiece size or style, the user MUST NOT use this respirator.

If the respirator user passes a NEGATIVE PRESSURE LEAK TEST but DOES NOT pass a respirator Quantitative Fit Test, try the next nearest size, larger or smaller and repeat the NEGATIVE PRESSURE LEAK TEST and the Quantitative Fit Test. If leakage is still detected, either per these user instructions or the OSHA fit testing process, the use of Mask Seal Kit P/N 805655-01 may be required to attain a proper fit. Refer to the INSTALLATION AND USE INSTRUCTIONS, SCOTT P/N 89462-01, included with the Mask Seal Kit. After installing the Mask Seal Kit, repeat the fit testing process to confirm a proper fit.

Once the proper size is selected and assigned to the user following successful Portacount Respirator Fit Tester testing to achieve minimum Fit Factors required, the respirator user must perform and pass a NEGATIVE PRESSURE LEAK TEST as described in these instructions every time the facepiece is donned to ensure proper fit before using the respirator in a hazardous atmosphere.

During NEGATIVE PRESSURE LEAK TESTING, any facepiece leakage that is detected from other than the face to facepiece seal may indicate damaged or defective equipment. Remove the defective equipment from service and tag for repair by authorized personnel. Repeat the testing with equipment known to be operating properly.

IF A SATISFACTORY NEGATIVE PRESSURE LEAK TEST CANNOT BE PERFORMED, DO NOT USE THE RESPIRATOR OR ENTER THE HAZARDOUS ATMOSPHERE.

The facepiece alone does not provide any protection against a hazardous atmosphere without the use of the complete respirator.

A respirator Quantitative Fit Test must be routinely carried out as outlined above for each user of this respirator to determine or confirm the amount of protection that the respirator provides.

Periodically repeating the fit testing is required to identify any physical changes of the user (such as those listed in the DONNING PROCEDURES) which could effect the fit of the facepiece.

## AIR SUPPLY SYSTEM REQUIREMENTS

When the respirator is used as a Type C supplied air respirator IT IS THE RESPONSIBILITY OF THE ORGANIZED RESPIRATORY PROGRAM UNDER WHICH THE RESPIRATOR IS USED TO PROVIDE A SUPPLY OF AIR THAT IS KNOWN TO BE CLEAN AND SAFE FOR BREATHING AND TO ENSURE THAT ALL OTHER REQUIREMENTS OF THE BREATHING AIR SUPPLY SYSTEM STATED BELOW ARE MET.

To use the SKA-PAK AT combination respirator as a Type C supplied-air respirator, it must be connected to a suitable supply of clean breathing air through one or more segments of air supply hose. The air supply system must supply air containing no less than 19.5 percent oxygen and meeting the Grade “D” requirements of the Compressed Gas Association (CGA) Commodity Specification for Air G–7.1 available from the CGA, Inc. 1235 Jefferson Davis Highway, Arlington, Virginia, 22202.

In addition, the air must be dry, TO A DEW POINT OF -65 °F / -54 °C OR LOWER. If the breathing air is not dry, water may condense on the inside of the air supply lines or inside the respirator. In temperatures at or below freezing, +32 °F / 0 °C, the condensation may freeze inside the air supply lines or inside the respirator, possibly causing the flow of breathing air to be reduced or to stop completely.

**NOTE**

THE AIR USED IN THE AIR SUPPLY CYLINDER ON THE RESPIRATOR IS ALSO REQUIRED TO BE DRY TO A DEW POINT OF -65°F / -54°C OR LOWER.

The user’s breathing air volume requirement will vary depending on the activity being performed. The volume of air needed, expressed in liters per minute (lpm) at 1 atmosphere pressure, may range from less than 20 lpm when at rest to over 60 lpm during heavy work.[6]

The air supply system must have the capacity to meet the user’s volume requirement for respiration while maintaining the required supply pressure of no less than 60 psig and no more than 125 psig at the point of attachment of the respirator airline connection hose to the air supply system. If the pressure in the air supply system can exceed 125 psig, the air supply system shall be equipped with a pressure-release mechanism that will prevent the pressure at the point of attachment of the hose to the air supply system from exceeding 125 psig.

The coupling installed on the air supply system must match both the coupling installed on the supply hose and the coupling installed on the airline connection hose. The correct coupling must be directly installed on the air supply system. Adapters shall not be used. The couplings and fittings that mate with the couplings used on SCOTT air supply hose are available from SCOTT or from the coupling manufacturer. To determine what couplings are required, locate the SCOTT part number stamped on the end of the Airline Connection Hose Assembly located in the waist belt of the respirator. Refer to Table 2 on Page 29 of this instruction to determine the manufacturer and series number of the couplings.

The SKA-PAK PLUS combination respirator is NIOSH certified only when used with one of the types of hose with which it has been tested and approved. The types of hose are:

SCOTT 30010-Series air supply hose

- SCOTT 26370-Series air supply hose
- SCOTT 200820-Series air supply hose
- SCOTT 803904-01 air supply hose.
- SCOTT 30020-Series air supply hose and
- SCOTT 26369-Series air supply hose

**WARNING**

**THE AIR SUPPLY MUST BE FREE OF CONDENSED MOISTURE. AIR REGULATORS, BY THEIR NATURE, BECOME COLD DURING USE AND CAN CAUSE MOISTURE IN THE AIR SUPPLY TO FREEZE EVEN AT AMBIENT TEMPERATURES WELL ABOVE 32° F / 0° C. FROZEN MOISTURE IN THE AIR SUPPLY MAY RESULT IN PARTIAL OR COMPLETE FAILURE OF THE RESPIRATOR WHICH MAY CAUSE SERIOUS INJURY OR DEATH.**

**WARNING**

**DO NOT USE OXYGEN! SUPPLYING THE RESPIRATOR WITH OXYGEN MAY CAUSE SICKNESS OR MAY CAUSE A FIRE OR EXPLOSION RESULTING IN SERIOUS INJURY OR DEATH.**

**WARNING**

**THE AIR SUPPLY PRESSURE MUST REMAIN BETWEEN 80 PSIG AND 115 PSIG WITH SUITABLE FLOW AT ALL TIMES DURING USE. IF THE AIR SUPPLY DOES NOT MAINTAIN THESE REQUIREMENTS, THE RESPIRATOR MAY NOT PROVIDE ADEQUATE PROTECTION FROM THE HAZARDOUS ATMOSPHERE WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.**

[6] A Guide to Industrial Respiratory Protection, HEW Publication Number (NIOSH) 76-189, John A. Pritchard (US. Dept. of Health Education and Welfare), p. 13.

The 30010-Series, 26370-Series, 200820-Series, and 803904-01 air supply hoses may be interchanged to supply a single SKA-PAK AT respirator, and, except for these, different types of supply hose may NOT be mixed.

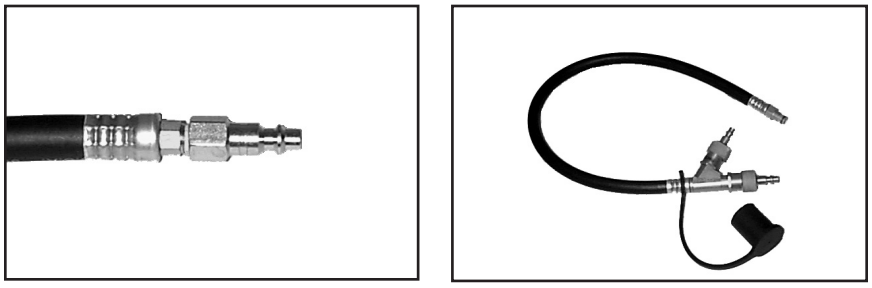
The 30010 series hose utilizes Hansen[7] brass disconnect couplings. The 26370-Series hose utilizes stainless steel Foster[8] disconnect couplings. The 200820-Series hose utilizes a stainless steel Foster male disconnect coupling and a brass Foster female disconnect coupling. The 26369 series hose utilizes stainless steel Hansen HK disconnect couplings. The 30020 series hose utilizes steel Schrader[9] disconnect couplings. The 805659 series hose utilizes brass Cejn[10] disconnect couplings. One of these types of couplings is located on the end of the airline connection hose and at the ends of each segment of air supply hose. Dual airline connection hoses terminate in two couplings, both of which are of one of the above types.

The air supply hose segments must be directly coupled to the airline connection hose at the waist belt of the respirator, to each other and to the air supply system. Adapters shall not be used.

After determining which type of air supply hose and couplings are used with your respirator, locate the appropriate section of Table 1 on page 23 of this instruction sheet for detailed instructions on operating the coupling and for limitations on air supply hose length and number of segments allowed.

**WARNING**

**DO NOT USE OTHER HOSES, COUPLINGS OR ADAPTERS TO ATTACH INCOMPATIBLE COMPONENTS TO THE RESPIRATOR. INCOMPATIBLE COMPONENTS MAY REDUCE THE ABILITY OF THE RESPIRATOR TO SUPPLY AIR AND MAY EXPOSE THE USER TO THE HAZARDOUS ATMOSPHERE WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**



Single Plug Version | Dual Plug Version

AIRLINE CONNECTION HOSES

**FIGURE 1**

**WARNING**

**THE USER OF THIS RESPIRATOR MAY HAVE TO DISCONNECT THE HOSE COUPLING SUDDENLY AND UNDER STRESSFUL CONDITIONS. THE USER MUST BE ABLE TO DISCONNECT THE COUPLING UNDER THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING USE, FOR EXAMPLE, WITHOUT BEING ABLE TO SEE THE COUPLING, WITH GLOVES ON, WITH ONE HAND, ETC. FAILURE TO ADEQUATELY TRAIN THE USER MAY RESULT IN SERIOUS INJURY OR DEATH.**

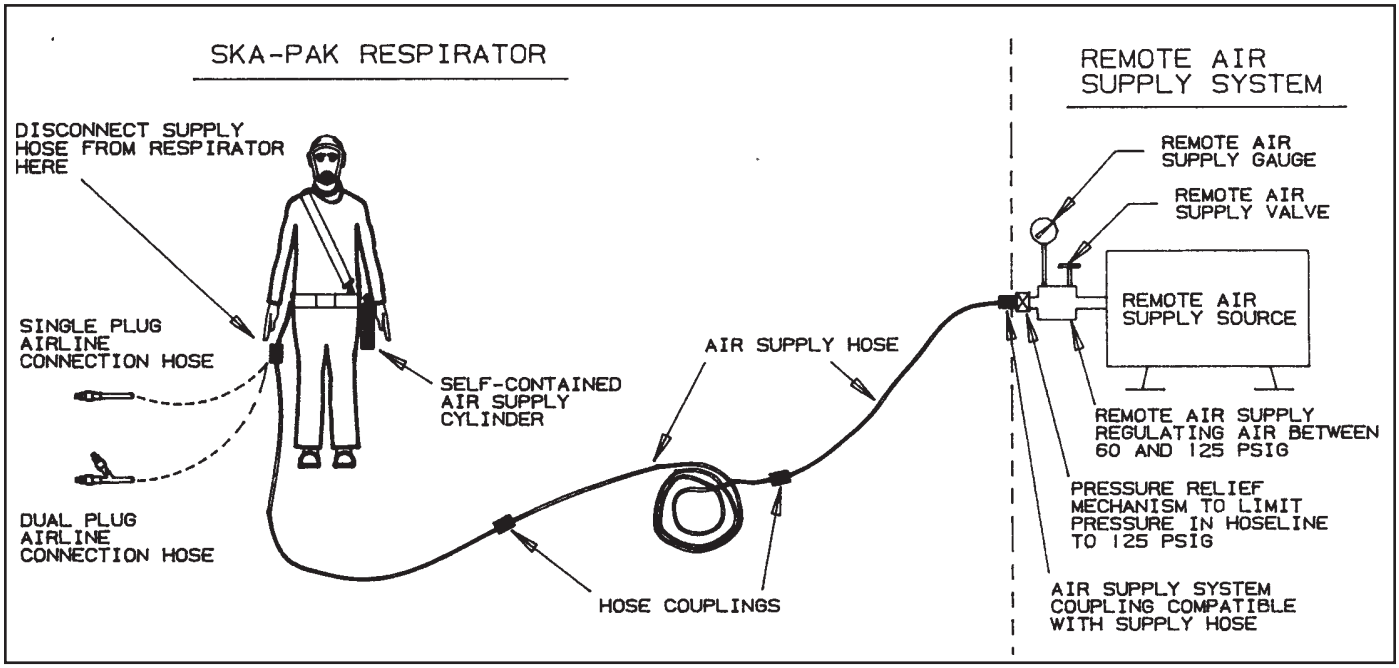



**FIGURE 2**

[7] Hansen is a registered trademark of Tuthill Corporation.
[8] Foster is a registered trademark of Foster Manufacturing Co., Inc.
[9] Schrader is a registered trademark of Scovill, Inc.
[10] Cejn is a registered trademark of Cejn AB

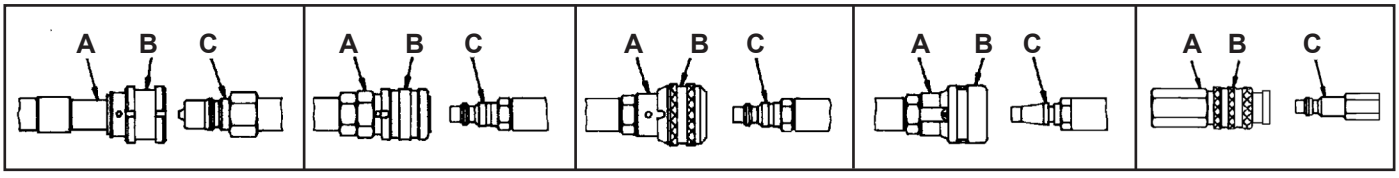
## WARNING

**THE USER OF THIS RESPIRATOR MAY HAVE TO DISCONNECT THE HOSE COUPLING SUDDENLY AND UNDER STRESSFUL CONDITIONS. THE USER MUST BE ABLE TO DISCONNECT THE COUPLING UNDER THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING USE, FOR EXAMPLE, WITHOUT BEING ABLE TO SEE THE COUPLING, WITH GLOVES ON, WITH ONE HAND, ETC. FAILURE OF THE USER TO ADEQUATELY PERFORM THESE TASKS UNDER STRESSFUL CONDITIONS MAY RESULT IN SERIOUS INJURY OR DEATH.**

## TABLE 1
## LIMITATIONS AND OPERATING INSTRUCTIONS FOR SUPPLY HOSE
**NOTE: THE AIR SUPPLY PRESSURE MUST BE MAINTAINED BETWEEN 80 PSIG AND 115 PSIG WHILE FLOWING AT LEAST 200 LITERS PER MINUTE (LPM) TO EACH USER.**

| Supply Hose[1] | Approved Total Lengths[2] (in ft) | Maximum Number of Segments Approved [3] | INSTRUCTIONS FOR OPERATION OF COUPLINGS<br>**Note: The user shall practice and be able to disconnect the couplings quickly in an emergency situation.** |
|---|---|---|---|
| 26369 Series with stainless steel Hansen HK couplings | 0 to 150 | 6 | 1. To connect the coupling, rotate socket sleeve "B" until the alignment notch in the sleeve is in line with alignment peg in body "A".<br>2. Slide sleeve "B" toward the supply hose (away from plug "C") and insert plug "C" into socket "A". Release sleeve "B" while pushing the plug into the socket until engaged, as evidenced by a "click". Test for positive engagement by tugging on the plug.<br>3. Rotate sleeve "B" one-quarter to one-half turn to lock the plug against accidental release.<br>4. To disconnect the coupling, realign sleeve "B" with the body of socket "A" as described in step 1. Slide sleeve "B" away from the body (toward the supply hose) to release the plug fitting from the socket.<br>IF IT IS NOT PRACTICAL TO SEE THE ALIGNMENT NOTCH IN THE SLEEVE, USE THE FOLLOWING PROCEDURE TO DISCONNECT THE COUPLING:<br>1. Grasp sleeve "B" with the right hand.<br>2. Simultaneously rotate and push the sleeve away from the plug until the alignment notch in the sleeve lines up with the alignment peg in the body and the socket separates from the plug. |
| 26370-Series or 200820-Series, or 803904-01 Hose with stainless steel Foster couplings | 0 to 300 | 12 | |
| 30010 Series with brass Hansen couplings | 0 to 300 | 12 | |
| 30020 Series with steel Schrader couplings | 0 to 300 | 12 | 1. Insert plug fitting "C" into socket "A" and continue pushing until it is engaged as evidenced by a "click".<br>2. Test for positive engagement by tugging on the plug.<br>3. Disconnect the coupling by rotating sleeve "B" 1/8 turn in the clockwise direction as viewed from the female end of socket "A". |
| 805659 Series with brass CEJN couplings | 0 to 300 | 12 | 1. Insert plug fitting "C" into socket "A" and continue pushing until it is engaged as evidenced by a "click".<br>2. Test for positive engagement by tugging on the plug.<br>3. Disconnect the coupling by pushing in on plug "C" while pulling back on sleeve "B". Plug "C" will separate. |

[1] The female connectors on all supply hose series are checked to stop the flow of air when they are disconnected. Both male and female connectors are checked on 26369 series supply hose.
[2] "0" feet = direct connection to air supply source.
[3] Segments of supply hose are commonly available in 25 ft, 50 ft, 75 ft, and 100 ft length segments.

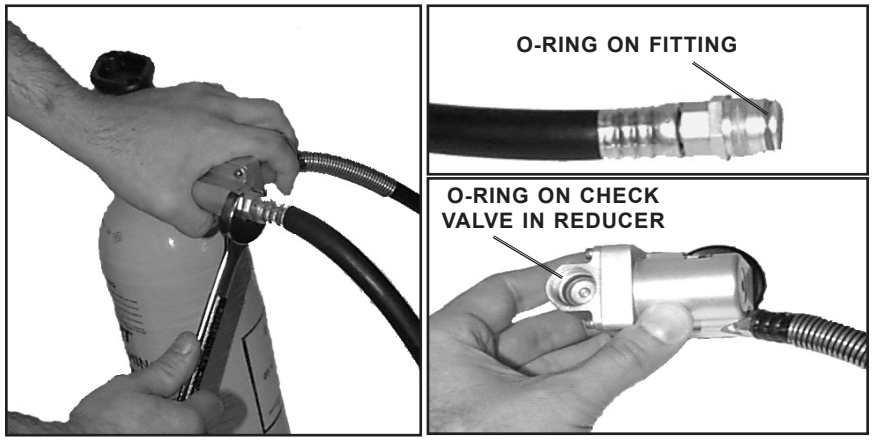



HANSEN HK COUPLING USED ON 26369 SERIES | FOSTER COUPLING USED ON 26370 SERIES | HANSEN COUPLING USED ON 30010 SERIES | SCHRADER COUPLING USED ON 30020 SERIES | CEJN COUPLING USED ON 805659 SERIES

## FIGURE 3
## COUPLINGS USED ON SUPPLY HOSES

## AIRLINE CONNECTION HOSE REPLACEMENT

To replace an airline connection hose with a different type of Scott airline connection hose, remove the hose from the pressure reducer by loosening the fitting on the end of the hose with a $^{3}/_{4}$ inch open end wrench until it separates from the pressure reducer. See FIGURE 4.




REPLACING THE AIRLINE CONNECTION HOSE
**FIGURE 4**

**WARNING**

**DO NOT ATTEMPT TO CHANGE ANY FITTINGS ON THE RESPIRATOR OR RESPIRATOR SUPPLY HOSE. THE USE OF FITTINGS, CONNECTIONS OR ADAPTERS NOT SUPPLIED BY SCOTT MAY VOID THE WARRANTY, VOID NIOSH CERTIFICATION AND MAY ADVERSELY EFFECT RESPIRATOR PERFORMANCE AND ENDANGER THE RESPIRATOR USER RESULTING IN SERIOUS INJURY OR DEATH.**

Inspect the airline connection hose to be installed to be certain that the hose is dry, free from obstructions, that the threads on the end fitting are not damaged and that the O-ring seal on the hose fitting is present and in good condition. If the threads are damaged or if the O-ring seal is missing or damaged, DO NOT USE THE AIRLINE CONNECTION HOSE; remove the airline connection hose from service and tag for repair by authorized personnel.

Inspect the O-ring in the reducer and replace if damaged. Before installing hose, be sure the check valve is properly installed in the reducer and the O-ring is placed on the check valve.

To install an airline connection hose, slide the end with the fitting through the sleeve on the waist belt from the right side as worn and thread the fitting into the pressure reducer using moderate force.

## TABLE 2
## IDENTIFICATION OF SUPPLY HOSE AND SUPPLY HOSE COUPLINGS

| SCOTT Airline Connection Hose Assy Number[11] | Corresponding SCOTT Supply Hose Required[12] | Type of coupling required from coupling manufacturer for connection to air supply system SEE WARNING BELOW | Air Supply Couplings Available from SCOTT |
|---|---|---|---|
| 804305-01 Single Plug or 804319-01 Dual Plug | 30010-SERIES, 26370-SERIES, 200820-SERIES or 803904-01 | Hansen 3000 Series[13] or Foster 3 Series Manual | Part No. 19458-00[14] Part No. 19889-00[5] |
| 804305-02 Single Plug or 804319-02 Dual Plug | 30020-Series | Schrader Standard Twist Lock | Part No. 6831-00[14] Part No. 55065-00[15] |
| 804305-03 Single Plug or 804319-03 Dual Plug | 26369-Series | Hansen 2HK Series | Part No. 10008005[15] |
| 804305-07 Single Plug | 805659-Series | Cejn 342 Series | Not Available |

NOTES:
[11] SCOTT Part Number stamped into end of hose. See FIGURE 2.
[12] SCOTT Part Number stamped into hose within 6 inches of either end.
[13] Specify silicone seals if ordering couplings from the manufacturer.
[14] Female connector with 1/4 inch male NPT inlet fitting.
[15] Female connector with 1/4 inch female NPT inlet fitting.

## ELECTRONIC ALARM BATTERY REPLACEMENT

The ELECTRONIC alarm requires a single 9 volt battery for operation. The LOW BATTERY YELLOW light on the ELECTRONIC alarm will appear when the battery must be replaced. When the LOW BATTERY YELLOW light begins flashing, the battery has sufficient power to continue normal operation for a period of time longer than the longest duration cylinder that may be installed on the SKA-PAK AT respirator. However, after use of the respirator is terminated, the battery must be replaced before respirator use is resumed. Once the LOW BATTERY YELLOW light has been activated, the ELECTRONIC alarm will not initialize on start-up with a depleted battery and the RED warning light will not operate. Beyond a point, the YELLOW LIGHT will glow instead of flash. Replace the battery as follows:

1. Verify that the cylinder valve is closed and open the purge valve to relieve any pressure in the system. Close the purge valve.
2. Unscrew counterclockwise the single knurled screw on the cover of the ELECTRONIC alarm housing.
3. Open the housing cover and pull the cover gasket away from the cover to reveal the battery. See FIGURE 5A.


FIGURE 5A


FIGURE 5B

4. Remove the old battery by lifting the bottom first.
5. Replace with one of the following 9 volt batteries: Energizer Alkaline No. 522 or EN22, Duracell Alkaline No. PC1604 or MN1604, or for increased service life use Ultralife Lithium Battery No. U9VL.
   Be sure battery is properly oriented with the + pole of the battery (the smaller male snap connector) positioned against the battery contact labeled + as shown in FIGURE 5B. As soon as the battery makes contact, the RED and YELLOW lights will flash alternately as they do for the initialization sequence. IF THE BATTERY IS INSTALLED INCORRECTLY, NEITHER LIGHT WILL FLASH.
6. With a fresh battery installed, fit the cover gasket back around the inside of the cover.
7. Close the cover and thread the knurled screw clockwise back in to secure the cover to the housing. Screw should be finger tight with the cover fully closed and the gasket evenly compressed.
8. Test the operation of the ELECTRONIC alarm as outlined in the REGULAR OPERATIONAL INSPECTION section of this instruction.
9. In the case of an inoperative or malfunctioning ELECTRONIC alarm, respirator must be removed from service and sent to an authorized service center for alarm repair or replacement. **DO NOT** use a respirator with an inoperative or malfunctioning ELECTRONIC alarm.

### WARNING

**BATTERY MUST ONLY BE CHANGED IN AN AREA KNOWN TO BE NONFLAMMABLE. CHANGING THE BATTERY IN A FLAMMABLE ATMOSPHERE MAY CAUSE AN IGNITION WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

### CAUTION

**OVERTIGHTENING THE CYLINDER VALVE MAY CAUSE DAMAGE THAT COULD RESULT IN LEAKAGE OF AIR FROM THE CYLINDER. USE NO TOOLS TO CLOSE THE CYLINDER VALVE.**

### WARNING

**REGULARLY INSPECT THE SKA-PAK AT RESPIRATOR INCLUDING THE ELECTRONIC ALARM AS DESCRIBED IN THIS INSTRUCTION. VERIFY THAT THE PROPER BATTERIES ARE USED AND THAT THERE IS NO DAMAGE TO OR MODIFICATION OF THE UNIT THAT WOULD IMPAIR THE INTRINSIC SAFETY. IF THE SKA-PAK AT RESPIRATOR IS USED IN AN EXPLOSIVE OR FLAMMABLE ATMOSPHERE, FAILURE TO CORRECT CONDITIONS THAT MAY IMPAIR THE INTRINSIC SAFETY OF THE EQUIPMENT MAY LEAD TO A FIRE OR AN EXPLOSION WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

## REGULAR OPERATIONAL INSPECTION

The following procedure shall be used when you first receive the respirator and for scheduled inspection of the respirator. All respirators shall be inspected after each use. A respirator not routinely used but kept for emergency use shall be inspected at least monthly. If damage or discrepancies are noted during the inspection of the respirator, remove the respirator from service and tag for repair by authorized personnel.

Ensure that the cylinder valve is closed (push in and rotate the cylinder valve knob full clockwise).

To vent any trapped air in the system, open the purge valve by rotating the red knob on the breathing regulator to the full counterclockwise position. Any trapped air will flow from the regulator. Close the purge valve by rotating the knob to the full clockwise position when air flow stops.

### ***CYLINDER INSPECTION***

**NOTE**

IT IS THE RESPONSIBILITY OF THE USER TO ENSURE THAT ALL DOT REQUIREMENTS FOR THE SELF-CONTAINED AIR SUPPLY CYLINDER ON THIS RESPIRATOR ARE MET AND MAINTAINED.

1. Check the latest cylinder hydrostatic test date to ensure it is current. All cylinders used with SCOTT self-contained breathing apparatus must be visually inspected regularly and hydrostatically tested by a licensed cylinder retester 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 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 retester.
2. 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 and emptied of compressed air. Refer to current applicable publications on compressed gas cylinder inspection available from Compressed Gas Association Inc. (703-413-4341), 1725 Jefferson Davis Hwy., #1004, Arlington, VA 22202.
3. Check the cylinder gauge for a “FULL” indication. If the cylinder pressure is less than “FULL,” replace the cylinder with a fully charged cylinder or have the cylinder charged to the full condition.

Proceed to ***HARNESS INSPECTION***.

**WARNING**

**FOLLOW THE REGULAR OPERATIONAL INSPECTION PROCEDURE EXACTLY. IF THE PURGE DOES NOT ACTUATE AS DESCRIBED IN THIS INSTRUCTION OR ANY OTHER OPERATIONAL MALFUNCTION IS NOTED, DO NOT USE THE RESPIRATOR. REMOVE THE RESPIRATOR FROM SERVICE AND TAG IT FOR REPAIR BY AUTHORIZED PERSONNEL. FAILURE TO PROPERLY IDENTIFY MALFUNCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.**

**CAUTION**

**OVERTIGHTENING THE CYLINDER VALVE MAY CAUSE DAMAGE THAT COULD RESULT IN LEAKAGE OF AIR FROM THE CYLINDER. USE NO TOOLS TO CLOSE THE CYLINDER VALVE.**

**WARNING**

**REGULARLY INSPECT THE SKA-PAK AT RESPIRATOR INCLUDING THE ELECTRONIC ALARM AS DESCRIBED IN THIS INSTRUCTION. VERIFY THAT THE PROPER BATTERIES ARE USED AND THAT THERE IS NO DAMAGE TO OR MODIFICATION OF THE UNIT THAT WOULD IMPAIR THE INTRINSIC SAFETY. IF THE SKA-PAK AT RESPIRATOR IS USED IN AN EXPLOSIVE OR FLAMMABLE ATMOSPHERE, FAILURE TO CORRECT CONDITIONS THAT MAY IMPAIR THE INTRINSIC SAFETY OF THE EQUIPMENT MAY LEAD TO A FIRE OR AN EXPLOSION WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

**WARNING**

**THIS INSPECTION PROCEDURE REQUIRES USING A SMALL AMOUNT OF AIR FROM THE SELF-CONTAINED AIR SUPPLY CYLINDER ON EACH INSPECTION. IF THE CYLINDER GAUGE IS NO LONGER READING "FULL", THE CYLINDER MUST BE RECHARGED TO ITS FULL CONDITION BEFORE RETURNING TO SERVICE. USE OF A CYLINDER AIR SUPPLY THAT IS LESS THAN FULL MAY RESULT IN REDUCED DURATION OF THE RESPIRATOR AND MAY RESULT IN SUDDEN TERMINATION OF BREATHING AIR WHICH COULD CAUSE SERIOUS INJURY OR DEATH.**

**WARNING**

**DAMAGED CYLINDERS MAY SUDDENLY LEAK OR RUPTURE IF LEFT CHARGED WITH COMPRESSED AIR. FAILURE TO INSPECT FOR DAMAGE AND TO EMPTY THE AIR FROM DAMAGED CYLINDERS MAY RESULT IN SERIOUS INJURY OR DEATH.**

**REGULAR OPERATIONAL INSPECTION CONTINUED ON NEXT PAGE...**

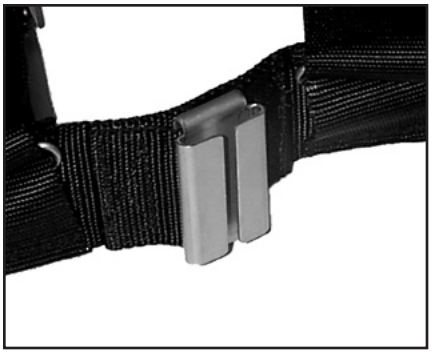
## *HARNESS INSPECTION*

1. Inspect the harness as follows:
   a) Inspect the Standard Harness for frayed webbing or damaged buckles. Make sure that all belts and straps are assembled properly as shown on Front Cover. Adjust the straps to approximately the full out position. Adjust the shoulder strap so that it holds the waist belt approximately at waist level.
   b). Inspect the Full Body Harness for frayed webbing or damaged buckles. Make sure that the Full Body Harness is assembled properly as shown on Page 4 and referenced in the DBI/SALA full body harness user instructions (SCOTT P/N 89497-01) provided with the harness. If any damage is found, do not use the harness.

**NOTE**

IF THE FULL BODY HARNESS HAS BEEN SUBJECTED TO FALL ARREST OR IMPACT FORCES, IT MUST BE IMMEDIATELY REMOVED FROM SERVICE AND DESTROYED.

2. Inspect the cylinder attachment to the harness as follows:
   a) If the SKA-PAK AT respirator is fitted to a SKA-PAK PLUS harness (either a standard harness or a Full Body Harness), inspect the valve hanger bracket and the female buckle. The valve hanger bracket should be securely engaged in the female buckle and should not lift out with normal handling. To remove the air supply cylinder from the harness, press the release tab at the bottom of the hanger bracket away from the cylinder valve and lift the air supply cylinder. See FIGURE 6A.



FEMALE BUCKLE
STANDARD HARNESS


VALVE HANGER BRACKET

FEMALE BUCKLE
FULL BODY HARNESS

**FIGURE 6A**
**SKA-PAK PLUS HARNESS ATTACHMENTS**

b) If the SKA-PAK AT respirator has been retrofitted to an existing SKA-PAK harness, verify that the cylinder and valve assembly is properly fitted to the harness. Inspect the cylinder clamps. Both clamps must be tight and hold the cylinder to the harness securely. Tighten as necessary. See FIGURE 6B.


**FIGURE 6B**
**SKA-PAK HARNESS ATTACHMENTS**

Proceed to ***PRESSURE REDUCER AND AIR PATH INSPECTION***.

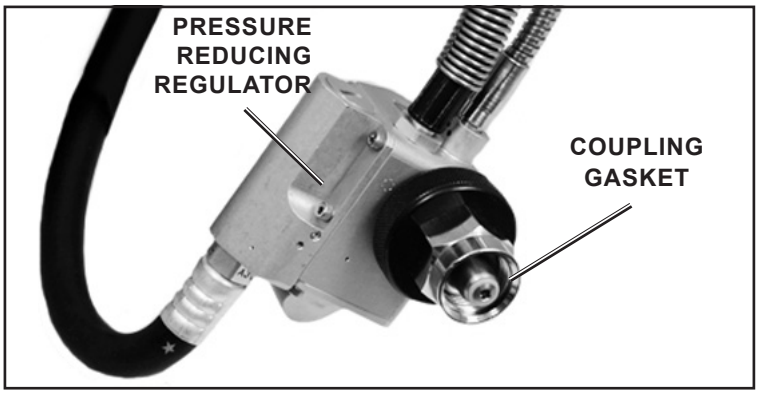
**REGULAR OPERATIONAL INSPECTION**
**CONTINUED ON NEXT PAGE...**

## ***PRESSURE REDUCER AND AIR PATH INSPECTION***

1. Inspect the gauge and ELECTRONIC alarm for damage or modifications that may impair the intrinsic safety. Verify that a fresh battery is installed in the ELECTRONIC alarm. The ELECTRONIC alarm requires one 9V battery for operation. See the ELECTRONIC ALARM BATTERY REPLACEMENT section of this instruction.
2. Inspect the pressure reducer for exterior damage.
3. Inspect the cylinder valve outlet threads and the coupling gasket. The gasket is located on the nipple coupling that connects the pressure reducer to the cylinder valve. To expose the threads and the gasket for inspection, grasp the hand wheel coupling on the pressure reducer and turn the hand wheel counterclockwise until the pressure reducer separates from the cylinder valve. Inspect the cylinder valve outlet for bent or damaged threads. If the gasket is present and in good condition and the valve outlet is undamaged, thread the coupling back onto the cylinder valve using hand tight pressure. See FIGURE 7.

**WARNING**

**A DAMAGED OR MISSING COUPLING GASKET MAY CAUSE AIR LEAKAGE THAT MAY REDUCE THE DURATION OF USE WHICH COULD RESULT IN CIRCUMSTANCES THAT COULD CAUSE SERIOUS INJURY OR DEATH.**




COUPLING GASKET
**FIGURE 7**

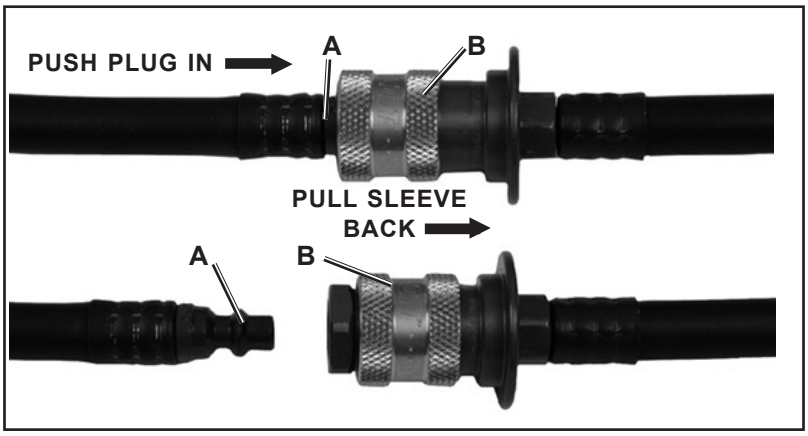
**CAUTION**

**WRENCHES SHALL NOT BE USED TO TIGHTEN THE HOSE COUPLING. OVER TIGHTENING THE HOSE COUPLING MAY DAMAGE THE NIPPLE SEAL.**

4. Inspect the airline connection hose for cuts or damage. Check that it is installed tightly into the pressure reducing regulator at one end and that the plug is free from dirt accumulations at the other end; check both plugs on dual airline connection hoses. Clean as required. Care must be taken to remove any dirt accumulations or obstructions from the plug without allowing them to enter the airline connection hose. Inspect the body and plugs at the end of dual airline connection hoses for damage and ensure the plugs are threaded tightly into the body. Inspect the dust cap on dual airline connection hoses for damage and install it on one of the plugs.
5. Inspect the air supply hose segments for cuts and signs of contamination. Check the end fittings of the hose for dirt accumulations or obstructions. Clean the fittings as required. Care must be taken to remove any dirt accumulations or obstructions from the fittings without allowing them to enter the air supply hose.
6. Inspect the hose assembly that connects the pressure reducer to the breathing regulator. Be sure that the hose is undamaged and connected tightly to the pressure reducer.
7. If the hose to the facepiece mounted breathing regulator is equipped with a quick disconnect check that the quick disconnect is engaged properly. See FIGURE 8. The quick disconnect operates as follows:

**WARNING**

**DIRT OR FOREIGN MATERIAL IN THE AIRLINE HOSE OR CONNECTION PLUG MAY CAUSE PARTIAL OR COMPLETE FAILURE OF THE RESPIRATOR IN HOSE LINE OPERATION OR IN SELF-CONTAINED OPERATION. FAILURE TO INSPECT THE AIRLINE CONNECTION COULD RESULT IN SERIOUS INJURY OR DEATH.**




QUICK DISCONNECT FITTING
**FIGURE 8**

**WARNING**

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

   a) While pushing the plug “A” into the socket, pull the locking sleeve “B” back toward the guard. The plug “A” will separate.
   b) To reconnect, push plug “A” into socket until the locking sleeve “B” pops forward. Test for proper engagement by tugging on the coupling.
8. Check that the breathing regulator purge valve (red knob on regulator) is closed (knob turned fully clockwise and pointer on knob upward).
9. Inspect the breathing regulator for exterior damage. Verify that the breathing regulator is clean.
10. Check that the breathing regulator is installed properly into the facepiece. The retaining latch on the breathing regulator (located opposite the purge valve) shall be engaged with the notch on the right hand side of the facepiece as worn.

Proceed to ***INSPECTION OF THE FACEPIECE***.

**WARNING**

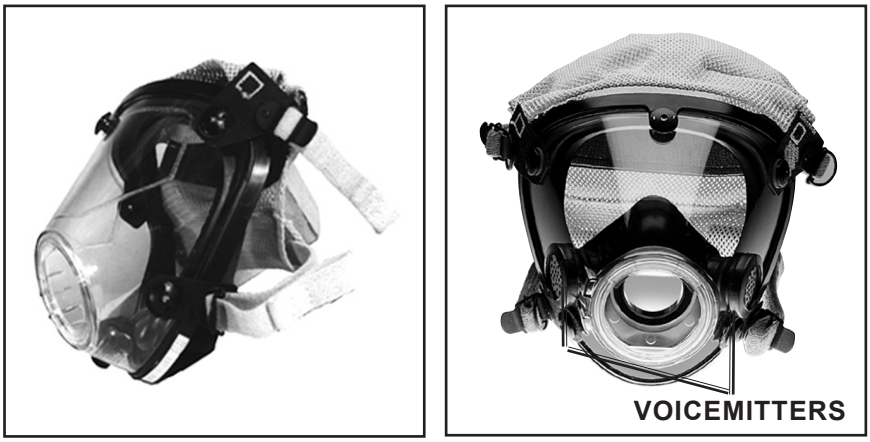
**CLOSE THE PURGE VALVE WHEN NOT IN USE. FAILURE TO CLOSE THE PURGE VALVE WILL EMPTY THE SELF-CONTAINED AIR SUPPLY IN A VERY SHORT TIME, POSSIBLY LESS THAN 2 MINUTES WHICH WILL REDUCE THE DURATION OF USE AND COULD RESULT IN CIRCUMSTANCES THAT COULD CAUSE SERIOUS INJURY OR DEATH.**

**REGULAR OPERATIONAL INSPECTION CONTINUED ON NEXT PAGE...**

## *INSPECTION OF THE FACEPIECE*

Examine the facepiece assembly for damaged or worn components. The facepiece must be complete and in serviceable condition with no worn, loose, or damaged components.

- The AV-2000 style facepieces include the AV-2000, the Weld-O-Vista, and the Scott-O-Vista (the Scott-O-Vista does not have voicemitters).
- The AV-3000 style facepieces include the AV-3000 and the AV-3000 SureSeal.




FACEPIECE WITH NO VOICEMITTERS

FACEPIECE WITH VOICEMITTERS

**FIGURE 9**

Inspect the facepiece as follows:

1. Inspect the facepiece seal and other rubber components for deformation, wear, damage, or cracks.
2. Inspect the lens for cracks, gouges, scratches, or any condition that could impair the operation of the facepiece or the user's vision.
3. Inspect the lens frame or bezel for damage such as cracks or distortion.
4. Check that all lens frame retainers or bezel screws are present and installed correctly.
5. Check that all harness anchors are present and operating properly.
6. Inspect the head harness for correct installation with all straps oriented correctly.
7. Inspect the head harness for damage or worn components.
8. Inspect the voicemitters for dents or damage. Verify that the voicemitters are properly installed and secure in the voicemitter ducts.

9. Inspect the nose cup for cuts or damage. Also look for any signs of damage to the facepiece port side of the nose cup where the regulator attaches.

10. Check that the nose cup is properly seated between the flanges of the voicemitter ducts. See FIGURE 10.

**FIGURE 10**
**Checking Voicemitter Ducts**

**CAUTION**

**IF THE NOSE CUP IS REMOVED FOR INSPECTION, MAKE CERTAIN IT IS REASSEMBLED CORRECTLY FOR THE MODEL FACEPIECE AND STYLE OF NOSE CUP.**

11. 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 , Weld-O-Vista, and AV-3000 full facepieces and optional on the SCOTT-O-VISTA full facepiece.

a) SCOTT AV-3000 and AV-3000 SureSeal Facepieces are available with two different styles of nose cup: a BLACK Nose Cup which fits behind the face seal, and a GRAY Nose Cup which fits in front of the face seal. The BLACK Nose cup must be fitted BEHIND the Face Seal as shown in FIGURE 11. The GRAY Nose Cup must be fitted IN FRONT OF the Face Seal as shown in FIGURE 12.

***AV-3000 FACEPIECES ONLY***


**FIGURE 11**
**BLACK Nose Cup**
**BEHIND Face Seal**

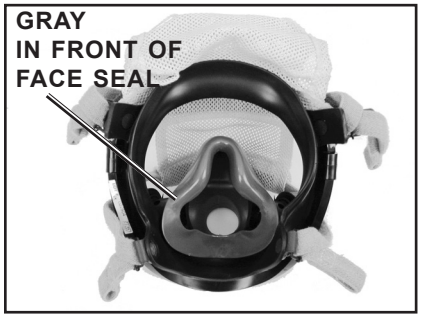



**FIGURE 12**
**GRAY Nose Cup**
**IN FRONT OF Face Seal**

**WARNING**

**TO MAINTAIN NIOSH APPROVAL, AN AV-3000 FACEPIECE EQUIPPED WITH A SURESEAL FACE SEAL P/N 31001738 (SMALL), P/N 31001739 (MEDIUM), OR P/N 31001740 (LARGE) MUST BE USED *ONLY* WITH GREY NOSE CUP P/N 31001043 (SMALL), P/N 31001044 (MEDIUM), OR P/N 31001045 (LARGE). USE OF A NON-APPROVED CONFIGURATION IN A HAZARDOUS ATMOSPHERE MAY RESULT IN SERIOUS INJURY OR DEATH.**

b) The AV-2000, the Weld-O-Vista, and the SCOTT-O-VISTA, the Nose Cup always goes BEHIND the face seal REGARDLESS of the color of the nose cup. See FIGURE 13.

***AV-2000 STYLE FACEPIECES ONLY***

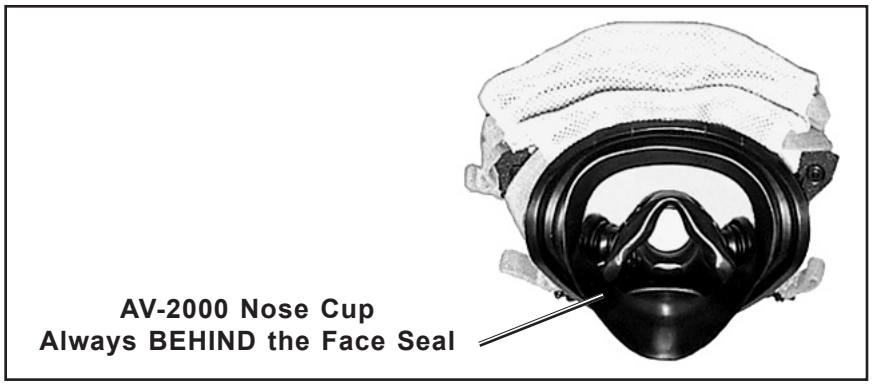



**FIGURE 13**

12. Verify that the facepiece is clean.
13. Adjust the head straps to the full outward position.

Proceed to ***OPERATIONAL TESTING OF THE RESPIRATOR***.

**REGULAR OPERATIONAL INSPECTION**
**CONTINUED ON NEXT PAGE...**

## REGULAR OPERATIONAL INSPECTION CONTINUED...

### *OPERATIONAL TESTING OF THE RESPIRATOR*

1. Don the facepiece properly (see donning procedures under USE OF THE RESPIRATOR) or hold the facepiece tightly to the face to effect a good seal. Inhale slightly and hold breath. A negative pressure (suction) shall be created, pulling the facepiece toward the face. Hold breath for 5 to 10 seconds. If leakage is noted, remove the respirator from service and tag for repair by authorized personnel.
2. Briefly remove the facepiece (see doffing procedures under TERMINATION OF USE) to take a breath if necessary. Don the facepiece or hold the facepiece tightly to the face. Depress the air-saver/donning switch fully and release. Open the cylinder valve by turning the valve knob counterclockwise fully. The VIBRALERT will actuate and the ELECTRONIC alarm will flash for approximately five seconds to initialize. No air flow shall be detected at this time. Inhale sharply to start the flow of air, then take one breath and hold.

**NOTE**

IF THE PURGE VALVE IS ADJUSTED TO PRODUCE A FLOW, IT MAY NOT BE POSSIBLE TO RESET THE AIR-SAVER/DONNING SWITCH BY INHALING; CLOSE THE PURGE VALVE AND REPEAT THE TEST.

Air shall flow freely into the facepiece during inhalation and stop when inhalation ceases. VIBRALERT shall actuate. Hold breath for 5 to 10 seconds. If airflow continues after inhalation has ceased, recheck the fit of the facepiece (see Step 1). If airflow continues after checking the fit, remove the respirator from service and tag for repair by authorized personnel. Exhale into the facepiece and take a second breath. Air shall leave the facepiece through the exhalation valve during exhalation and fresh air shall flow into the facepiece on inhalation. Depress the air saver switch fully and release. Doff the facepiece. No air shall flow from the facepiece.

3. With the cylinder valve open and the air-saver/donning switch depressed, check the open end of the fitting on the airline connection hose for any sign of leakage. If leakage or if airflow from the airline connection hose can be detected from the fitting, DO NOT USE THE Respirator; remove the respirator from service and tag for repair by authorized personnel.

   On respirators equipped with a dual airline connection hose, check both plugs for leakage. If leakage or airflow can be detected from the fitting, DO NOT USE THE RESPIRATOR; remove the respirator from service and tag for repair by authorized personnel.

   Close the cylinder valve by pushing in on the cylinder valve knob while turning it fully clockwise. Vent any trapped air in the respirator by opening the purge valve momentarily. Close the purge valve when air flow and VIBRALERT stop. The ELECTRONIC alarm shall flash until air is purged from the system. Check the gauge on the air cylinder to be certain the cylinder still indicates “FULL.”

**WARNING**

**AIR FLOW FROM THE AIRLINE CONNECTION HOSE WILL CONSUME AIR FROM THE SELF-CONTAINED AIR SUPPLY AND CAN SIGNIFICANTLY SHORTEN THE DURATION OF THE RESPIRATOR. FAILURE TO PROVIDE A FULL CYLINDER WITH THE SKA-PAK AT RESPIRATOR MAY LEAD TO CIRCUMSTANCES THAT COULD RESULT IN SERIOUS INJURY OR DEATH.**

**WARNING**

**IF THE VIBRALERT END OF SERVICE TIME INDICATOR DOES NOT ACTUATE AS DESCRIBED, DO NOT USE THE RESPIRATOR. REMOVE THE RESPIRATOR FROM SERVICE AND TAG FOR REPAIR BY AUTHORIZED PERSONNEL. USE OF A RESPIRATOR WITHOUT A PROPERLY OPERATING VIBRALERT END OF SERVICE TIME INDICATOR MAY RESULT IN SERIOUS INJURY OR DEATH.**

**WARNING**

**NEVER PLACE A SKA-PAK AT RESPIRATOR IN SERVICE IF THE CYLINDER GAUGE INDICATES LESS THAN "FULL." AIR LOSS FROM THE SELF-CONTAINED AIR SUPPLY CYLINDER DUE TO INSPECTION AND TESTING CAN SIGNIFICANTLY SHORTEN THE DURATION OF THE RESPIRATOR. FAILURE TO PROVIDE A FULL CYLINDER WITH THE SKA-PAK AT RESPIRATOR MAY LEAD TO CIRCUMSTANCES THAT COULD RESULT IN SERIOUS INJURY OR DEATH.**

**CAUTION**

**OVERTIGHTENING THE CYLINDER VALVE MAY CAUSE DAMAGE THAT COULD RESULT IN LEAKAGE OF AIR FROM THE CYLINDER. USE NO TOOLS TO CLOSE THE CYLINDER VALVE.**

4. Connect the respirator to the air supply system using one or more segments of air supply hose. There shall be no air flow from the facepiece. Don the facepiece or place it tightly against the face. Inhale sharply to start the flow of air. Take several breaths. The VIBRALERT end of service time indicator and the ELECTRONIC alarm shall NOT actuate. Air shall leave the facepiece through the exhalation valve on exhalation and fresh air shall flow into the facepiece on inhalation. On respirators equipped with dual airline connection hoses, remove the dust cap from the second plug and connect a second hose to the respirator. The respirator shall operate as described above. Disconnect the first hose. The respirator shall operate as described above. Cover the unused plug with the dust cap.

   At the completion of REGULAR OPERATIONAL INSPECTION, depress the air-saver/donning switch, doff the facepiece and disconnect the respirator from the air supply source. Prepare the facepiece for donning by adjusting the head harness straps to the full out position.

   Verify that the air supply cylinder gauge is reading "FULL." If gauge is reading less than "FULL" replace air supply cylinder with one that is "FULL."

**WARNING**

**DO NOT USE THE SELF-CONTAINED AIR SUPPLY FOR ANY PURPOSE OTHER THAN EMERGENCY ESCAPE. IF THE SELF-CONTAINED AIR SUPPLY HAS BEEN DEPLETED, THERE MAY BE INSUFFICIENT AIR SUPPLY FOR ESCAPE WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

## PREPARATION FOR USE

The purpose for the self-contained air supply on the SKA-PAK AT respirator is to provide breathable air during escape from objectionable, oxygen deficient and/or unbreathable (toxic) atmospheres.

If respirator use is expected at temperatures near or below freezing or if the respirator is to be stored in temperatures near or below freezing, refer to LOW TEMPERATURE OPERATION section for additional information and supplemental procedures.

Before initiating any activity which requires use of the SKA-PAK AT respirator, both the normal exit route and one or more emergency escape routes to an area with a safe, breathable atmosphere shall be determined. During normal exit, the respirator will be supplied with air through the air supply hose from the air supply system. Emergency exit routes shall be such that they can be travelled using the self-contained air supply.

If escape cannot be safely accomplished within the limited time of respiratory protection provided by this respirator after the air supply hose is disconnected, DO NOT USE THIS RESPIRATOR; make whatever changes are required for safety, such as selecting a respirator of appropriate self-contained duration.

Determine the amount of air supply hose required for the job and ensure that it is less than or equal to the maximum allowable length of that type of hose. See Table 1.

Be certain that the air supply system is providing safe, respirable breathing air and is compatible with the air supply hose. Be certain that personnel who are knowledgeable in the operation of the air supply system are present to monitor and maintain the supply pressure at the point of attachment of the air supply hose(s) to the air supply system(s).

Verify that the air supply cylinder gauge is reading "FULL." If gauge is reading less than "FULL" replace air supply cylinder with one that is "FULL."

**WARNING**

**EMERGENCY SITUATIONS TEND TO INCREASE BREATHING RATE AND, THEREFORE, TO DECREASE THE ACTUAL DURATION OF THE SELF-CONTAINED AIR SUPPLY. FAILURE TO TAKE SUCH FACTORS INTO ACCOUNT WHEN USING THE RESPIRATOR FOR ESCAPE MAY RESULT IN SUDDEN TERMINATION OF BREATHING AIR WHICH COULD CAUSE SERIOUS INJURY OR DEATH.**

**WARNING**

**USE ONLY BREATHING AIR WHICH MEETS THE REQUIREMENTS AS DESCRIBED IN THE AIR SUPPLY REQUIREMENTS SECTION OF THIS INSTRUCTION. USE OF AN AIR SUPPLY THAT DOES NOT MEET THE REQUIREMENTS COULD RESULT IN SERIOUS INJURY OR DEATH.**

**WARNING**

**THE AIR SUPPLY PRESSURE MUST REMAIN BETWEEN 80 PSIG AND 115 PSIG WITH SUITABLE FLOW AT ALL TIMES DURING USE. IF THE AIR SUPPLY DOES NOT MAINTAIN THESE REQUIREMENTS, THE RESPIRATOR MAY NOT PROVIDE ADEQUATE PROTECTION FROM THE HAZARDOUS ATMOSPHERE WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.**

## ***DONNING THE STANDARD RESPIRATOR HARNESS***

For the Multipurpose Full Body Harness, refer to the DBI/SALA user instructions (SCOTT P/N 89497-01) included with the harness for complete information on application, fitting, maintenance and inspection of the. Don the Full Body Harness in accordance with the DBI/SALA user instructions (SCOTT P/N 89497-01). Make sure that air supply cylinder, pressure reducer, air supply hose and regulator do not get tangled in harness. Ensure that the regulator hose hugs the back by pulling the hose through the two loops on the right shoulder of the harness to take up any slack.

For all other harnesses, follow the procedure below to place the respirator on the body and position the facepiece for donning. The following steps apply to both the flame resistant and corrosion resistant harness. Both harnesses are configured to place the air supply cylinder on the left hip.

Grasp the shoulder strap such that the facepiece is toward the front of the wearer and the air supply cylinder is next to the left foot. Pass the shoulder strap over the left shoulder and head onto the right shoulder. Draw the waist belt around the waist with the air supply cylinder at the left hip and engage the waist belt buckle. See FIGURE 14.

**WARNING**

**USE ONLY WITH A FULL AIR SUPPLY CYLINDER. IF AIR SUPPLY CYLINDER GAUGE READS LESS THAN FULL, REPLACE WITH A FULL CYLINDER BEFORE USE. USE WITH AN AIR SUPPLY CYLINDER THAT IS LESS THAN FULL MAY SIGNIFICANTLY REDUCE THE AVAILABLE BREATHING AIR SUPPLY CAUSING SUDDEN TERMINATION OF BREATHING AIR RESULTING IN SERIOUS INJURY OR DEATH.**

PLACING THE RESPIRATOR ON THE BODY

**FIGURE 14**

Insert the male connector into the female connector until engaged as evidenced by a “click”. Test for positive engagement by pulling on the buckle. To release the buckle, depress the two locking tabs on the top and the bottom of the buckle simultaneously and separate the two halves.

**NOTE**

HARNESS MUST ALWAYS BE WORN SUCH THAT SHOULDER STRAP AND WAIST BELT CONNECTION BUCKLES LAY FLAT AGAINST THE WEARER WITHOUT ANY TWISTS OR BEING WRAPPED UNDER WAIST BELT.

Adjust the waist belt. Tighten or loosen the waist belt by sliding the waist belt tri-slide buckle. See FIGURE 15.

ADJUSTING THE WAIST BELT
**FIGURE 15**

Adjust the shoulder strap tri-slide buckle so that it remains in place on the right shoulder and holds the waist belt at waist level. Ensure that the regulator hose is secured in the snap loop on the shoulder pad. See FIGURE 16.

ADJUSTING THE SHOULDER STRAP
**FIGURE 16**

If any other safety equipment is to be used with the SKA-PAK AT respirator, such as fall protection equipment or communication equipment, verify that the equipment does not interfere with the operation of the SKA-PAK AT respirator in any way. Verify that the SKA-PAK AT air lines are not obstructed and that nothing will interfere with the face to facepiece seal or dislodge the facepiece from the user's face in usage. If any obstruction or interference is suspected, do not use the respirator until the problem is corrected.

Position the required length of air supply hose and prepare it for use by connecting the segments to each other and to the air supply system. Adjust the pressure at the air supply system to the operating pressure of the respirator. Repeat this step for each air supply hose and each air supply system to be used.

Adjust all head straps to the full outward position. On respirators equipped with a neck strap, place the body harness on the shoulder before placing the neck strap around the neck. Position the facepiece in a ready to don position using the Scott Neck Strap Assembly. See ACCESSORIES.

**WARNING**

**DON THE BODY HARNESS BEFORE DONNING THE NECK STRAP AS INSTRUCTED. INTERFERENCE BETWEEN THE SHOULDER STRAP AND THE NECK STRAP MAY INTERFERE WITH PROPER DONNING OF THE FACEPIECE IN AN EMERGENCY WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

**WARNING**

**DO NOT USE ANY OTHER SAFETY EQUIPMENT WITH THE SKA-PAK AT RESPIRATOR WHICH INTERFERES WITH THE OPERATION OF THE SKA-PAK AT RESPIRATOR OR WHICH MAY CAUSE THE FACEPIECE TO BE PULLED FROM THE USER'S FACE EXPOSING THE USER TO THE HAZARDOUS ATMOSPHERE THE RESPIRATOR WAS INTENDED TO PROTECT AGAINST. FAILURE TO VERIFY THAT THE SKA-PAK AT RESPIRATOR WILL OPERATE PROPERLY MAY RESULT IN SERIOUS INJURY OR DEATH.**

**DONNING THE RESPIRATOR HARNESS**

**CONTINUED ON NEXT PAGE...**

## ***DONNING THE STANDARD RESPIRATOR HARNESS CONTINUED...***

Position the required length of air supply hose and prepare it for use by connecting the segments to each other and to the air supply system. Adjust the pressure at the air supply system to the operating pressure of the respirator. Repeat this step for each air supply hose and each air supply system to be used.

**WARNING**

**IF USE OF A HOSE IN THE WORK AREA WILL CREATE A HAZARD, DO NOT USE THIS RESPIRATOR. MAKE WHATEVER CHANGES ARE NECESSARY FOR SAFETY, SUCH AS SELECTING AN APPROPRIATE RESPIRATOR. FAILURE TO CONSIDER ALL POSSIBLE CIRCUMSTANCES IN THE USE OF THIS EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.**

**FIGURE 17**
CONNECTING SUPPLY HOSE AND "STANDBY" CONDITION
(SHOWN WITH OPTIONAL NECK STRAP ASSEMBLY)

Check to be certain that the hand coupling between the cylinder valve and the pressure reducer is tight and that the breathing regulator purge valve (red knob on regulator) is closed (knob turned fully clockwise). Depress the air-saver/donning switch and release. Connect the supply hose to the airline connection hose on the respirator. There will be no flow of air from the facepiece at this time.

**NOTE**

IF THE AIR-SAVER/DONNING SWITCH HAS NOT BEEN DEPRESSED OR IF THE PURGE VALVE IS NOT CLOSED PRIOR TO CONNECTING THE AIR SUPPLY HOSE TO THE RESPIRATOR, THERE WILL BE A CONSTANT FLOW OF AIR FROM THE FACEPIECE THAT WILL SUBSIDE AFTER THE FACEPIECE HAS BEEN PROPERLY DONNED AND/OR THE PURGE VALVE HAS BEEN CLOSED.

The user is now in “standby” condition. The respirator is in place but not in use.

**WARNING**

**DO NOT DROP OR DRAG THE FACEPIECE AFTER THE AIR SAVER SWITCH HAS BEEN DEPRESSED. AN IMPACT TO THE REGULATOR COULD RESTART THE AIR FLOW FROM THE REGULATOR. THE RESULTANT FREE FLOW OF AIR MAY AFFECT THE AIR SUPPLY PRESSURE AND/OR VOLUME TO OTHER USERS ON THE SAME SUPPLY SYSTEM WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

## ***DONNING THE FULL BODY/FALL PROTECTION RESPIRATOR HARNESS***

See the DBI/SALA user instructions (SCOTT P/N 89497-01) included with the full body/fall protection harness for complete information on application, fitting, maintenance and inspection of the full body/fall protection harness.

Don the harness in accordance with the DBI/SALA user instructions (SCOTT P/N 89497-01). Make sure that air supply cylinder, pressure reducer, air supply hose and regulator do not get tangled in harness. Ensure that the regulator hose hugs the back by pulling the hose through the two loops on the right shoulder of the harness to take up any slack.

On respirators equipped with a neck strap, don the full body/fall protection harness before placing the neck strap around the neck. Position the facepiece in a ready to don position using the SCOTT Neck Strap Assembly.

FULL BODY/FALL PROTECTION HARNESS
CONNECTING SUPPLY HOSE AND "STANDBY" CONDITION
**FIGURE 18**

Position the required length of air supply hose and prepare it for use by connecting the segments to each other and to the air supply system. Adjust the pressure at the air supply system to the operating pressure of the respirator. Repeat this step for each air supply hose and each air supply system to be used.

Check to be certain that the hand coupling between the cylinder valve and the pressure reducer is tight and that the breathing regulator purge valve (red knob on regulator) is closed (knob turned fully clockwise). Depress the air-saver/donning switch and release. Connect the supply hose to the airline connection hose on the respirator. There will be no flow of air from the facepiece at this time.

**NOTE**

IF THE AIR-SAVER/DONNING SWITCH HAS NOT BEEN DEPRESSED OR IF THE PURGE VALVE IS NOT CLOSED PRIOR TO CONNECTING THE AIR SUPPLY HOSE TO THE RESPIRATOR, THERE WILL BE A CONSTANT FLOW OF AIR FROM THE FACEPIECE THAT WILL SUBSIDE AFTER THE FACEPIECE HAS BEEN PROPERLY DONNED AND/OR THE PURGE VALVE HAS BEEN CLOSED.

The user is now in “standby” condition. The respirator is in place but not in use.

**WARNING**

**IF USE OF HOSE IN THE WORK AREA WILL CREATE A HAZARD, DO NOT USE THIS RESPIRATOR; MAKE WHATEVER CHANGES ARE NECESSARY FOR SAFETY, SUCH AS SELECTING AN APPROPRIATE RESPIRATOR. USE OF A RESPIRATOR THAT PRESENTS A HAZARD IN THE WORK AREA MAY RESULT IN SERIOUS INJURY OR DEATH.**

**WARNING**

**FAILURE TO DEPRESS THE AIR SAVER/DONNING SWITCH WHEN THE RESPIRATOR IN NOT IN USE OR CARELESS HANDLING OF THE FACEPIECE MOUNTED REGULATOR WILL RESULT IN A FREE FLOW OF AIR FROM THE RESPIRATOR WHICH MAY AFFECT THE AIR SUPPLY SYSTEM PRESSURE AND/OR VOLUME TO OTHER RESPIRATOR USERS ON THE SAME SUPPLY SYSTEM AND CAUSE SERIOUS INJURY OR DEATH.**

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

## USE OF RESPIRATOR CONTINUED...

### *FACEPIECE DONNING PROCEDURES*

Before use of the respirator, the user must read and practice the procedures for donning, use, and termination of use. The user must be familiar with and practice the prescribed donning, leak test, use, and termination of use procedures prior to respirator use. Follow the donning instructions for the model facepiece you have.

The DONNING INSTRUCTIONS for FOUR STRAP full facepieces (such as the AV-2000, AV-3000, Scott-O-Vista, and the Weld-O-Vista) and the FIVE STRAP full facepieces (such as the AV-3000 SureSeal) are included in this instruction.

The respirator MUST NOT be worn when conditions prevent a good face to facepiece seal. Such conditions include but are not limited to:

- long hair at the forehead or the side of the face that interferes with the sealing surface or gets caught in the head harness buckles,
- facial hair such as growth of beard or sideburns, or low hairline that crosses or interferes with the sealing surface,
- thick or protruding hairstyles such as pony tails or buns that interfere with the smooth and close fit of the head harness to the head,
- temple pieces on corrective glasses,
- a skull cap that projects under the facepiece,
- excessive use of cosmetics including moisturizers, make-up, or after shave,
- the absence of one or both dentures,
- weight loss or weight gain since last fit testing,
- facial scarring,
- anything else which interferes with the face to facepiece seal or the fit of the head harness to the head.

Periodically repeating the fit testing is required to identify any physical changes of the user (such as those listed above) which could affect the fit of the facepiece.

**NOTE**

IF THE STYLE FULL FACEPIECE RESPIRATOR MASK IS BEING DONNED FOR THE FIRST TIME OR IF THIS IS THE FIRST TIME A PARTICULAR STYLE FACEPIECE IS TO BE USED, REFER TO THE APPROPRIATE STEPS IN THE FACEPIECE FITTING SECTION OF THIS INSTRUCTION. DURING TRAINING, THE USER MUST DETERMINE THE LEVEL OF TIGHTNESS OF THE HEAD HARNESS REQUIRED TO PROVIDE THE BEST SEAL AND MOST SECURE FIT.

If the facepiece is to be used with a hood, refer to the donning instructions provided with the hood. For other head gear that will cover the facepiece head harness and/or hood, don the facepiece/hood first, then don the other head gear.

To don the facepiece and begin use of respirator, proceed as follows:

**WARNING**

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

***DONNING THE FOUR STRAP FACEPIECE***
***(including: AV-2000, AV-3000, Scott-O-Vista, and Weld-O-Vista)***

1. Adjust the head straps to their full outward position.
2. Hold the facepiece in one hand and hold the head harness by the strap at the base of the head net.
3. Place the facepiece on the face with chin properly located in the chin pocket while pulling the head harness over the top of the head. Verify that no hair or clothing is interfering with the face to facepiece seal. See FIGURE 19-A.
4. Tighten the neck straps by pulling the two lower strap ends toward the rear of the head. See FIGURE 19-B.
5. Stroke the head harness net down the back of the head using one or both hands. Verify that the head harness is lying flat against the back of the head. Retighten the neck straps. See FIGURE 19-C.

**NOTE**

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

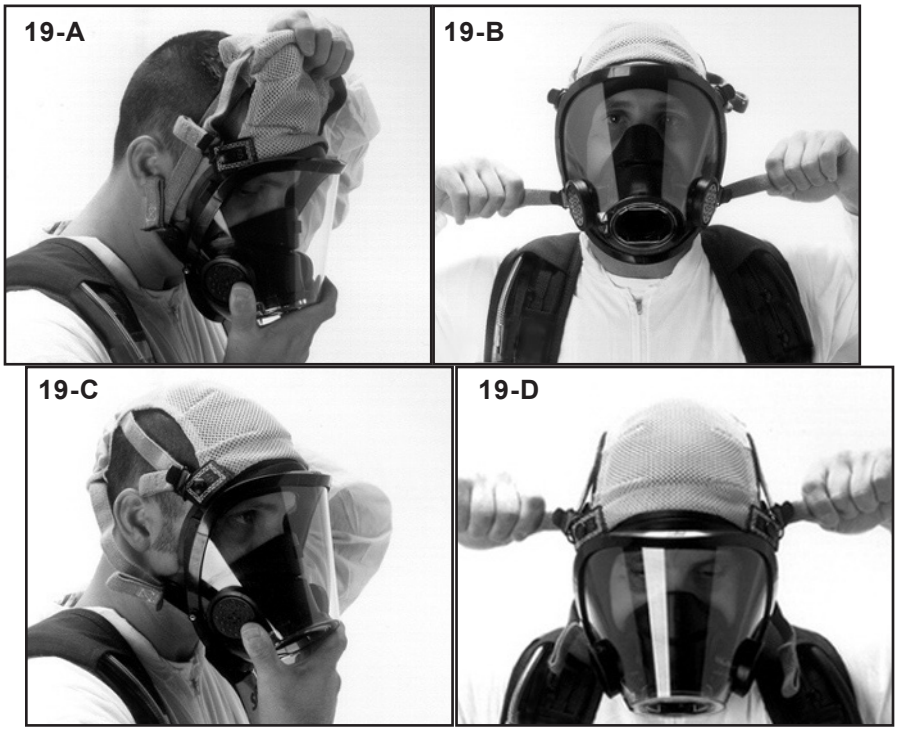



**FIGURE 19**
**DONNING THE FOUR STRAP FACEPIECE**

**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 FACEPIECE SEAL MAY REDUCE THE DURATION OF USE OF THE RESPIRATOR AND/OR EXPOSE THE USER TO THE ATMOSPHERE THE RESPIRATOR IS INTENDED TO PROTECT AGAINST RESULTING IN SERIOUS INJURY OR DEATH.**

6. Tighten the two temple straps. Adjust the temple straps by pulling the two temple strap ends toward the back of the head. Overtightening may cause discomfort. See FIGURE 19-D.
7. Retighten the neck straps if required.
8. Refer to the **DONNING PROBLEMS** section of this instruction.

**NOTE**

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

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

## USE OF RESPIRATOR CONTINUED...

***DONNING THE FIVE STRAP AV-3000 SURESEAL FACEPIECE***

1. Adjust the head straps to the full outward position.

**FIGURE 20-A**
**ADJUST HEAD STRAPS OUT**

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

**FIGURE 20-B**
**HARNESS OUT OF WAY**

3. Place the facepiece centered on the face with the chin properly positioned in the chin cup. Verify that no hair or clothing is interfering with the face to facepiece seal. Hold the facepiece in place with the chin properly located in the chin cup throughout the donning process.

**FIGURE 20-C**
**CHIN IN CHIN POCKET**

**NOTE**

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

4. Stroke the head harness over the head and ensure that straps are lying smooth and flat against the head and neck with no twists. Verify the head harness is centered and properly located at the back and base of the head. Maintain the head harness in this position.

**FIGURE 20-D**
**HEAD HARNESS POSITION**

**NOTE**

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

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

**FIGURE 20-E**
**HOLD AND TIGHTEN**

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

**FIGURE 20-F**
**HOLD AND TIGHTEN**

7. Verify the proper location of the face in the facepiece and the chin in the chin cup. Tighten the forehead strap last by pulling the forehead strap toward the back of the head. Do not overtighten the forehead strap.

**FIGURE 20-G**
**TIGHTEN FOREHEAD STRAP**

8. Verify that the head harness is centered on the crown of the head and lying flat against the back of the head. Verify the proper location of the face in the facepiece and the chin in the chin cup and retighten all straps as needed.

**FIGURE 20-H**
**HEAD HARNESS MUST BE FLAT AND CENTERED**

**NOTE**

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

**USE OF RESPIRATOR**
**CONTINUED ON NEXT PAGE...**

## USE OF RESPIRATOR CONTINUED...

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

**CENTER HEAD HARNESS ON THE CROWN OF THE HEAD**
**FIGURE 20-I**

**NOTE**

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

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

**FIGURE 20-J**
**RETIGHTEN IF REQUIRED**

**NOTE**

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

11. Refer to the **DONNING PROBLEMS** section of this instruction.

## ***DONNING PROBLEMS***

1. Perform a personal check of the Facepiece and Head Harness and address any donning problems. OSHA standard 29 CFR 1910.134 requires teams of at least two people for situations where this type of equipment is used. Have your partner help you verify the facepiece is donned properly.
   Possible problems include:
   a) Head Harness Strap twisted,
   b) Head Harness off-center or not flat against the head,
   c) Head Harness too high on the head,
   d) Hair or clothing in the face seal,
   e) Face seal rolled over inside the facepiece rather than flat against the face
   f) Facepiece is sitting too low on the face as evidenced by pressure on the forehead or the facepiece making contact with the throat area permitting a break in the seal.

   The illustrations below depict the AV-3000 SureSeal, but similar conditions can occur with the AV-2000 or AV-3000 facepiece as well.

**WARNING**

**IF ANY DONNING PROBLEMS ARE FOUND, REMOVE THE FACEPIECE AND RE-DON IT CORRECTLY. USE OF AN IMPROPERLY DONNED FACEPIECE MAY LEAD TO EXPOSURE TO THE HAZARDOUS ATMOSPHERE WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

**HARNESS STRAP TWISTED**

**HEAD HARNESS OFF CENTER**

**HEAD HARNESS TOO HIGH**

**FACE SEAL ROLLED OVER**

**FACEPIECE TOO LOW**

**FIGURE 21**
**DONNING PROBLEMS**

   If any donning problems are found, remove the facepiece and re-don the facepiece correctly.
2. Proceed to BEGIN USE OF THE RESPIRATOR as instructed below.

**USE OF RESPIRATOR**
**CONTINUED ON NEXT PAGE...**

## USE OF THE RESPIRATOR CONTINUED...

### ***BEGIN USE OF THE RESPIRATOR***

1. Replace head protection if required.
2. If regulator is not installed, depress donning switch and verify free flow of air has stopped. Verify the 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. Inhale sharply to start the flow of air. Take several deep breaths to check the operation of the respirator; breathing should be free and unrestricted as described under PREPARATION FOR USE.
3. **FULLY OPEN THE CYLINDER VALVE** by turning the valve knob to the full counterclockwise position. This will require approximately 2 $^{1}/_{2}$ complete rotations of the cylinder valve knob. The ELECTRONIC alarm shall flash both lights for approximately five seconds to initialize and stop. The cylinder pressure gauge on the ELECTRONIC alarm shall read "FULL". The VIBRALERT shall NOT actuate and breathing shall continue normally. See USE OF THE AUTOMATIC TRANSFER FEATURE section of this instruction.

**NOTE**

IF THE YELLOW BATTERY LIGHT CONTINUES TO FLASH AFTER INITIALIZATION, REPLACE THE BATTERY BEFORE USE OF THE RESPIRATOR. SEE THE ELECTRONIC ALARM BATTERY REPLACEMENT SECTION OF THIS INSTRUCTION.

Check the air pressure at the point of attachment of the air supply system to the supply hose during inhalation and exhalation; the air pressure shall meet the operating pressure requirements for the respirator at all times.

The airline connection hoses must be protected from moisture during use by keeping them connected to an air supply hose or, on dual plug versions, by capping the unused plug with the cap provided. If it is possible that water has entered the airline connection hose, remove the airline connection hose from the pressure reducer and purge the hose with clean, dry breathing air until the hose is dry. Care should be taken to avoid prolonged contact with or submergence of the air supply hose in liquid solvents and/or petroleum products during use. Absorption of solvents into the rubber supply hose over time may result in contamination of the air flowing through the hose.

**WARNING**

**IMMEDIATELY LEAVE THE CONTAMINATED AREA IF YOU DETECT ANY INDICATION OF RESPIRATOR MALFUNCTION SUCH AS THE SMELL OR TASTE OF CHEMICALS, IRRITATION OF THE EYES, NOSE OR THROAT, DIZZINESS OR NAUSEA, OR IF THE AIR SUPPLY TO THE RESPIRATOR BECOMES PARTIALLY OR COMPLETELY CUT OFF. FOLLOW THE EMERGENCY USE PROCEDURES FOR THIS RESPIRATOR AND ALL PRECAUTIONS AND PROCEDURES OF YOUR RESPIRATORY PROTECTION PROGRAM. FAILURE TO RECOGNIZE INDICATIONS OF RESPIRATOR MALFUNCTION MAY RESULT IN SERIOUS INJURY OR DEATH.**

**NOTE**

WHEN USING THE SKA-PAK AT RESPIRATOR WITH DUAL AIRLINE CONNECTION HOSE AND TRANSFER TO ANOTHER AIR SUPPLY HOSE IS ANTICIPATED DURING USE OF THE RESPIRATOR, THE USER SHALL CHECK THE OPERATION OF THE RESPIRATOR AS DESCRIBED ABOVE WITH EACH AIR SUPPLY HOSE AND EACH AIR SUPPLY SYSTEM THE SUPPLY HOSE MAY BE CONNECTED TO BEFORE ENTERING THE HAZARDOUS AREA. IF IT IS NOT POSSIBLE FOR THE USER OR OTHER PERSONS TRAINED IN USE OF THE RESPIRATOR TO CHECK THE AIR PRESSURE OF THE AIR SUPPLY SYSTEM BEFORE TRANSFER TO THAT SYSTEM DO NOT CONNECT THE RESPIRATOR TO THE AIR SUPPLY SYSTEM. TAKE WHATEVER ACTION NECESSARY TO ENSURE SAFETY, SUCH AS SELECTING AN APPROPRIATE RESPIRATOR.

Check the face-to-facepiece seal by holding your breath. Air flow into the facepiece should stop. If you hear flow through the regulator or feel air flow past the face seal, DO NOT PROCEED. If a good facepiece seal cannot be made, DO NOT USE THIS RESPIRATOR.

Proceed with use of the respirator in accordance with your respiratory protection program.

**WARNING**

**THE VALVE ON THE SELF-CONTAINED AIR SUPPLY CYLINDER MUST BE FULLY OPEN FOR PROPER OPERATION OF THE AUTOMATIC TRANSFER FEATURE. SEE THE USE OF AUTOMATIC TRANSFER FEATURE SECTION OF THIS INSTRUCTION. FAILURE TO UNDERSTAND THE OPERATION OF THIS EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.**

**WARNING**

**AIR LOSS FROM THE SELF-CONTAINED AIR SUPPLY CYLINDER DUE TO A POORLY FITTING FACEPIECE CAN SIGNIFICANTLY SHORTEN THE TIME THE RESPIRATOR WILL PROVIDE RESPIRATORY PROTECTION. USE OF A RESPIRATOR WITH A POORLY FITTING FACEPIECE MAY REDUCE THE DURATION OF PROTECTION RESULTING SERIOUS INJURY OR DEATH.**

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

## USE OF THE RESPIRATOR CONTINUED...

## USE OF THE AUTOMATIC TRANSFER FEATURE

Before entering the area requiring respiratory protection, test the Automatic Transfer feature of the SKA-PAK AT respirator as follows:

1. Breathe normally from the respirator supplied by the air supply hose.
2. Check that the air supply cylinder gauge is reading "FULL".
3. Check that the red purge valve on the facepiece mounted regulator is closed (fully clockwise and pointer on knob up).
4. **OPEN THE CYLINDER VALVE** by turning the valve knob to the full counterclockwise position. This will require approximately 2 $^{1}/_{2}$ complete rotations of the cylinder valve knob. The ELECTRONIC alarm shall flash both lights for approximately five seconds to initialize and stop. The cylinder pressure gauge on the ELECTRONIC alarm shall read "FULL". The VIBRALERT shall NOT actuate and breathing shall continue normally.
5. To test the Automatic Transfer, briefly disconnect the air supply hose from the airline connection hose. The SKA-PAK AT respirator shall begin to supply air from the air supply cylinder and actuate the VIBRALERT end of service time indicator.
6. Immediately reconnect the air supply hose to the airline connection hose. Air shall be supplied to the respirator from the air supply hose and the SKA-PAK AT respirator shall cease supplying air from the cylinder. The VIBRALERT end of service time indicator shall stop. ***Perform this test quickly to maintain supply of air in cylinder.***
7. If the ELECTRONIC alarm RED light begins to flash during or after the above test, check both the gauge on the air supply cylinder and the pressure gauge on the ELECTRONIC alarm. If the cylinder has dropped below 90% (+/-5%) of full volume, the ELECTRONIC alarm RED light will continue to flash. Replace the air supply cylinder with a "FULL" cylinder before entering the area requiring respiratory protection.
8. During use of the respirator in the hazardous atmosphere, if the VIBRALERT actuates at any time or the ELECTRONIC alarm RED light begins to flash, IMMEDIATELY LEAVE THE HAZARDOUS ATMOSPHERE AND DETERMINE THE CAUSE OF THE ALARM.

**NOTE**

IF THE AIR SUPPLY SYSTEM IS INCAPABLE OF MAINTAINING THE REQUIRED PRESSURE AND FLOW TO THE SKA-PAK AT respirator, THE VIBRALERT MAY ACTUATE INTERMITTENTLY. IF THE VIBRALERT END OF SERVICE TIME INDICATOR ACTUATES FOR ANY REASON, LEAVE THE HAZARDOUS ATMOSPHERE AND DETERMINE THE CAUSE OF THE ALARM.

### WARNING

**THE CYLINDER VALVE MUST BE FULLY OPENED AND THE PURGE VALVE MUST BE CLOSED (POINTER FACING UPWARD) FOR PROPER OPERATION OF THE AUTOMATIC TRANSFER FEATURE AND THE SELF-CONTAINED AIR SUPPLY DURING EMERGENCY ESCAPE. FAILURE TO CHECK THE CYLINDER VALVE AND PURGE VALVE MAY RESULT IN IMPROPER OPERATION OF THE RESPIRATOR AND LEAD TO SERIOUS INJURY OR DEATH.**

### CAUTION

**OVERTIGHTENING THE CYLINDER VALVE MAY CAUSE DAMAGE THAT COULD RESULT IN LEAKAGE OF AIR FROM THE CYLINDER. USE NO TOOLS TO CLOSE THE CYLINDER VALVE.**

### WARNING

**IF EITHER THE VIBRALERT END OF SERVICE TIME INDICATOR OR THE ELECTRONIC ALARM ACTUATES AT ANY TIME DURING RESPIRATOR USE, LEAVE THE AREA REQUIRING RESPIRATORY PROTECTION IMMEDIATELY. ACTUATION OF THE VIBRALERT MEANS THAT THE AIR SUPPLY HOSE HAS FAILED AND IS NO LONGER PROVIDING THE NECESSARY PRESSURE TO OPERATE THE RESPIRATOR. ACTUATION OF THE ELECTRONIC ALARM MEANS THAT THE AIR SUPPLY CYLINDER HAS BEEN DEPLETED TO 90% (+/-5%) OF FULL VOLUME. IN EITHER CASE, FAILURE TO LEAVE THE HAZARDOUS AREA IMMEDIATELY MAY RESULT IN SERIOUS INJURY OR DEATH.**

## TERMINATION OF USE

Exit from the area requiring respiratory protection is normally made by retracing the path used during entry so that exit can be made while air is supplied by the air supply system through the air supply hose.

After leaving the contaminated area and arriving in a safe, breathable atmosphere, doff the facepiece (i.e. remove the facepiece and terminate respiratory protection) as follows:

1. Be certain that respiratory protection is no longer required.
2. Loosen the head harness straps by simultaneously lifting the buckle release levers outward (away from the head) and pulling them away from face. The buckle release levers are U- shaped extensions of the facepiece buckle assemblies.
3. Depress the air-saver/donning switch fully and remove the facepiece by pulling it up and over the head. If the facepiece is removed before depressing the air-saver/donning switch or before disconnecting the air supply hose from the airline connection hose, there will be a constant flow of air from the facepiece. The user must be aware that while the respirator free-flows the air supply source pressure may drop significantly.
   Close the air supply cylinder valve by pushing in on the cylinder valve knob while turning clockwise.
   Disconnect the air supply hose from the airline connection hose and turn off the air supply system if not being used by others.
4. To resume use of the respirator, replace the air supply cylinder with a "FULL" cylinder and repeat the procedures in the PREPARATION FOR USE and USE OF THE RESPIRATOR sections above as applicable.
5. To terminate use, remove the respirator from service and tag for inspection and cleaning.

**WARNING**

**DO NOT DROP OR DRAG THE FACEPIECE AFTER THE AIR SAVER SWITCH HAS BEEN DEPRESSED. AN IMPACT TO THE REGULATOR COULD RESTART THE AIR FLOW FROM THE REGULATOR. THE RESULTANT FREE FLOW OF AIR MAY AFFECT THE AIR SUPPLY PRESSURE AND/OR VOLUME TO OTHER USERS ON THE SAME SUPPLY SYSTEM WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

## FAILURE OF THE RESPIRATOR TO SUPPLY AIR DURING ESCAPE

If air flow to the facepiece is interrupted while using the emergency air supply from the cylinder:

1. Be certain that the facepiece fits the face tightly during inhalation.
2. Check the cylinder air gauge and be certain the cylinder contains air (gauge indicates above empty).
3. Be certain that the cylinder valve is fully open.
4. Open purge valve by rotating the purge valve knob in the counterclockwise direction (pointer down) until air flow is sufficient for breathing.

**WARNING**

**USERS OF THIS RESPIRATOR MUST BE FULLY TRAINED IN THE USE OF THE RESPIRATOR UNDER THE CONDITIONS IT MAY HAVE TO BE USED. FAILURE TO TRAIN AND/OR FAILURE TO PRACTICE WITH THE RESPIRATOR MAY RESULT IN SERIOUS INJURY OR DEATH DURING AN EMERGENCY REQUIRING RESPIRATORY PROTECTION.**

**WARNING**

**ONLY OPEN THE PURGE VALVE AS FAR AS NEEDED FOR FREE BREATHING. IF PURGE VALVE IS FULLY OPEN, THE AIR CYLINDER WILL EMPTY VERY QUICKLY, POSSIBLY LESS THAN 2 MINUTES, AND MAY RESULT IN SUDDEN TERMINATION OF BREATHING AIR WHICH COULD CAUSE SERIOUS INJURY OR DEATH.**

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

## USE OF THE RESPIRATOR CONTINUED...

## EMERGENCY USE PROCEDURE

IF CONDITIONS IN THE WORKPLACE REQUIRE EMERGENCY EVACUATION during respirator use, the preferred procedure is to egress with respirator connected to the air supply hose following the path taken during entry into the workplace. If it becomes necessary to disconnect the respirator from the air supply hose for egress—for instance, if the hose is entangled or if it is necessary to exit by a different route—the user shall disconnect the hose and immediately leave the area requiring respiratory protection. The VIBRALERT end of service time indicator alarm shall actuate indicating that the respirator user is now breathing from the air supply cylinder. The ELECTRONIC alarm RED light shall actuate when the air supply in the cylinder has dropped below 90% (+/-5%) of "FULL".

IF EITHER THE VIBRALERT END OF SERVICE TIME INDICATOR OR THE ELECTRONIC ALARM ACTUATES AT ANY TIME DURING RESPIRATOR USE, leave the area requiring respiratory protection immediately. Actuation of the VIBRALERT means that the air supply has been interrupted and is no longer providing the necessary pressure to operate the respirator. Actuation of the ELECTRONIC alarm RED light means that the air supply cylinder has been depleted to 90% (+/-5%) of full volume. Actuation of the ELECTRONIC alarm LOW BATTERY YELLOW light means the battery must be changed. In any case, the user must leave the hazardous area immediately.

**NOTE**

THE SKA-PAK AT COMBINATION SCBA AND TYPE C RESPIRATOR IS A PRESSURE DEMAND OPEN CIRCUIT TYPE BREATHING APPARATUS. DURING USE, AIR SHALL FLOW FREELY INTO THE FACEPIECE DURING INHALATION ONLY, AND AIR SHALL CEASE FLOWING AT ALL OTHER TIMES. IF AIR CONTINUES TO FLOW FROM THE BREATHING REGULATOR AFTER INHALATION CEASES, THE PURGE VALVE (RED KNOB ON REGULATOR) MAY BE OPEN OR THE FACEPIECE MAY NOT BE SEALING AGAINST THE FACE. IF EXCESS AIR FLOW IS NOTICED DURING ESCAPE, CHECK THAT THE PURGE VALVE IS CLOSED (ROTATED FULL CLOCKWISE WITH POINTER ON KNOB UPWARD) AND THAT THE FACEPIECE HAS BEEN DONNED PROPERLY AND TIGHTENED PROPERLY WHILE CONTINUING YOUR ESCAPE.

1. **BREATHE** normally. When breathing from the air supply cylinder, the VIBRALERT end of service time indicator shall continue to actuate.
2. **DISCONNECT** the air supply hose from the airline connection hose, if necessary.
3. **EGRESS** to an area with a safe, breathable atmosphere following all precautions and procedures of your respiratory protection program.
4. When in a safe breathing atmosphere, doff the facepiece according to the instructions under TERMINATION OF USE.
5. Close the cylinder valve by pushing in and rotating the cylinder valve knob full clockwise.
6. Remove the respirator from service and tag for charging, inspection and cleaning.

### WARNING

**EMERGENCY SITUATIONS TEND TO INCREASE BREATHING RATE AND, THEREFORE, TO DECREASE THE ACTUAL DURATION OF THE SELF-CONTAINED AIR SUPPLY. FAILURE TO TAKE SUCH FACTORS INTO ACCOUNT WHEN USING THE RESPIRATOR FOR ESCAPE MAY RESULT IN SUDDEN TERMINATION OF BREATHING AIR WHICH COULD CAUSE SERIOUS INJURY OR DEATH.**

### WARNING

**THE VALVE ON THE SELF-CONTAINED AIR SUPPLY CYLINDER MUST BE FULLY OPEN FOR PROPER OPERATION OF THE AUTOMATIC TRANSFER FEATURE. SEE THE USE OF AUTOMATIC TRANSFER FEATURE SECTION OF THIS INSTRUCTION. FAILURE TO UNDERSTAND THE OPERATION OF THIS EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.**

### WARNING

**IF EITHER THE VIBRALERT END OF SERVICE TIME INDICATOR OR THE ELECTRONIC ALARM ACTUATES AT ANY TIME DURING RESPIRATOR USE, LEAVE THE AREA REQUIRING RESPIRATORY PROTECTION IMMEDIATELY. ACTUATION OF THE VIBRALERT MEANS THAT THE AIR SUPPLY HOSE HAS FAILED AND IS NO LONGER PROVIDING THE NECESSARY PRESSURE TO OPERATE THE RESPIRATOR. ACTUATION OF THE ELECTRONIC ALARM MEANS THAT THE AIR SUPPLY CYLINDER HAS BEEN DEPLETED TO 90% (+/-5%) OF FULL VOLUME. IN EITHER CASE, FAILURE TO LEAVE THE HAZARDOUS AREA IMMEDIATELY MAY RESULT IN SERIOUS INJURY OR DEATH.**

### WARNING

**THE USER OF THIS RESPIRATOR MAY HAVE TO DISCONNECT THE HOSE COUPLING SUDDENLY AND UNDER STRESSFUL CONDITIONS. THE USER MUST BE ABLE TO DISCONNECT THE COUPLING UNDER THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING USE, FOR EXAMPLE, WITHOUT BEING ABLE TO SEE THE COUPLING, WITH GLOVES ON, WITH ONE HAND, ETC. FAILURE TO ADEQUATELY TRAIN THE USER MAY RESULT IN SERIOUS INJURY OR DEATH.**

### CAUTION

**OVERTIGHTENING THE CYLINDER VALVE MAY CAUSE DAMAGE THAT COULD RESULT IN LEAKAGE OF AIR FROM THE CYLINDER. USE NO TOOLS TO CLOSE THE CYLINDER VALVE.**

### WARNING

**RESPIRATORS USED FOR EMERGENCY ESCAPE MUST BE THOROUGHLY INSPECTED AND RECHARGED BEFORE RETURNING TO SERVICE. FAILURE TO INSPECT THE RESPIRATOR AND RECHARGE THE SELF-CONTAINED AIR SUPPLY CYLINDER MAY RESULT IN A MALFUNCTION OF THE RESPIRATOR WHICH COULD CAUSE SERIOUS INJURY OR DEATH.**

## LOW TEMPERATURE OPERATION

The respirator is NIOSH approved for use in temperatures to -25 °F / -32 °C. For temperatures below +32 °F / 0 °C, approval requires use of a Nose cup Assembly.

Respirators intended for routine use and respirators not routinely used but kept for emergency use should be located in areas where the temperature is maintained above freezing, +32 °F / 0 °C. Where it is expected that the respirator will be used in ambient temperatures near or below freezing, the respirator shall be equipped with a Nose cup Assembly to reduce the formation of vision impairing mist or ice on the interior of the facepiece vision area.

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 used, the following modification to the USE OF THE RESPIRATOR section is required:

> WHEN USING A NOSE CUP ASSEMBLY, do not exhale into the facepiece until the facepiece is completely donned and the nose cup, if used, is properly in place against the face.

Whenever use of the respirator is anticipated in areas at or below freezing, the facepiece, regulator, airline connection hoses and air supply hoses MUST be protected against exposure to water during storage.

### WARNING

**THE NOSE CUP ASSEMBLY IS REQUIRED FOR USE OF THIS RESPIRATOR IN TEMPERATURES AT OR BELOW FREEZING, 32° F / 0° C. FAILURE TO USE THE NOSE CUP MAY CAUSE OBSCURED VISION AND/OR PARTIAL OR COMPLETE BLOCKAGE OF THE AIRFLOW WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

### WARNING

**RESPIRATORS MUST BE THOROUGHLY DRY BEFORE AND DURING STORAGE. MOISTURE ON A RESPIRATOR IN BELOW FREEZING TEMPERATURES MAY CAUSE A MALFUNCTION OF THE RESPIRATOR WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

### WARNING

**THE SELF-CONTAINED AIR SUPPLY CYLINDERS MUST BE FILLED 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. 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. FAILURE TO FILL THE CYLINDER WITH BREATHING AIR AS SPECIFIED MAY CAUSE A MALFUNCTION OF THE RESPIRATOR WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.**

## CLEANING THE RESPIRATOR

1. Damp sponge dirt accumulations from the exterior of the respirator.
2. If the air supply hose has been in contact with solvents and/or petroleum products, wash the hose with soap and water and allow to dry.
3. Clean the facepiece and mask mounted regulator as described below.

### ***CLEANING THE FACEPIECE***

Supplies needed:

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

**NOTE**

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

**NOTE**

DO NOT USE A QUATERNARY AMMONIA (AMMONIUM CHLORIDE) TYPE OF CLEANER.

1. 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 REMOVED 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 POROUS 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 MOISTURE HAS BEEN REMOVED FROM THE REGULATOR AS DESCRIBED IN THE **REGULATOR CHECK** SECTION OF THIS INSTRUCTION.

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.

**WARNING**

**CLEAN ALL AIR SUPPLY HOSES BEFORE STORAGE. SOLVENTS AND/OR PETROLEUM PRODUCTS MAY PENETRATE AIR SUPPLY HOSES IF STORED WITHOUT CLEANING. THE CONTAMINATES MAY PENETRATE THE HOSE RESULTING IN CONTAMINATION OF THE BREATHING AIR DURING THE NEXT USE CAUSING SERIOUS INJURY OR DEATH.**

**WARNING**

**KEEP SCOTT RECOMMENDED SANITIZING OR DISINFECTING CLEANER OUT OF REACH OF CHILDREN. IT IS A VIOLATION OF FEDERAL LAW TO USE THIS CLEANING PRODUCT IN A MANNER INCONSISTENT WITH THESE INSTRUCTIONS OR THE PRODUCT LABELING. IMPROPER USE OR HANDLING OF THIS PRODUCT MAY RESULT IN SERIOUS INJURY OR DEATH.**

**CAUTION**

**CERTAIN CLEANING AND DISINFECTING 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.**

**CAUTION**

**FAILURE TO THOROUGHLY RINSE AND COMPLETELY DRY THE ENTIRE FACEPIECE ASSEMBLY MAY ALLOW A BUILDUP OF DETERGENTS AND/OR DISINFECTING AGENTS WHICH COULD DAMAGE FACEPIECE COMPONENTS.**

3. Inspect the inside of the regulator assembly through the regulator opening. See FIGURE 22. If excessive dirt or soil is present, forward regulator assembly to SCOTT trained authorized personnel for thorough cleaning.

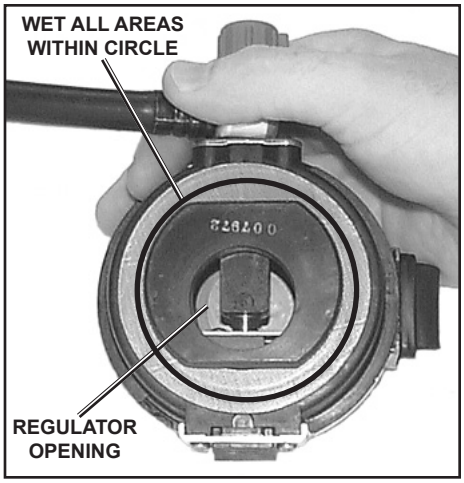



**FIGURE 22**

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 22. 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 LUBRICANTS 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 below.

## ***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 DESCRIBED 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 CLEANING THE MASK MOUNTED REGULATOR section and repeat the REGULATOR CHECK.

**WARNING**

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

**CAUTION**

**OVERTIGHTENING THE CYLINDER VALVE MAY CAUSE DAMAGE THAT COULD RESULT IN LEAKAGE OF AIR FROM THE CYLINDER. USE NO TOOLS TO CLOSE THE CYLINDER VALVE.**

## MAINTENANCE

No attempt shall be made to replace components or to make adjustments or repairs beyond the scope of this instruction manual without proper training.

Clean and inspect the respirator after each use as follows:

1. Inspect the equipment for worn or aging rubber parts, worn or frayed harness webbing or damaged components.
2. Remove the breathing regulator from the facepiece by pulling back on the regulator retaining latch and rotating the regulator $^{1}/_{4}$ turn.
3. Clean the respirator according to CLEANING THE RESPIRATOR section of this instruction. The unit must be thoroughly dry before storage.
4. Inspect the gasket on the breathing regulator that seals against the facepiece for rips or damage that may break the seal.
5. Connect the breathing regulator to the facepiece and rotate until it latches into place. Verify that the latch securely snaps into the notch on the facepiece.
7. Perform the REGULAR OPERATIONAL INSPECTION described in this instruction manual.
8. Store the respirator in a cool dry area.
9. If any damage or deterioration is noted, remove respirator from service and tag it for repair by authorized personnel.

**WARNING**

**USE OF RESPIRATORS WITH DAMAGED OR WORN COMPONENTS MAY RESULT IN A MALFUNCTION OF THE RESPIRATOR WHICH COULD CAUSE SERIOUS INJURY OR DEATH.**

**WARNING**

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

## STORAGE OF THE RESPIRATOR

1. Check to ensure gasket is present between facepiece and mask-mounted 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 8.
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.

**WARNING**

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

**WARNING**

**PLACING RESPIRATORS IN STORAGE WITHOUT THOROUGHLY DRYING THEM MAY RESULT IN CORROSION OR OTHER DAMAGE WHICH COULD CAUSE A MALFUNCTION 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 RESIDUAL MOISTURE WHICH MAY FREEZE IN COLD TEMPERATURES AND CAUSE A MALFUNCTION OF THE RESPIRATOR. SUCH A MALFUNCTION MAY RESULT IN SERIOUS INJURY OR DEATH.**

## 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[16]. However, heavy use may require more frequent testing. This recommendation is in addition to all other cleaning and maintenance procedures. A manual covering the maintenance of this respirator is available on request from SCOTT Safety.

## RESPIRATOR MARKINGS

Do not alter or permanently cover over any labels on the Scott SKA-PAK AT respirator or Scott SKA-PAK AT respirator cylinder and valve assembly. If user applied identification markings are added to the Scott SKA-PAK respirator or respirator cylinder and valve assembly, do not obscure any labels supplied on the SKA-PAK AT respirator or SKA-PAK AT respirator cylinder and valve assembly. Any user applied markings must be applied in such a way as will not weaken or damage the SKA-PAK AT respirator or SKA-PAK AT respirator cylinder and valve assembly, will not interfere with the proper function of these assemblies and will not add flammable materials to these assemblies.

**WARNING**

**APPLYING ANY MARKINGS OR LABELS THAT DAMAGE OR OBSCURE THE EXISTING LABELING MAY VOID THE APPROVAL OF THE CERTIFYING AGENCY BY INTERFERING 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 LABELS THAT DAMAGE OR INTERFERE WITH THE OPERATION OF THE RESPIRATOR. ANY USER APPLIED MARKINGS THAT INTERFERE WITH THE OPERATION OF THE RESPIRATOR MAY CAUSE A FAILURE OF THE RESPIRATOR AND MAY RESULT IN SERIOUS INJURY OR DEATH.**

[16] For respirators equipped with a breathing regulator with part number 200077-XX, inspect the respirator at least once a year.

## ACCESSORIES

The following accessories are available:

1. Neck Strap, P/N 804088-01, is used to hold the facepiece in the standby position.
2. A variety of Lens Kits are available to allow installation of corrective lenses in facepiece.
3. Clear protective Lens Cover, P/N 803941-25 (package of 25) to protect facepiece lens from external scratching, splatter, paint spray, and abrasion.
4. Dual airline connection hose assembly for redundant air supply hoses or to facilitate transfer between hoses. H-Type P/N 804319-01 with standard Hansen fittings, S-Type P/N 804319- 02 with standard Schrader fittings and HK-Type P/N 804319-03 with Hansen HK fittings.
5. Suit Pass-Thru, P/N 803620-01 with standard Hansen fittings and P/N 803620-02 with standard Schrader fittings.
6. Refer to the FACEPIECE FITTING AND FIT TESTING section of this instruction for information about Fit Testing Accessories. Consult your SCOTT distributor for details of availability and application.
7. A variety of SCOTT Full Facepieces are approved for use with the SKA-PAK AT respirator. Consult your SCOTT distributor for details.
8. Tool Kit with instruction for Scott-O-Vista and AV-2000 Maintenance, P/N 26978-01.

## CAUTIONS AND LIMITATIONS

D – AIR LINE 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.

I – CONTAINS ELECTRICAL PARTS WHICH HAVE NOT BEEN EVALUATED AS AN IGNITION SOURCE IN FLAMMABLE 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.

## S--SPECIAL OR CRITICAL USER'S INSTRUCTIONS

APPROVED FOR RESPIRATORY PROTECTION DURING ENTRY INTO AND ESCAPE FROM OXYGEN DEFICIENT ATMOSPHERES, GASES, AND VAPORS, WHEN USING THE AIRLINE SUPPLY.

APPROVED FOR ESCAPE ONLY WHEN USING THE SELF CONTAINED AIR SUPPLY.

APPROVED FOR USE AT TEMPERATURES ABOVE -25 °F / -32 °C.

APPROVED ONLY WHEN THE COMPRESSED-AIR CYLINDER 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.

THIS APPROVAL APPLIES ONLY WHEN THE DEVICE IS SUPPLIED WITH AIR FROM THE SELF-CONTAINED AIR SUPPLY OR RESPIRABLE BREATHING AIR.

IF THE SUPPLIED-AIR FAILS, PROCEED TO FRESH AIR IMMEDIATELY.

REFER TO TABLE 1 ON PAGE 23 FOR LIMITATIONS AND OPERATING INSTRUCTIONS FOR SUPPLY HOSE.

WHEN USING FACEPIECE 803921-01, 803921-02, 803921-03, OR 803921-08 AT TEMPERATURES BELOW +32° F / 0° C ADD OPTIONAL NOSE CUP ASSEMBLY 802819-01.

SEE LOW TEMPERATURE OPERATION SECTION OF THIS INSTRUCTION MANUAL FOR ADDITIONAL INFORMATION.

THE CONTAINER SHALL MEET APPLICABLE DOT SPECIFICATIONS.

SEE THE REGULAR OPERATIONAL INSPECTION SECTION OF THE INSTRUCTION MANUAL FOR ADDITIONAL INFORMATION.

THE SCOTT VOICE AMPLIFIER AND OTHER SCOTT COMMUNICATIONS DEVICES CAN ONLY BE USED WITH FACEPIECES EQUIPPED WITH DUAL VOICEMITTERS.

## WARNING

**IMPROPER USE OF A RESPIRATOR MAY RESULT IN SERIOUS INJURY OR DEATH. IMPROPER USE INCLUDES, 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.**

## SCOTT SAFETY

**LIMITED WARRANTY ON SKA-PAK AIRLINE RESPIRATOR PRODUCTS**

Scott Safety (SCOTT) warrants all of its SKA-PAK, SKA-PAK PLUS, and SKA-PAK AT airline respirator products to be free from defects in workmanship and materials for a period of five (5) years from the date of original manufacture by SCOTT. This warranty applies to all components of these SKA-PAK products EXCEPT consumables and electrically operated communication devices. Electrically operated communication devices are warranted for one (1) year from the date of original manufacture. SCOTT's obligation under this warranty is limited to replacing or repair (at SCOTT's option) SKA-PAK products shown to be defective in either workmanship or materials.

Only personnel of SCOTT or, when directed by SCOTT, authorized SCOTT agents are authorized to perform warranty obligations. This warranty does not apply to defects or damage caused by any repairs, of or alterations to SKA-PAK products made by owner or any third party unless expressly permitted by SCOTT product manuals or by written authorization from SCOTT. To obtain performance under this warranty, and as a condition precedent to any duty of SCOTT, the purchaser must return such products to SCOTT, a SCOTT authorized distributor, or a SCOTT authorized service center. Any product returned to SCOTT shall be sent to SCOTT SAFETY (Attn: Warranty Claim Dept.) 4320 Goldmine Road, Monroe, NC 28111.

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

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

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