

**DUAL EBSS ACCESSORY HOSE ASSEMBLY
FOR USE WITH THE SCOTT AIR-PAK® 75,
AIR-PAK® NxG, and AIR-PAK® X3 SERIES
NFPA-1981 (2013 Edition) Compliant
Self Contained Breathing Apparatus (SCBA)**

WARNING

THIS ACCESSORY HOSE IS INTENDED FOR USE WITH RESPIRATORS WHICH MAY SUPPORT HUMAN LIFE IN HAZARDOUS ATMOSPHERES. FAILURE TO CAREFULLY FOLLOW THESE INSTRUCTIONS HEREIN MAY RESULT IN SERIOUS INJURY OR DEATH.



TYPICAL DUAL EBSS ACCESSORY HOSE

WARNING

IMPROPER USE OF THE RESPIRATOR EQUIPPED WITH EITHER HOSE ASSEMBLY DESCRIBED IN THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH. IMPROPER USE INCLUDES, BUT IS NOT LIMITED TO, USE WITHOUT ADEQUATE TRAINING, DISREGARD OF THE WARNINGS AND INSTRUCTIONS CONTAINED HEREIN AND/OR THE WARNINGS AND INSTRUCTIONS PROVIDED WITH THE RESPIRATOR, AND FAILURE TO INSPECT AND MAINTAIN THIS RESPIRATOR.

THE INFORMATION PRESENTED HEREIN IS MEANT TO SUPPLEMENT, NOT REPLACE THE WARNINGS AND INSTRUCTIONS PROVIDED WITH YOUR RESPIRATOR, AND THE INSTRUCTION, TRAINING, SUPERVISION, MAINTENANCE, AND OTHER ELEMENTS OF YOUR ORGANIZED RESPIRATORY PROTECTION PROGRAM.

DESCRIPTION

The respirator packaged with these instructions is equipped with an Emergency Breathing Support System (EBSS) accessory hose. When used for emergency escape, an EBSS accessory hose must be used to supply breathing support air to ONLY ONE other respirator user. The DUAL EBSS ACCESSORY HOSE is intended to be used ONLY with properly equipped SCOTT respirators.

DUAL EBSS ACCESSORY HOSE

The DUAL EBSS accessory hose is a waist mounted hose equipped with both a female AND a male quick disconnect (dual manifold) used to supply air to or receive air from ONE other respirator user. In addition, the DUAL EBSS accessory hose may be connected to an extended duration air supply hose line to supply breathing air to the respirator user. The DUAL EBSS accessory hose is available on the SCOTT AIR-PAK 75, AIR-PAK NxG, and AIR-PAK X3 series SCBA.

Breathing support may be provided one of two ways with the DUAL EBSS hose.

- This hose may be connected to a compatible SCOTT SCBA configured with a quick disconnect in the regulator line by connecting the female side of the dual manifold to the regulator line, facepiece and head harness of the user to be supported.
- Another respirator also fitted with this dual manifold hose may receive emergency breathing support by connecting the two dual manifolds together. Never connect the dual manifold hose to more than one other respirator at a time.

When used for Extended Duration, the male connector on the DUAL EBSS hose is attached to the air supply line with a specific adapter suitable for the style of air supply line used. Adapter P/N 200112-SERIES must be used when connecting to an air supply line. By connecting to a breathing air supply line, the respirator will operate as an open-circuit, pressure demand, entry and escape, combination self-contained breathing apparatus and type C supplied air respirator.

A belt mounted carrying pouch with a snap opening is included to facilitate storage of the DUAL EBSS when not in use. The carrying pouch is mounted on the right hand side of the respirator.

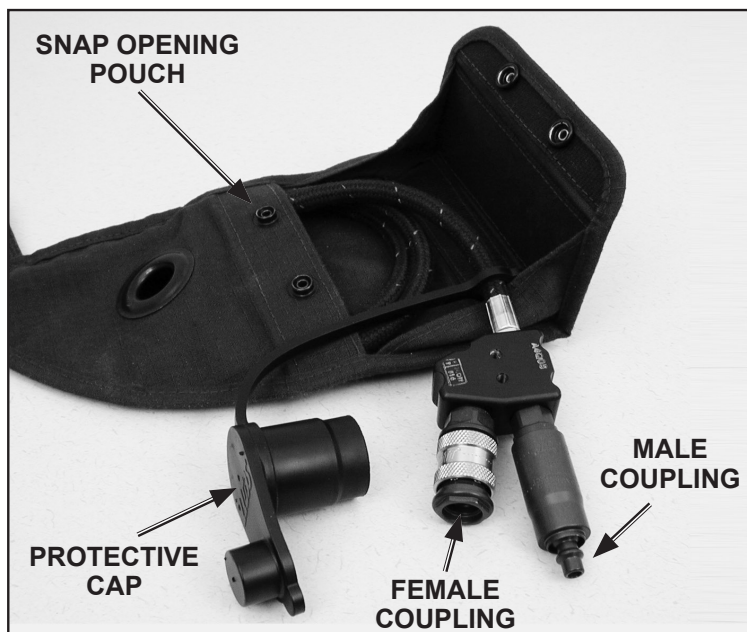


FIGURE 1
TYPICAL DUAL EBSS ACCESSORY HOSE

NOTE

AN SCBA MAY BE CONFIGURED WITH BOTH OF THESE ACCESSORY HOSES INSTALLED, OR WITH ADDITIONAL AIR SUPPLY ACCESSORY HOSES INSTALLED. SPECIAL TRAINING IS REQUIRED. REGARDLESS OF THE CONFIGURATION, NEVER TRY TO SUPPLY MORE THAN ONE OTHER RESPIRATOR USER WITH BREATHING AIR.

WARNING

WHEN USED FOR EMERGENCY ESCAPE, AN EBSS ACCESSORY HOSE IS INTENDED TO BE USED TO SUPPLY BREATHING SUPPORT AIR TO ONLY ONE OTHER RESPIRATOR USER. NEVER TRY TO SUPPLY MORE THAN ONE OTHER PERSON WITH BREATHING AIR USING ANY EBSS ACCESSORY HOSE OR HOSES. EVEN WITH A FULL CYLINDER, MULTIPLE USERS CAN QUICKLY DEplete THE AIR SUPPLY. INSUFFICIENT BREATHING AIR TO ESCAPE FROM THE HAZARDOUS ATMOSPHERE MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

NEVER WORK BEYOND THE END-OF-SERVICE INDICATOR ALARM WITH THE EXPECTATION THAT YOU CAN JOIN WITH ANOTHER RESPIRATOR USER FOR ESCAPE. OTHER RESPIRATOR USERS ARE ALSO CONSUMING THEIR AIR AND MAY NOT HAVE SUFFICIENT SUPPLY FOR TWO PEOPLE TO ESCAPE WHEN BREATHING FROM ONE CYLINDER. A DELAY IN LEAVING THE AREA AFTER ALARM ACTUATION MAY LEAD TO A LOSS OF BREATHING AIR RESULTING IN SERIOUS INJURY OR DEATH.

WARNING

ALL RESPIRATOR USERS MUST HAVE A PROPERLY FITTED FACEPIECE. FAILURE TO PROPERLY FIT AND DON THE FACEPIECE MAY RESULT IN A POOR FACE TO FACEPIECE SEAL DURING USE. A POOR 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.

WARNING

NEVER TRY TO SUPPLY MORE THAN ONE OTHER PERSON WITH BREATHING AIR USING ANY EBSS ACCESSORY HOSE OR HOSES. EVEN WITH A FULL CYLINDER, MULTIPLE USERS CAN QUICKLY DEplete THE AIR SUPPLY. INSUFFICIENT BREATHING AIR TO ESCAPE FROM THE HAZARDOUS ATMOSPHERE MAY RESULT IN SERIOUS INJURY OR DEATH.

TRAINING REQUIRED BEFORE USE

Special training and care is required for use of any accessory hose described in these instructions.

Training must include practice in a variety of scenarios to simulate actual emergency escape situations. Skills to practice include:

- Assessing the situation to determine the best escape route from the hazardous atmosphere to fresh air.
- Connecting and disconnecting the hose couplings in a variety of situations.
- Actual use of the equipment with two people connected and breathing from one cylinder while moving through obstacles on a simulated escape route.

You must have the OPERATING AND MAINTENANCE Instructions originally supplied with the SCOTT respirator. Additional copies are available through SCOTT Safety and its distributors.

When the respirator is pressurized, the accessory hose is also pressurized. The DUAL EBSS manifold male quick disconnect can release high pressure air (160 psi) when the check valve sleeve is pulled back. Do not pull back the check valve sleeve and point the male quick disconnect at anyone. High pressure air pointed at unprotected skin may cause transmission of air into the blood stream causing air embolism and other tissue damage. High pressure air introduced into a body cavity may cause serious or fatal injury.

Care must also be exercised when using any accessory hose described in these instructions to avoid snagging or tangling of the hose and misuse or damage which could result in partial or complete loss of breathing air. Any damage such as cuts or breakage to the hose or to the quick disconnects may result in uncontrolled air loss from the respirator. If damage occurs when connected and in use by two persons for emergency breathing support, the air loss will be from both respirator cylinders.

This respirator is NIOSH/MSHA certified as described by the approval label attached to the assembly. However, NIOSH/MSHA has no guidelines and does not test nor certify respirators when being used to give or receive emergency breathing support.

This equipment is suitable for use in the same atmospheres and temperature ranges as the SCOTT SCBA to which it is installed. There is no potential hazard of using this hose per instructions in flammable atmospheres.

WARNING

WHEN THE RESPIRATOR IS PRESSURIZED, THE MALE QUICK DISCONNECT ON THE DUAL EBSS CAN RELEASE HIGH PRESSURE AIR WHEN THE CHECK VALVE SLEEVE IS PULLED BACK. RELEASING AIR REDUCES THE AMOUNT OF BREATHING AIR AVAILABLE IN THE CYLINDER. FAILURE TO CONSERVE BREATHING AIR MAY RESULT IN INSUFFICIENT AIR FOR AN EMERGENCY SITUATION WHICH MAY LEAD TO SERIOUS INJURY OR DEATH.

REGULAR OPERATIONAL INSPECTION

Before use of an SCBA equipped with an EBSS accessory hose, add the following steps to the REGULAR OPERATIONAL INSPECTION of the respirator as defined in the user instructions provided with the respirator:

1. Verify that the installation of the DUAL EBSS hose does not interfere with the removal and reinstallation of the cylinder and valve assembly.
2. Inspect the Pouch to confirm that it is not damaged or missing. Verify that both snaps properly engage and disengage.
3. Verify that the Protective Cap is installed and is not damaged. If the Protective Cap is missing or damaged, remove the respirator from service and tag for repair.
4. Inspect both the male and female quick disconnects on the DUAL EBSS manifold. Pay special attention to the following:
 - a) Inspect the operation of the external check valve sleeve on the male quick disconnect. If any damage is noted, do not use the apparatus. Remove it from service and tag for repair.
 - b) Inspect the condition of the male quick disconnect for signs of wear. Particularly look for wear on the locking ridge as shown in FIGURE 2.
If the coating is worn through and bare metal is showing, do not use the apparatus. Remove it from service and tag for repair.
5. Open the cylinder valve on the self-contained breathing apparatus (SCBA) to pressurize the system.



FIGURE 2

NOTE

PUSH IN THE DONNING SWITCH ON THE REGULATOR TO PREVENT FLOW WHILE PERFORMING LEAK TEST.

6. Check the connection of the DUAL EBSS hose to the outlet manifold assembly using soap solution or other leak detection methods. There shall be no evidence of external leakage.
7. Check the quick disconnect fittings at the end of the DUAL EBSS hose. Minor leakage, not to exceed one bubble in five seconds, is acceptable. If greater flow is detected, do not use apparatus. Remove it from service and tag for repair.
8. Insert female end of Male/Female adapter P/N 200112-SERIES into the male fitting on the dual manifold. Check that there is no evidence of flow from the end of the adapter. See FIGURE 3. Remove the adapter from the male coupling.

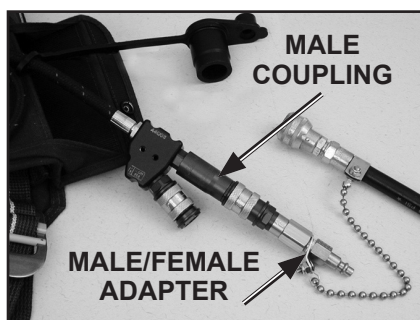


FIGURE 3

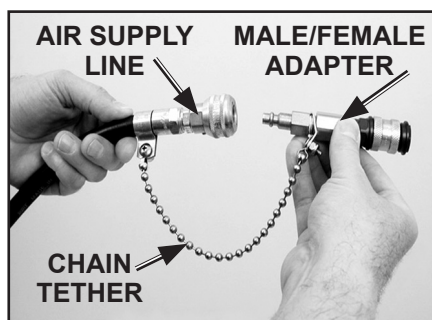


FIGURE 4

9. Insert the male end of each Male/Female adapter P/N 200112-SERIES into the female fitting on an air supply line. Check that there is no evidence of flow from the end of the adapter or any sign of leakage from the assembly. See FIGURE 4. Minor leakage, not to exceed one bubble in five seconds, is acceptable. If greater flow is detected, do not use the apparatus. Remove it from service and tag for repair.
10. Don the system and verify proper operation as a self-contained breathing apparatus in accordance with the Operating and Maintenance Instructions supplied with the SCBA.
11. Close cylinder and vent residual pressure from system.

WARNING

COMPRESSED AIR IS HAZARDOUS. WHEN THE RESPIRATOR IS PRESSURIZED, THE DUAL EBSS HOSE CAN EMIT 160 PSI OF COMPRESSED AIR IF THE CHECK VALVE SLEEVE ON THE MALE QUICK DISCONNECT IS RETRACTED. DO NOT RETRACT THE CHECK VALVE SLEEVE WHEN THE RESPIRATOR IS PRESSURIZED. DO NOT POINT THE DUAL EBSS HOSE AT ANYONE AND RETRACT THE CHECK VALVE SLEEVE. CARELESS HANDLING OF COMPRESSED AIR MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

VERIFY THAT THE EXTERNAL CHECK VALVE SLEEVE ON THE MALE SIDE OF THE DUAL EBSS MOVES FREELY AND SEALS PROPERLY WHEN THE MALE QUICK DISCONNECT IS NOT IN USE. FAILURE TO IDENTIFY A MALFUNCTION OF THE EXTERNAL CHECK VALVE SLEEVE MAY LEAD TO LOSS OF BREATHING AIR WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

WARNING

USE CARE WHEN HANDLING THE DUAL EBSS HOSE. IF THE RESPIRATOR IS PRESSURIZED AND THE HOSE BECOMES CUT OR DAMAGED, IT MAY CAUSE LOSS OF THE AIR SUPPLY IN THE AIR SUPPLY CYLINDER. IF CONNECTED TO ANOTHER DUAL EBSS ON ANOTHER RESPIRATOR, IT MAY CAUSE LOSS OF THE AIR SUPPLY FROM BOTH CYLINDERS. LOSS OF THE CYLINDER AIR SUPPLY MAY RESULT IN SERIOUS INJURY OR DEATH.

PREPARATION FOR USE OF THE EMERGENCY BREATHING SUPPORT SYSTEM (EBSS)

When considering providing Emergency Breathing Support, consider the following points:

- **KNOW YOUR ESCAPE ROUTE.** The person offering Emergency Breathing Support must have sufficient breathing air supply left in the cylinder to support two people for the duration of time required to follow the escape route to fresh air.
- Because two users will be connected to one cylinder of air, the duration of the air supply cylinder will be significantly less than the rated duration of the respirator supplying the air to one person. For example, when connected to a second respirator user and emergency breathing support is given, a fully charged 30 minute rated respirator may supply no more than fifteen (15) minutes of emergency escape breathing support for two people. The actual duration obtained will probably be much less and depends on the same conditions as outlined in the SERVICE LIFE section of the standard respirator instructions.
- The users must be aware of the importance of maintaining a secure face to facepiece seal to both users while exiting the area requiring respiratory protection. The respirator user who is PROVIDING support must verify that the facepiece and regulator are properly donned, connected, and secure on the respirator user RECEIVING support. Failure to do so may result in loss of breathing air to one or both respirator users.
- **REGARDLESS OF THE CIRCUMSTANCES, THE USERS ENGAGED IN EMERGENCY BREATHING SUPPORT WITH AN EBSS ACCESSORY HOSE MUST IMMEDIATELY EXIT THE AREA REQUIRING RESPIRATORY PROTECTION.**
- All other limitations on respirator use remain the same during emergency breathing support.

PULL BACK SLEEVE COUPLING USE

It is important to thoroughly understand the operation and use of the Dual EBSS quick disconnect coupling. See FIGURE 5.

1. To connect, push plug “D” into socket until the locking sleeve “E” pops forward. Test for proper engagement by tugging on the coupling.
2. To disconnect, push the plug “D” into the socket while pulling the locking sleeve “E” back toward the guard. The plug “D” will separate.

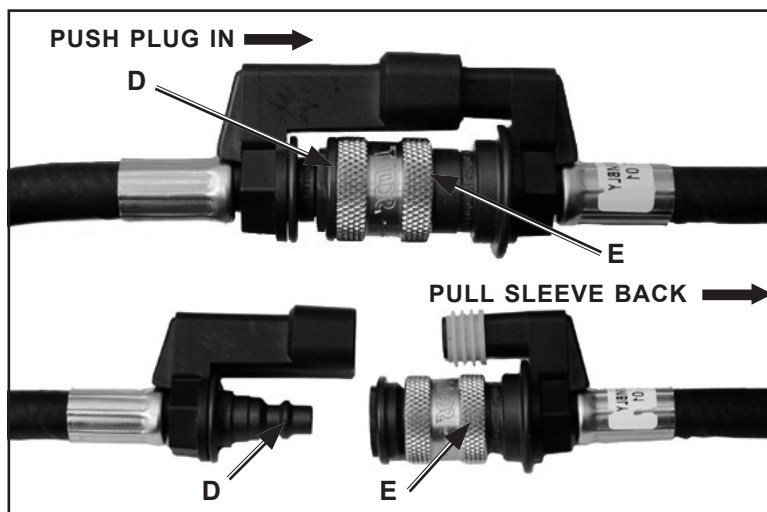


FIGURE 5
PULL-BACK SLEEVE QUICK DISCONNECT

NOTE

THE FEMALE SIDE OF THE DUAL EBSS HOSE IS EQUIPPED WITH THE PULL-BACK SLEEVE TYPE COUPLING.

NOTE

IF SLEEVE “C” IS NOT BACK, ROTATE UNTIL NOTCH “B” LINES UP WITH RIVET HEAD “A” AND SLIDE SLEEVE “C” BACK TOWARD THE GUARD UNTIL THE SLEEVE LOCKS BACK IN PLACE WITH A “CLICK”.

WARNING

ONCE THE END-OF-SERVICE INDICATOR ALARM HAS ACTIVATED ON THE INTENDED SUPPORT RESPIRATOR, DO NOT USE THAT RESPIRATOR FOR BREATHING SUPPORT. ALTHOUGH THE SYSTEM WILL FUNCTION PROPERLY, ESCAPE TIME WILL BE EXTREMELY LIMITED. A SUDDEN TERMINATION OF BREATHING AIR MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

THE RESPIRATOR USER MUST IMMEDIATELY LEAVE THE AREA REQUIRING RESPIRATORY PROTECTION WHEN AN END-OF-SERVICE INDICATOR ALARM ACTUATES. ACTUATION OF ANY END-OF-SERVICE INDICATOR ALARM WARNS THAT THE AIR SUPPLY IN THE CYLINDER IS NEARLY DEPLETED OR THAT THERE IS A MALFUNCTION IN THE RESPIRATOR. A DELAY IN LEAVING THE AREA AFTER ALARM ACTUATION MAY RESULT IN SUDDEN TERMINATION OF THE AIR SUPPLY WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

WARNING

THE RESPIRATOR USER WHO IS PROVIDING SUPPORT MUST VERIFY THAT THE FACEPIECE AND REGULATOR ARE PROPERLY DONNED, CONNECTED, AND SECURE ON THE RESPIRATOR USER RECEIVING SUPPORT. FAILURE TO DO SO MAY RESULT IN LOSS OF BREATHING AIR TO ONE OR BOTH RESPIRATOR USERS WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

WARNING

USERS OF THIS SYSTEM MAY HAVE TO DISCONNECT AND CONNECT THE HOSE COUPLING QUICKLY OR UNDER STRESSFUL CONDITIONS. USERS MUST BE ABLE TO OPERATE THE COUPLING UNDER THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING USE, SUCH AS: WITHOUT BEING ABLE TO SEE THE COUPLING, WITH GLOVES ON, WITH ONE HAND, ETC. FAILURE TO BE ABLE TO OPERATE THE COUPLING IN ALL SITUATIONS MAY RESULT IN AN INTERRUPTION OF THE BREATHING AIR SUPPLY THAT COULD LEAD TO SERIOUS INJURY OR DEATH.

WARNING

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

USE OF THE DUAL EBSS ACCESSORY HOSE

Operation of the respirator while giving or receiving emergency breathing support requires specific training. How these situations are handled will be directly related to the experience and training of the individuals. Only through practice and proper training can the users become familiar enough to safely perform the procedures required in an emergency or stressful situation.

Two methods of EBSS connection are available when using this hose:

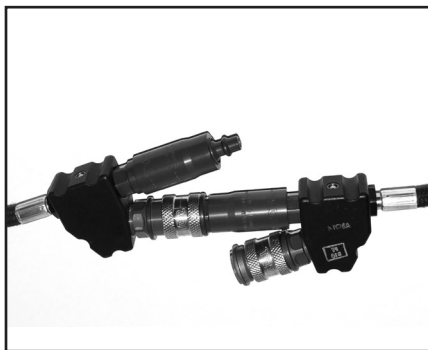
- If the person requiring support does not have a matching DUAL EBSS hose, he must separate the quick disconnect in his regulator hose and connect his regulator hose to the female side of the DUAL EBSS hose of the person offering support.
- If the person requiring support has a matching DUAL EBSS hose, the two dual manifolds may be connected either male-to-female or female-to-male to begin supplying air from the respirator of the person offering support.

The following procedure contains the steps required to familiarize the user with the connect and disconnect process. Sufficient practice and training is required to be able to perform these procedures under emergency and stressful situations and in difficult circumstances such as conditions of impaired visibility or with gloves on, etc.

1. The person requiring support must have either a regulator and hose assembly with a male quick disconnect OR a matching DUAL EBSS hose. The person giving support must have this DUAL EBSS hose on his respirator.
2. **KNOW YOUR ESCAPE ROUTE.** The person offering Emergency Breathing Support must have sufficient breathing air supply left in the cylinder to support two people for the duration of time required to escape to fresh air..
3. Open the snap opening on the carrying pouch and extend the DUAL EBSS hose.



**FIGURE 6
REMOVE DUST CAP**



**FIGURE 7
CONNECT DUAL EBSS HOSE**

4. Remove the rubber dust cap from the DUAL EBSS manifold on the hose. See FIGURE 6.
5. There are two methods of connection possible as follows:
 - a) If the person requiring support **DOES NOT** have a matching DUAL EBSS hose, he must hold his/her breath and separate the quick disconnect on his/her regulator and connect it to the female side of the dual manifold hose on the support respirator. While holding the female coupling behind the guard, insert plug "D" into the socket until engaged as evidenced by the sleeve moving forward with a sharp "click".
 - b) If the person requiring support **DOES** have a matching DUAL EBSS hose, the two manifolds may be joined either male-to-female or female-to-male to accomplish the connection. See FIGURE 7. Connection will immediately begin air flow to both facepieces.

WARNING

DO NOT GIVE EMERGENCY BREATHING SUPPORT WHEN THE AIR SUPPLY IS NOT SUFFICIENT FOR TWO PEOPLE TO REACH SAFETY WHEN BREATHING FROM THE SAME CYLINDER. THE PERSON CONSIDERING GIVING ASSISTANCE MUST MAKE A JUDGEMENT PRIOR TO GIVING EMERGENCY BREATHING SUPPORT. MISJUDGMENT OF THE REMAINING AIR SUPPLY MAY LEAD TO INJURY OR DEATH OF BOTH PERSONS.

WARNING

IMPROPER USE OF A RESPIRATOR USED FOR EMERGENCY BREATHING SUPPORT INCREASES THE RISK OF INJURY OR DEATH FOR BOTH THE WEARER AND THE PERSON RECEIVING BREATHING SUPPORT. PRIOR TO OFFERING EMERGENCY BREATHING SUPPORT, DETERMINE THAT SUFFICIENT AIR REMAINS IN THE SUPPORT RESPIRATOR AND THAT A SAFE EXIT IS AVAILABLE WHICH CAN ACCOMMODATE TWO PERSONS AT ONCE. FAILURE TO DO SO COULD RESULT IN DEPLETING THE AVAILABLE AIR SUPPLY OR BECOMING TRAPPED IN A CONFINED AREA RESULTING IN POSSIBLE SERIOUS INJURY OR DEATH.

NOTE

WHEN TWO RESPIRATORS ARE CONNECTED BY THE DUAL EBSS HOSES AND THE RESPIRATOR REQUIRING SUPPORT HAS ACTIVATED ITS VIBRALERT, THE VIBRALERT ON THE RESPIRATOR OF THE PERSON GIVING SUPPORT WILL ALSO BE ACTIVATED. THE AIR WILL BE SUPPLIED TO BOTH RESPIRATORS FROM THE RESPIRATOR REQUIRING SUPPORT UNTIL THAT AIR SUPPLY IS SUFFICIENTLY DEPLETED, AT WHICH TIME THE AIR THEN WILL BE SUPPLIED FROM THE RESPIRATOR GIVING SUPPORT AND BOTH VIBRALERTS WILL STOP. WHEN THE CYLINDER OF THE RESPIRATOR GIVING SUPPORT HAS BEEN SUFFICIENTLY DEPLETED, BOTH VIBRALERTS WILL AGAIN BE ACTIVATED.

6. Test for positive engagement by tugging on the couplings.

NOTE

DO NOT ALLOW THE DUAL EBSS HOSE TO BECOME TANGLED OR SNAGGED WHILE IN USE. IF THE HOSE BECOMES TANGLED OR SNAGGED, IT MAY DISLODGE THE FACEPIECE FROM ONE OR BOTH USERS OR IT MAY PERMIT DAMAGE OF THE HOSE WHICH COULD CAUSE RAPID AIR LOSS FROM BOTH CYLINDER AIR SUPPLIES.

The support respirator has now been converted into an emergency breathing support system for two person escape. THE USERS ENGAGED IN EMERGENCY BREATHING SUPPORT WITH THE DUAL EBSS HOSE MUST IMMEDIATELY EXIT THE AREA REQUIRING RESPIRATORY PROTECTION.

TERMINATION OF DUAL EBSS USE

To terminate emergency breathing support:

1. Leave the contaminated area or be certain respiratory protection is no longer required.
2. Disconnect the supported user from the DUAL EBSS hose on the respirator providing support.
3. Remove the regulator from the facepiece or the facepiece with the regulator connected from the user being supported.
4. Replace the rubber dust cap on the DUAL EBSS hose.
5. Coil the hose neatly and return the hose to the carrying pouch.

ADDITIONAL PRECAUTIONS

1. Always make a thorough evaluation of the situation before offering emergency breathing support for escape.
2. When using a DUAL EBSS accessory hose for escape and the VIBRALERT end-of-service indicator alarm is activated, it will be heard or felt in both facepieces. Under certain conditions, as in very heavy breathing in unison, the alarm may be intermittent in-time with the breathing in one or both facepieces.
3. Never rely on the expectation that breathing support will be available after your end-of-service indicator alarm has actuated. The Emergency Breathing Support System must be used only in emergency escape situations and not as a routine method of exiting a hazardous atmosphere.
4. When a positive pressure regulator is used on either the respirator giving or receiving emergency breathing support, extra care must be taken not to dislodge that facepiece as this could result in a loss of valuable air if the mask is not replaced immediately.
5. Do not retract the check valve sleeve on the male side of the dual manifold when the respirator is pressurized. Retracting the check valve sleeve will cause loss of the breathing air supply in the cylinder and will emit a high pressure stream of compressed air which may be dangerous.

WARNING

ONCE THE END-OF-SERVICE INDICATOR ALARM HAS ACTIVATED ON THE INTENDED SUPPORT RESPIRATOR, DO NOT USE THAT RESPIRATOR FOR BREATHING SUPPORT. ALTHOUGH THE SYSTEM WILL FUNCTION PROPERLY, ESCAPE TIME WILL BE EXTREMELY LIMITED. A SUDDEN TERMINATION OF BREATHING AIR MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

WHEN THE DUAL EBSS HOSE IS EXTENDED FROM THE CARRYING POUCH, DO NOT PERMIT THE HOSE TO SNAG OR TO BECOME TANGLED. SNAGGING OR TANGLING THE HOSE WHEN CONNECTED TO THE FACEPIECE OF ANOTHER RESPIRATOR USER MAY DISLODGE THE FACEPIECE EXPOSING THE USER TO THE HAZARDOUS ATMOSPHERE AND MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

AFTER DISCONNECTING THE SUPPORTED USER, REMOVE THE REGULATOR FROM THE FACEPIECE OR THE FACEPIECE WITH REGULATOR CONNECTED FROM THE USER RECEIVING EMERGENCY BREATHING SUPPORT. FAILURE TO REMOVE FACEPIECE OR REGULATOR AFTER DISCONNECT FROM AIR SUPPLY MAY RESULT IN SERIOUS INJURY OR DEATH FROM SUFFOCATION.

WARNING

WHEN USING EBSS, BOTH THE SUPPORT RESPIRATOR AND THE RECEIVING RESPIRATOR BECOME ESCAPE ONLY RESPIRATORS. DO NOT USE SUPPORT RESPIRATOR FOR BREATHING SUPPORT. ESCAPE TIME WILL BE EXTREMELY LIMITED. A SUDDEN TERMINATION OF BREATHING AIR MAY RESULT IN SERIOUS INJURY OR DEATH.

USE OF THE DUAL EBSS ACCESSORY AS AN EXTENDED DURATION HOSE

The DUAL EBSS accessory hose may also be used to extend the duration of use of the AIR-PAK self-contained breathing apparatus (SCBA) while preserving the supply of air in the SCBA cylinder. By connecting to a breathing air supply line, the respirator will operate as an open-circuit, pressure demand, entry and escape, combination self-contained breathing apparatus and type C supplied air respirator. Connection to an air supply line is always made to the male side of the DUAL EBSS manifold using a special Male/Female adapter.

AIR SUPPLY REQUIREMENTS

1. **AIR QUALITY** - The user must provide breathing air which is respirable, contains no less than 19.5% oxygen by volume and meets the minimum grade requirements of the Compressed Gas Association (CGA) Commodity Specification for Air, G-7.1, grade D or higher, or meets with air requirements of CE EUROPEAN STANDARD EN 132. In addition to meeting the requirements stated above, the air must be dry to a dew point of -65° F / -54° C or less. Do not use with oxygen or oxygen enriched air.
2. **AIR SUPPLY PRESSURE AND FLOW** - The air supply pressure must be maintained between 60 psig and 115 psig while flowing at least 200 liters per minute (lpm) to each user. Use a pressure regulator rated for high flow that can maintain the required pressure and flow to each user while breathing. The no-flow supply pressure may be different from the pressure observed while breathing. If the air supply pressure can exceed 125 pounds per square inch (psig), a pressure release mechanism, set to actuate no higher than 150 psig, must be installed so that the air pressure at the point of attachment of the supply hose will not exceed 125 psig.
3. **TOTAL LENGTH OF AIR SUPPLY LINE** - Hoses are available in lengths indicated by the last three digits of the part number. For example, P/N 30010-025 is a twenty-five foot hose with Hansen fittings. Hoses are available in incremental lengths of 25 feet up to 100 feet. Refer to TABLE 1, LIMITATIONS AND OPERATING INSTRUCTIONS FOR SUPPLY HOSE and FIGURE 11 for details on operating the quick disconnect couplings and for limitations on air supply line length and number of segments allowed.
4. Always provide enough air supply hose between the air source and the respirator so that movement of the respirator user is not restricted in any way.
5. **A MALE/FEMALE ADAPTER IS PROVIDED FOR CONNECTING TO AN AIR SUPPLY LINE. THE ADAPTER MUST BE USED BECAUSE** The check valve IN THE ADAPTER prevents loss of breathing air from the SCBA if the air supply line is cut or damaged while in use.
This adapter is available in several versions to work with SCOTT air supply lines:
 - Adapter P/N 200112-01 is compatible with air supply lines P/N 30010 with Hansen† 3000 series fittings
 - Adapter P/N 200112-02 is compatible with air supply lines P/N 26370 series with Foster† fittings.
 - Adapter P/N 200112-03 is compatible with air supply lines P/N 26369 series with Hansen† HK series fittings.
 - Adapter P/N 200112-04 is compatible with air supply lines P/N 30020 series with Schrader† fittings.
6. The Male/Female adapter is equipped with a chain tether and hose clamp to attach to the air supply line (NOT to the dual manifold or DUAL EBSS hose).

NOTE

MALE/FEMALE ADAPTERS MAY BE INSTALLED AT THE FINAL CONNECTOR ON EVERY AIR SUPPLY LINE TO BE USED WITH THE DUAL EBSS MANIFOLD HOSE.

WARNING

READ AND UNDERSTAND THIS AND OTHER APPLICABLE INSTRUCTIONS, LABELS AND WARNINGS PACKAGED WITH THE RESPIRATOR BEFORE ATTEMPTING TO USE THIS RESPIRATOR. IMPROPER USE OF THIS RESPIRATOR MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

PRIOR TO OPERATION, THE USER MUST VERIFY THAT THE SUPPLY PRESSURE AND FLOW AVAILABLE ARE IN ACCORDANCE WITH THESE INSTRUCTIONS FOR USE. OPERATION OF THIS EQUIPMENT WITH INADEQUATE SUPPLY PRESSURE OR FLOW MAY LEAD TO SERIOUS INJURY OR DEATH.

WARNING

AIR REGULATORS, BECOME COLD DURING USE. AIR CONTAINING MOISTURE USED TO SUPPLY THE RESPIRATOR MAY FREEZE THE BREATHING REGULATOR EVEN THOUGH THE TEMPERATURE IS WELL ABOVE 32° F / 0° C. FROZEN MOISTURE IN THE BREATHING REGULATOR MAY CAUSE A MALFUNCTION OF THE APPARATUS WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

USE CARE WHEN HANDLING THE DUAL EBSS HOSE AS WELL AS ANY AIR SUPPLY HOSE LINES. DAMAGE TO A PRESSURIZED AIR HOSE MAY CAUSE THE HOSE TO MOVE VIOLENTLY WHICH COULD CAUSE SERIOUS INJURY OR DEATH.

WARNING

THE MALE/FEMALE ADAPTER MUST BE USED FOR CONNECTING TO AN AIR SUPPLY LINE. THE CHECK VALVE IN THE ADAPTER PREVENTS LOSS OF BREATHING AIR FROM THE SCBA IF THE AIR SUPPLY LINE IS CUT OR DAMAGED WHILE IN USE. FAILURE TO USE THE ADAPTER WHEN CONNECTING TO AN AIR SUPPLY LINE MAY RESULT IN SUDDEN LOSS OF BREATHING AIR FROM THE SCBA WHICH COULD CAUSE SERIOUS INJURY OR DEATH.

WARNING

DO NOT USE THE RESPIRATOR IN CBRN ENVIRONMENT WHEN USED WITH AIR LINE. THE RESPIRATOR IS NOT CBRN APPROVED WHEN USED WITH AIR LINES. IMPROPER USE OF RESPIRATOR MAY DEGRADE THE PERFORMANCE OF THE RESPIRATOR WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

† Hansen is a registered trademark of Tuthill Corporation.

† Foster is a registered trademark of Foster Manufacturing Co., Inc.

† Schrader is a registered trademark of Scovill, Inc.

EXTENDED DURATION OPERATION AND USE

Perform the REGULAR OPERATIONAL INSPECTION of the DUAL EBSS hose as described in this instruction. When not in use, always keep the DUAL EBSS manifold covered for protection with the attached caps.

While using the DUAL EBSS hose for extended duration, the cylinder valve on the SCBA must be kept closed. During periods of extended activity, occasionally check of the remaining cylinder air supply by opening the cylinder valve and observing the remote pressure gauge. Determine if the amount of remaining air is sufficient for the planned activity or for escape from the hazardous atmosphere. Be aware that at very high work rates and at peak inhalation flow, the actual time available from a partial cylinder may be less than expected.

NOTE

WHILE USING THE DUAL EBSS HOSE FOR CONNECTION TO AN AIR SUPPLY LINE FOR EXTENDED DURATION, THE CYLINDER VALVE ON THE SCBA MUST REMAIN CLOSED TO PRESERVE THE AIR SUPPLY IN THE CYLINDER. WITH THE CYLINDER VALVE CLOSED, RESIDUAL PRESSURE TRAPPED IN THE SYSTEM MAY SHOW ON THE REMOTE PRESSURE GAUGE. WHILE USING THE AIR SUPPLY LINE, THIS RESIDUAL PRESSURE MAY REMAIN OR MAY BE DEPLETED WITHOUT AFFECTING THE OPERATION OF THE RESPIRATOR.

Entry into the potentially hazardous atmosphere may be performed either by connecting to the air supply line first, or by using the SCBA to enter and then connecting to an air supply line while in the potentially hazardous atmosphere.

While in a safe breathing environment, don the apparatus and perform all checks in accordance with the Operation and Maintenance Instructions for the apparatus. Open the cylinder valve and verify that the breathing air cylinder is full. Check for proper operation of the system including alarm actuation.

1. FOR ENTRY USING THE AIR SUPPLY LINE:

- a) Insert the male end of the Male/Female adapter onto the female fitting on the air supply line and check for proper engagement. Check that there is no evidence of flow from the end of the adapter. See FIGURE 8.

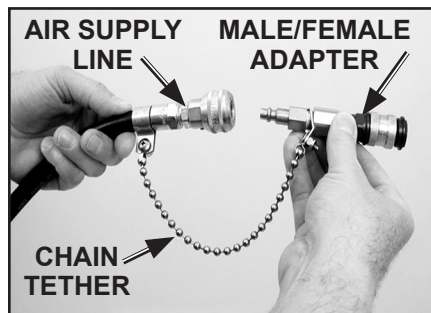


FIGURE 8

- b) Open the pouch and feed the male connector on the DUAL EBSS hose through the opening in the side of the pouch as shown in FIGURE 9. The fabric gusset fits between the male and female connectors on the manifold. Close the pouch and secure the snaps.



FIGURE 9

WARNING

IF THE CYLINDER VALVE IS NOT FULLY CLOSED, AIR FROM THE SELF-CONTAINED AIR SUPPLY CYLINDER MAY BE GRADUALLY DEPLETED. ALWAYS BE SURE ENOUGH AIR REMAINS IN THE CYLINDER TO EXIT THE HAZARDOUS ATMOSPHERE. FAILURE TO MONITOR AVAILABLE AIR SUPPLY MAY RESULT IN A SITUATION THAT COULD LEAD TO SERIOUS INJURY OR DEATH.

WARNING

WHEN USING THE DUAL EBSS HOSE FOR EXTENDED DURATION CONNECTION TO A BREATHING AIR SUPPLY LINE, ALWAYS KEEP THE DUAL EBSS HOSE CONTAINED WITHIN THE CARRYING POUCH AND THE DUAL EBSS SECURED WITHIN THE POUCH AND THE MALE CONNECTOR PROJECTING THROUGH THE SIDE OPENING OF THE CARRYING POUCH. FAILURE TO KEEP THE DUAL EBSS SECURED DURING USE MAY RESULT IN SNAGGING OF THE DUAL EBSS AND THE AIR SUPPLY LINE WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

- c) Connect the adapter on the air supply line to the male connector and check for proper engagement. See FIGURE 10.

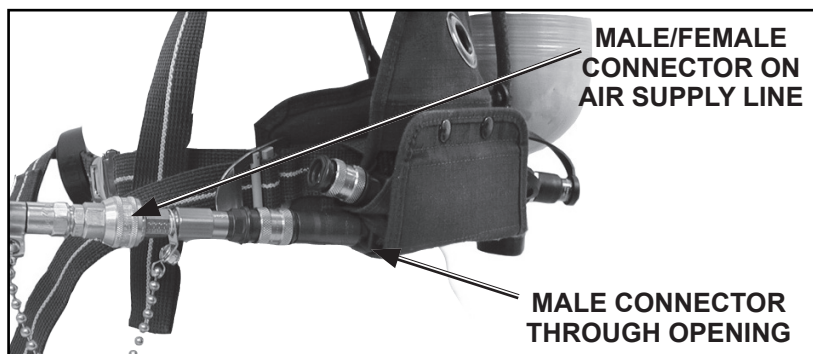


FIGURE 10

- d) Close the cylinder valve and continue to breathe normally with air supplied through the air supply line. Breathing should be free and unrestricted. THE CYLINDER VALVE MUST BE CLOSED WHEN USING THE DUAL EBSS HOSE FOR AIR SUPPLY.
- e) Complete preparations for safe entry and enter the hazardous or potentially hazardous environment.

2. FOR ENTRY USING THE SELF-CONTAINED BREATHING APPARATUS:

- a) Open the cylinder valve and verify that the breathing air cylinder is full.
- b) Open the pouch and feed the male connector on the DUAL EBSS hose through the opening in the side of the pouch as shown in FIGURE 9. Close the pouch and secure the snaps.
- c) Complete preparations for safe entry and enter the hazardous or potentially hazardous environment.
- d) Upon arrival at the pre-positioned air supply line, insert the male end of the Male/Female adapter onto the female fitting on the air supply line and check for proper engagement. Check that there is no evidence of flow from the end of the adapter.
- e) Connect the male connector on the DUAL EBSS hose to the adapter on the air supply line and check for proper engagement. See FIGURE 8.
- f) Close the cylinder valve. Breathing should continue free and unrestricted as air is supplied through the pre-positioned air supply line. THE CYLINDER VALVE MUST BE CLOSED WHEN USING THE HOSE FOR AIR SUPPLY. Proceed with planned activity.

3. WHILE IN THE HAZARDOUS ATMOSPHERE, TRANSFER TO ANOTHER PRE-POSITIONED AIR SUPPLY LINE AS FOLLOWS:

- a) Open the cylinder valve; the alarm may be initiated momentarily then stop. Check the remote pressure gauge for the availability of sufficient air supply depending upon planned activity.
- b) Disconnect the adapter and air supply line from the DUAL EBSS hose. Check that there is no evidence of flow from the end of the DUAL EBSS hose. If flow is detected, immediately proceed to a safe breathing environment. The Male/Female adapter may be left connected to the air supply line.
- c) Proceed to the pre-positioned air supply line.
- d) Insert the male end of the Male/Female adapter onto the female fitting on the air supply line and check for proper engagement. Check that there is no evidence of flow from the end of the adapter.
- e) Connect the male connector on the DUAL EBSS hose to the adapter on the pre-positioned air supply line and check for proper engagement.
- f) Close the cylinder valve. Breathing should continue free and unrestricted as air is supplied through the pre-positioned air supply line. Continue with planned activity.

WARNING

USE CARE WHEN HANDLING THE DUAL EBSS HOSE. IF THE RESPIRATOR IS PRESSURIZED AND THE HOSE BECOMES CUT OR DAMAGED, IT MAY CAUSE LOSS OF THE AIR SUPPLY IN THE AIR SUPPLY CYLINDER. LOSS OF THE CYLINDER AIR SUPPLY MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

THE CYLINDER VALVE MUST BE FULLY CLOSED WHEN USING THE HOSE FOR AIR SUPPLY. IF THE CYLINDER VALVE IS NOT FULLY CLOSED, AIR FROM THE SELF-CONTAINED AIR SUPPLY CYLINDER MAY BE GRADUALLY DEPLETED. LOSS OF BREATHING AIR IN THE CYLINDER SUPPLY MAY LEAD TO SERIOUS INJURY OR DEATH.

WARNING

WHEN USING THE DUAL EBSS HOSE FOR EXTENDED DURATION CONNECTION TO A BREATHING AIR SUPPLY LINE, ALWAYS KEEP THE DUAL EBSS HOSE CONTAINED WITHIN THE CARRYING POUCH AND THE DUAL EBSS SECURED WITHIN THE POUCH AND THE MALE CONNECTOR PROJECTING THROUGH THE SIDE OPENING OF THE CARRYING POUCH. FAILURE TO KEEP THE DUAL EBSS SECURED DURING USE MAY RESULT IN SNAGGING OF THE DUAL EBSS AND THE AIR SUPPLY LINE WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

WARNING

ALWAYS BE SURE ENOUGH AIR REMAINS IN THE CYLINDER TO EXIT THE HAZARDOUS ATMOSPHERE. FAILURE TO MONITOR AVAILABLE AIR SUPPLY MAY LEAD TO SERIOUS INJURY OR DEATH.

EXIT FROM HAZARDOUS ATMOSPHERES

1. **BY AIR SUPPLY LINE** - Upon completion of activity, exit from the hazardous environment while attached and supplied by the air supply line. Upon arrival at a safe breathing environment, remove the facepiece and terminate respirator use. Disconnect the air supply line from the DUAL EBSS hose. The Male/Female adapter may be left connected to the air supply line.
2. **BY SELF-CONTAINED AIR SUPPLY** - Upon completion of activity, open the cylinder valve and observe the remote pressure gauge. The alarm may sound momentarily then stop. Disconnect the air supply line from the DUAL EBSS hose, and exit. The Male/Female adapter may be left connected to the air supply line.

ESCAPE FROM HAZARDOUS ATMOSPHERES

1. If an emergency escape is necessary, open the cylinder valve of the self-contained air supply, observe the remote pressure gauge.
2. Disconnect the air supply line from the DUAL EBSS hose.
3. Immediately proceed to a safe breathing environment.

TROUBLESHOOTING OF EXTENDED DURATION USE

1. **RESTRICTED OR INTERRUPTED FLOW THROUGH AIR SUPPLY LINE:** If breathing becomes restricted or is completely interrupted while being supplied by the air supply line, open the cylinder to regain normal breathing capability. Check the remote pressure gauge and decide whether to transfer to another pre-positioned air supply line, continue the activity using self-contained air supply, or leave the hazardous area.
2. **AUTOMATIC SHUT-OFF:** Some SCBA models may be equipped with a facepiece mounted regulator with an automatic shut-off device that actuates when the regulator is removed from the facepiece. This device may not shut off when air is being supplied only through the air supply line since the maximum flow through the air supply line is less than the flow provided by the self-contained air supply. Open the cylinder valve to allow the shut-off to actuate and then close the cylinder valve.

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.

WARNING

IF BREATHING IS RESTRICTED OR IS COMPLETELY INTERRUPTED WHILE BEING SUPPLIED THROUGH THE AIR SUPPLY LINE, OPEN THE CYLINDER VALVE TO REGAIN NORMAL BREATHING CAPABILITY AND CHECK THE REMOTE PRESSURE GAUGE. CONNECT TO ANOTHER SOURCE OF BREATHING AIR OR LEAVE THE HAZARDOUS AREA BEFORE THE SELF-CONTAINED BREATHING SUPPLY IS DEPLETED. FAILURE TO RESPOND CORRECTLY TO THE SITUATION MAY LEAD A LOSS OF BREATHING AIR WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

SUPPLY HOSE OPERATION AND USE

TABLE 1

LIMITATIONS AND OPERATING INSTRUCTIONS FOR SUPPLY HOSE

NOTE: THE AIR SUPPLY PRESSURE MUST BE MAINTAINED BETWEEN 60 PSIG AND 115 PSIG WHILE FLOWING AT LEAST 200 LITERS PER MINUTE (LPM) TO EACH USER.

Supply Hose¹	Approved Total Lengths² in feet	Maximum Number of Segments³ Approved	INSTRUCTIONS FOR OPERATION OF COUPLINGS 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	<ol style="list-style-type: none"> 1. To connect: Insert plug fitting "C" into socket "A" and push together until engaged as evidenced by an audible click. 2. Test for positive engagement by tugging on the plug. 3. To disconnect: Pull back sleeve "B" while pushing together the socket and plug to disengage. Once the coupling is disengaged, release the sleeve.
26370 Series 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	<ol style="list-style-type: none"> 1. Insert plug fitting "C" into socket "A" and continue pushing until it is engaged as evidenced by a "click". 2. Test for positive engagement by tugging on the plug. 3. Disconnect the coupling by rotating sleeve "B" 1/8 turn in the clockwise direction as viewed from the female end of socket "A".

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.

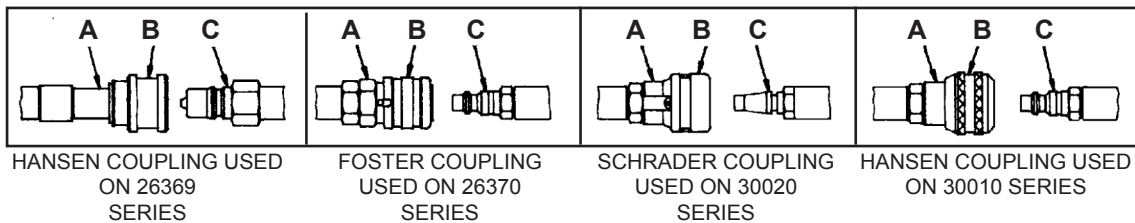


FIGURE 11
COUPLINGS USED ON SUPPLY HOSES

OPERATION OF SUIT VENTILATION SYSTEM

1. While wearing an encapsulating chemically protective suit, an SCBA attached to an air supply line for extended duration shall be operated as stated above. The ventilation system shall be operated in accordance with SCOTT P/N 89239-01, *Instructions for Use of Suit Ventilation Hose Assembly P/N 803801-01 installed on a SCOTT AIR-PAK SCBA*.
2. When operating the respirator from the DUAL EBSS hose with suit ventilation attached, whenever the hose line air supply is disconnected for any reason, the suit ventilation must also be disconnected at the SCOTT coupling.

OPERATION OF APPLIANCE HOSE SYSTEM

1. An SCBA attached to an air supply line for extended duration and operating a life support or safety related appliance shall be operated as stated above. The appliance hose shall be operated in accordance with SCOTT P/N 89263-01, *Instructions for Use of Appliance Hose Assembly P/N 803801-02 installed on a SCOTT AIR-PAK SCBA*.
2. When operating the respirator from the DUAL EBSS hose for extended duration use with the appliance hose attached, whenever the hose line air supply is disconnected for any reason, the appliance must also be disconnected at the SCOTT coupling.

USE OF A SINGLE EBSS AND A DUAL EBSS WITH A SUPPLIED AIR LINE

For escape, a respirator user with an SCBA equipped with BOTH a SINGLE EBSS accessory and a DUAL EBSS accessory hose and connected to and breathing from a supplied air line may supply breathing air to one other respirator user with the SINGLE EBSS accessory hose connection. The supplied air line must provide breathing air at sufficient pressure to supply both respirator users without loss of positive pressure in either facepiece. The air supply cylinder on the respirator offering support may then be held in reserve until it is needed in the course of escape or until the escape is completed. If the air supply cylinder is needed, the respirator user offering support shall open the cylinder valve fully and disconnect from the supplied air line to complete the escape. Refer to the USE OF THE DUAL EBSS ACCESSORY AS AN EXTENDED DURATION HOSE section of this instruction for details of use of the DUAL EBSS as an Extended Duration hose.

WARNING

NEVER TRY TO SUPPLY MORE THAN ONE OTHER PERSON WITH BREATHING AIR USING ANY EBSS ACCESSORY HOSE OR HOSES. EVEN WITH A FULL CYLINDER, MULTIPLE USERS CAN QUICKLY DEplete THE AIR SUPPLY. INSUFFICIENT BREATHING AIR TO ESCAPE FROM THE HAZARDOUS ATMOSPHERE MAY 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 dealer or distributor, or contact SCOTT at 1-800-247-7257 (or 704-291-8300 outside the continental United States) or visit our web site at www.scottsafety.com.

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A Tyco Business

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