

RIT DRAG BAG RESCUE PACK

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RIT DRAG BAG RESCUE PACK

OPERATING INSTRUCTIONS

WARNING!

Before use of the Rapid Intervention Team Rescue Pack in an emergency/rescue situation, the user must have been given proper training in its use, have read and understood these Operating Instructions and demonstrated proficiency to a responsible teacher or supervisor. Failure to do so can result in injury or death for the user and can have serious consequences for people to be rescued and/or items of value to be saved.

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INTERSPIRO WARRANTS THIS PRODUCT AGAINST FAILURE TO COMPLY WITH INTERSPIRO'S PUBLISHED SPECIFICATIONS FOR THE PRODUCT AND AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF FIVE (5) YEARS AFTER DATE OF PURCHASE. WITHIN THAT PERIOD, INTERSPIRO WILL, AT ITS OPTION, REPAIR OR REPLACE THE PRODUCT OR REFUND YOUR PURCHASE PRICE IF INTERSPIRO DETERMINES THE PRODUCT DOES NOT CONFORM TO INTERSPIRO'S SPECIFICATIONS OR IS DEFECTIVE IN MATERIAL OR WORKMANSHIP. TO MAKE A WARRANTY CLAIM, CONTACT YOUR AUTHORIZED INTERSPIRO DISTRIBUTOR OR INTERSPIRO DIRECTLY. FOR TELEPHONE INQUIRIES PLEASE HAVE YOUR PRODUCT INVOICE OR OTHER PROOF OF PURCHASE AVAILABLE. IF YOU WRITE, INCLUDE PROOF OF PURCHASE AND A WRITTEN EXPLANATION OF THE PROBLEM. WARRANTY SERVICING WILL BE PROVIDED ON-SITE OR AT ONE OF INTERSPIRO'S AUTHORIZED SERVICE FACILITIES, AT INTERSPIRO'S DISCRETION. IF SHIPMENT TO AN AUTHORIZED SERVICE FACILITY IS REQUIRED, SHIPPING INSTRUCTIONS WILL BE PROVIDED BY INTERSPIRO OR YOUR AUTHORIZED INTERSPIRO DISTRIBUTOR. DO NOT SHIP ANY PRODUCT OR COMPONENT WITHOUT SHIPPING AUTHORIZATION. ALL SHIPPING CHARGES TO INTERSPIRO'S SERVICE FACILITY MUST BE PREPAID BY THE CUSTOMER.

THIS LIMITED WARRANTY DOES NOT APPLY IF THE PRODUCT HAS BEEN (I) INVOLVED IN AN ACCIDENT OR SUBJECTED TO MISUSE, IMPROPER MAINTENANCE OR NEGLIGENCE; (II) ALTERED OR REPAIRED IN ANY WAY THAT HAS, IN INTERSPIRO'S JUDGEMENT, ADVERSELY AFFECTED ITS PERFORMANCE OR RELIABILITY; (III) USED IN AN APPLICATION OR FOR A PURPOSE FOR WHICH THE PRODUCT WAS NOT DESIGNED OR UNDER STRESSES OR CONDITIONS EXCEEDING THOSE SPECIFIED FOR THE PRODUCT; OR (IV) DAMAGED AFTER LEAVING INTERSPIRO'S FACILITY.

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THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

CAUTIONS AND LIMITATIONS

- D. Airline respirators can be used only when the respirators are supplied with respirable air meeting the requirements of CGA G-7.1 Grade D or higher quality.
- E. Use only the pressure ranges and hose lengths specified in the user's instructions.
- 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 users instructions, and/or maintenance manuals for information on use and maintenance of these respirators.
- S. Special or critical users instructions and/or specific use limitations apply. Refer to instruction manual before use.

Approved for emergency rescue respiratory protection during escape from oxygen deficient atmospheres, gases, and vapors at temperatures above -25 degrees F (-32 degrees C). Approved only when compressed air reservoir is fully charged with air meeting the requirements of the Compressed Gas Association Specification G-7.1 for Type 1, Grade D air or higher quality, as well as meeting a dew point level of -65°F (-54°C) or dryer (24 ppm v/v or less), and a maximum particulate level of 5 mg/m³ air. The container shall meet applicable DOT specifications.

Approved for respiratory protection during emergency escape from hazardous atmosphere when supplied with respirable air at a pressure between 60 and 125 pounds per square inch and when using hoses with a total length between 25 and 300 feet, with a maximum of 12 hose lengths.

IMPORTANT INFORMATION TO USER

Please read this information carefully before referring to the apparatus instructions.

The Rapid Intervention Team Rescue Pack breathing apparatus should only be used by adults in good physical and physiological condition.

The Rapid Intervention Team Rescue Pack breathing apparatus must be used in a manner consistent with NFPA 1500, Standard on Fire Department Occupational Safety and Health Program.

The face mask may not seal properly with your face if you have a beard, heavy sideburns or other physical characteristics interfering with the mask's contour.

An improper facial seal may allow non-respirable air to leak into the mask, reducing or eliminating respiratory protection. The seal must be tested before each use.

OSHA 1910.134 requires that before any employee uses a positive pressure tight-fitting facepiece, they must pass an appropriate qualitative or quantitative fit test initially and at least annually thereafter.

Do not use Rapid Intervention Team Rescue Pack breathing apparatus in an emergency/rescue situation unless you have received proper training in its use, have read and understood this Instruction manual and demonstrated proficiency to a responsible teacher or supervisor. Special attention must be given to:

- face seal
- test before use
- awareness of different durations at different conditions
- emergency situation (loss of air and free air flow)
- procedure at low-air alarm.

Only holders of a valid INTERSPIRO Service Certificate may service and test SPIROMATIC S apparatus.

Failure to comply with these special points can result in respiratory injury or death for the user and may have serious consequences for people to be rescued and/or items of value to be saved.

TECHNICAL DESCRIPTION

The Rapid Intervention Team (RIT) Drag Bag Rescue Pack system is a compressed air breathing apparatus for rescue work in a contaminated environment. The apparatus consists of:

- A carry bag
- An air supply cylinder
- A regulator unit including:
 - An audible low air alarm
 - A medium pressure hose with "Y" connector
 - A Rapid Intervention Crew/Company Universal Air Connection System (RIC UAC)
- A Revitox rescue mask with breathing valve and hose
- An optional 25' extra air/rescue hose
- An optional RIT Pack Rescue Hose to connect to an SCBA face mask

NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, requires fire departments to have a rapid intervention team available for the rescue of members operating at emergency incidents. The Rapid Intervention Team must be equipped with the appropriate personal protective clothing, SCBA and any specialized rescue equipment that might be needed.

NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services, requires a Rapid Intervention Crew/Company Universal Air Connection System (RIC UAC). The RIC UAC will permit the breathing air cylinder of an SCBA user to be replenished from an independent rescue breathing air supply source while the SCBA victim remains trapped or unable to be removed from the hazardous atmosphere. This RIC UAC does not take breathing air from an SCBA being worn by a member of the rescue operation but replenishes the victim's breathing air cylinder from a source of "rescue breathing air". The RIC UAC is not a "buddy breathing" device, as it does not permit the sharing of a single SCBA breathing air source between two persons.

The Interspiro RIT Drag Bag Rescue Pack has been developed as specialized rescue breathing apparatus equipment. The RIT Drag Bag Rescue Pack is intended for the rescue of firefighters in an IDLH atmosphere wearing an SCBA and/or for rescue of individuals not wearing an SCBA .

NOTE: IF EQUIPPED, RESCUE OF FIREFIGHTERS ALREADY WEARING SCBA AND REQUIRING ADDITIONAL AIR CAN ALSO BE ACCOMPLISHED USING THE INTERSPIRO BUDDY BREATHING HOSE (SEE THE SPIROMATIC S SERIES SCBA OPERATING INSTRUCTION).

The RIT Drag Bag Rescue Pack breathing apparatus uses clean dry air compressed in a cylinder in a carrying Drag Bag. The air is fed to a pressure regulator which reduces the cylinder air pressure to a secondary pressure of approximately 110 psi. The air is then supplied to a hose assembly with a "Y" connector. The "Y" connector can supply an SCBA or the Revitox rescue mask.

The RIT Drag Bag Rescue Pack also includes a high pressure (4500 psi) hose assembly with a female RIC UAC.

An audible warning device and the first stage regulator are located in a manifold at

the handwheel connection or quick connection to the cylinder valve. Both the audible warning device and the regulator unit are separate components and therefore easily assembled or dismantled from the unit in order to permit fast exchange service if required.

RIT DRAG BAG ASSEMBLY

The RIT Drag Bag Rescue Pack includes a carrying Drag Bag with shoulder strap.

EXTERNAL DIMENSIONS:
SIZE: 36" L X 13" H X 10" W

The RIT Drag Bag Rescue Pack cylinder air supply is mounted inside the Drag Bag and secured to the Drag Bag with a webbing strap.

The RIT Drag Bag Rescue Pack regulator medium pressure (~ 110 psi) hose assembly with "Y" connector is contained in a sleeve with a high pressure (4500 psi) hose assembly with a female UAC.

The medium pressure hose assembly with "Y" coupling/high pressure hose assembly with UAC passes through a slot inside the Drag Bag and is secured with a velcro flap on the outside of the Drag Bag for ease of deployment.

The RIT Drag Bag Rescue Pack Revitox Rescue mask and any additional accessories (i.e. an optional Interspiro medium pressure 25' extension hose with "Y" on both ends, RIT Pack Rescue Hose to connect an SCBA facemask, Fire Department supplied rope or other accessory items deemed necessary by the rescue team) may also be carried in the RIT Drag Bag Rescue Pack carrying bag.



RIT Drag Bag Rescue Pack



RIT Drag Bag cylinder air supply in bag



RIT medium pressure/ HP hoses secured with a velcro flap



RIT Drag Bag Rescue Pack Revitox mask

RAPID INTERVENTION TEAM RESCUE PACK AIR SUPPLY

The compressed air supply for the Rapid Intervention Team Rescue Pack utilizes lightweight aluminum/composite cylinders wrapped in carbon fiber.

The cylinders are fitted with a valve which includes a built-in pressure gauge. The cylinder valve is equipped also with a burst disc, designed to rupture and let air out if the cylinder should be inadvertently overcharged.

CAUTION!
SHOULD THE CYLINDER BE EXPOSED TO A PRESSURE THAT CAUSES THE BURST DISC TO RUPTURE, IT MUST BE RETURNED TO AN AUTHORIZED SPIROMATIC S SERVICE CENTER FOR INSPECTION AND REPAIR.

Table 1. Air cylinders

Model	Approx. content of free air in cu. ft.	Charging pressure psi	Duration*
9030	87	4500	60 min.
6630	66	4500	45 min.

RECOMMENDATION
THE INTERSPIRO RESCUE PACK IS ALWAYS RECOMMENDED TO BE USED WITH A 60 MINUTE CYLINDER.

LIMITATION
APPROVED ONLY WHEN COMPRESSED AIR RESERVOIR IS FULLY CHARGED WITH AIR MEETING THE REQUIREMENTS OF THE COMPRESSED GAS ASSOCIATION SPECIFICATION G-7-1 FOR TYPE 1, GRADE D AIR OR HIGHER QUALITY, AS WELL AS MEETING A DEW POINT LEVEL OF -65°F (-54°C) OR DRYER (24 PPM V/V OR LESS), AND A MAXIMUM PARTICULATE LEVEL OF 5 MG/M3 AIR. THE CONTAINER SHALL MEET APPLICABLE DOT SPECIFICATIONS.

CAUTION!
DURATION IS DEPENDENT ON THE USER'S EXERTION, PHYSICAL AND EMOTIONAL CONDITION, AS WELL AS ON ENVIRONMENTAL PRESSURE AND WHETHER THE CYLINDER WAS FULLY CHARGED AND WHETHER THE FACEPIECE FITS. DURATION CAN VARY 50 % OR MORE.

* Duration tested to NIOSH standards.
Conversion of US units to metric or vice versa.
1 cu.ft. = 28.3 litres, 1 liter = 0.0353 cu.ft.
1 psi = 0.0689 bar, 1 bar = 14.5 psi

RIT RESCUE PACK REGULATOR ASSEMBLY

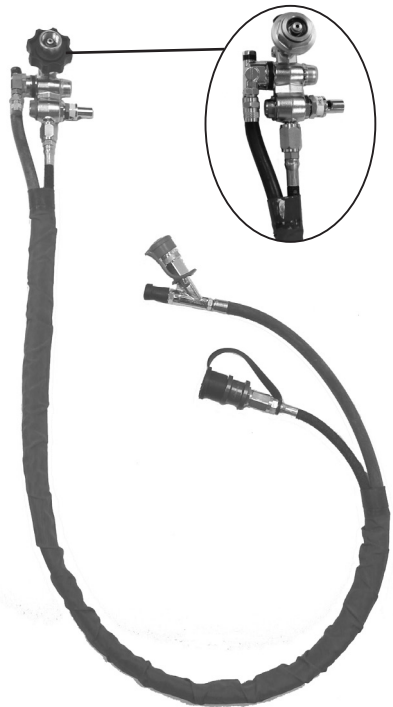
The RIT Pack Rescue regulator assembly comprises a regulator manifold with a handwheel connector or a quick connector for the cylinder valve, a particle filter, a pressure regulator, a low air warning whistle, an air pressure bleed valve, a medium pressure hose assembly with a "Y" connector, and a high pressure hose assembly with RIC UAC.

The regulator unit is of a "plug in" type which means that it is pushed into a manifold and locked in place with a locking clip and cover.

This modular system enables simple servicing to be carried out with minimum down time for the apparatus by using service exchange of modular components.

The pressure regulator used in the Rapid Intervention Rescue Pack is a balanced piston pressure reducer with an extremely high flow capacity. The very high capacity ensures that the positive pressure is maintained in the mask even at low cylinder pressures and at extremely high breathing rates.

The medium pressure (~ 110 psi) hose assembly with "Y" connector is contained in a sleeve with a high pressure (4500 psi) hose assembly with a female UAC.



RIC Rescue Pack Regulator assembly
(Handwheel or Quick Connect)

AUDIBLE WARNING

The audible warning device, like the pressure regulator, is of the "plug in" type. It means that the same simple servicing system as for the regulator can be used.

When the primary air supply pressure has dropped to approximately 25 % the audible alarm will start to sound. The alarm signal is approx. 95 dBA and continues to sound until the cylinder contents are depleted.

REVITOX RESCUE MASK

The Revitox is a Spiromatic mask that has been modified with an attachment for artificial respiration.

The Revitox rescue mask is connected via a supply hose with a female quick coupling to the male quick connection of the "Y" connector on the Rescue Pack supply hose.

With the aid of Revitox the rescue personnel can commence a rescue operation immediately in toxic atmosphere.

Revitox can also be used as an extra mask for instance when helping people through smoked filled environments. (see the Spiromatic S SCBA Operating Instruction).

Interspiro Revitox consists of a facemask, cover, breathing valve and a supply hose (2.5 m). Revitox functions as a normal Spiromatic mask with automatic positive pressure. On the breathing valve there is a spring loaded button with which artificial respiration can be performed by alternatively pushing in the button and releasing it.

The inhalation air is forced in with a pressure of approximately 180-200 mm water column. The air flow gives efficient lung ventilation and the pressure is so low that the victim, when not unconscious, can breathe against it. The breathing valve is held in the face mask by a bayonet coupling and locked by the cover. The air is supplied to the Revitox by the supply hose connected to the Rescue Pack.



Revitox rescue mask with hose assembly



Revitox mask



Locking cover



Revitox Breathing Valve



Revitox hose assembly

PREPARATION FOR USE

RIT RESCUE PACK AIR SUPPLY AND REGULATOR

1. Slide a fully charged cylinder assembly into the RIT Drag Bag.

NOTE

PUSH THE AIR SUPPLY CYLINDER BACK SO THAT THE DOMED END OF THE CYLINDER IS UP AGAINST THE END OF THE BAG BEFORE SECURING THE VELCRO STRAP.



Slide fully charged cylinder into RIT Bag

2. Secure the air supply with the webbing velcro strap inside the bag by wrapping the webbing over the cylinder valve and securing the velcro.



Secure cylinder with velcro strap

3. Connect the RIT Rescue Regulator handwheel or quick connect to the cylinder valve. Tighten the handwheel connector by hand.



Tighten RIT regulator handwheel or connect the quick coupling

4. Route the HP/medium pressure hose assembly through the slot of the RIT Bag.



Route HP/medium pressure hoses through slot

5. Ensure that the HP/medium pressure hoses follow the inside top contour of the RIT Bag.



HP/medium pressure hoses following top contour of RIT Bag

6. Secure the medium pressure hose assembly with "Y" couplings/ HP hose assembly with UAC to the outside of the RIT Bag with velcro strap.



Secure hoses with the velcro strap

7. Secure the ends of the hose assemblies under the velcro flap on the outside of the RIT Bag.



Secure the ends of hose assemblies with velcro flap

REVITOX RESCUE MASK

1. Push the breathing valve into the face mask and turn so that the bayonet coupling connects.
2. Lock the breathing valve in place by pushing in the cover (apply a thin coating of lubricant 331-900-269 to O-ring if needed). Tighten the two handscrews moderately.
3. Connect the supply hose to the breathing valve and tighten the nut at the breathing valve connection.



Connecting the Revitox breathing valve



Revitox with hose assembly

An optional Interspiro 25' extension hose assembly with "Y" couplings on both ends is available.



96379-01 25' extension rescue hose assembly (Optional)

An optional Interspiro RIT Pack Rescue Hose to connect to an SCBA face mask is also available.



33789-01 RIT Pack Rescue hose (Optional))

REVITOX MASK: PREPARATION FOR USE IN RIT BAG

1. Place the Revitox Mask into the RIT Drag Bag in front of the RIT air supply.



Revitox Mask in RIT Drag Bag

2. Place the Revitox hose into the pouch on the top of the bag. Make 3 or 4 loops of the hose inside the pouch.



Place Revitox hose in pouch

3. Leave end of Revitox hose with female quick coupling just outside the pouch.



Leave female quick coupling just outside pouch

4. Close the velcro flap to secure the hose.
5. Check that the Revitox is all the way down in the RIT Bag.
6. Close the top flap. Secure the sides with the velcro. Secure the flap on the top with the seat belt buckle.
7. The optional Interspiro medium pressure 25' extension hose with "Y" on both ends, RIT Pack Rescue Hose to connect an SCBA facemask, Fire Department supplied rope or other accessory items deemed necessary by the rescue team may be stored in RIT Rescue Drag Bag.



Close top velcro flap and secure with seat belt buckle

NOTE

IF FIRE DEPARTMENT SUPPLIED ROPE IS INCLUDED IN THE BAG, THE ROPE CAN BE STORED IN ANY OF THE OUTSIDE POUCHES.

LEAKAGE AND FUNCTION TEST OF THE RESCUE PACK BREATHING APPARATUS

CAUTION!

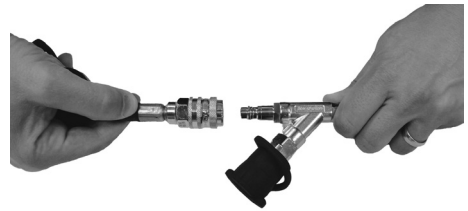
PRIOR TO AND AFTER USE, PERFORM A VISUAL INSPECTION OF ALL PLASTIC, RUBBER AND METAL PARTS FOR DAMAGE. IF ANY DAMAGED PARTS ARE FOUND THE RESCUE PACK MUST BE TAKEN OUT OF SERVICE AND REPAIRED ACCORDING TO THE SERVICE MANUAL. REPAIRS ARE TO BE MADE BY INTERSPIRO OR A HOLDER OF AN INTERSPIRO SERVICE CERTIFICATE.

1. Open the flap and remove the RIT Rescue Pack regulator hose assembly.



Remove Rescue Pack hose assembly

2. Remove the Revitox mask with hose assembly from the rescue mask pouch. Connect the male quick coupling of the Rescue Pack medium pressure supply hose "Y" connector to the Revitox rescue mask supply hose female quick coupling. The locking sleeve of the quick coupling will automatically move forward and snap into place, locking the hoses together.



Connection supply hoses

3. Turn off the positive pressure of the Revitox breathing valve (black lever against the valve housing).



Positive pressure turned off



Positive pressure turned on

4. Open the cylinder valve and charge the system. When pressurized the audible whistle will sound until the pressure is above 1/4 full cylinder pressure.

NOTE!

THE CYLINDER VALVE PRESSURE GAUGE MUST READ FULL PRIOR TO USE. NFPA 1404 REQUIRES THAT AIR CYLINDERS SHALL BE MAINTAINED AT NOT LESS THAN 90 PERCENT OF THE RATED PRESSURE STAMPED ON THE CYLINDER.



Opening cylinder valve

5. With the positive pressure still turned off, listen for leakage of air in the system.

NOTE!

IF ANY LEAKAGE OF AIR IS HEARD OR SUSPECTED, THE UNIT MUST BE REMOVED FROM SERVICE. THE RESCUE PACK WITHOUT THE REVITOX MASK CAN BE CHECKED FOR LEAKAGE BY SPRAYING THE REGULATOR AND CYLINDER VALVE WITH A SOAP/WATER SOLUTION WITH THE SYSTEM STILL PRESSURIZED. THIS LEAK CHECK IS ALSO MADE DURING CLEANING AFTER EACH USE. ANY REPAIRS MUST BE CARRIED OUT BY A HOLDER OF AN INTERSPIRO SERVICE CERTIFICATE.

6. With cylinder valve still open, very briefly turn on the positive pressure of the Revitox breathing valve (the black lever away from the housing). A strong flow of air should be heard.

7. With head harness fully extended and folded over the visor, hold the mask against the face and push in the green button briefly to check the function of the artificial respiration. Do not exhale into the mask. Turn off the positive pressure again.

8. Close the cylinder valve.

9. Slowly release the air until the low air warning activates (approximately 1100 psi.). After the low air warning activates the residual air can be evacuated.

10. Open the breathing valve of the Revitox mask by moving the black lever away from the valve housing and let the residual air escape slowly. Wipe the sealing edge of the mask with a clean damp cloth.

NOTE!

THE RESCUE PACK IS NOT EQUIPPED WITH A REMOTE PRESSURE GAUGE, THEREFORE THE 1100 PSI ACTIVATION CANNOT BE MEASURED WITHOUT THE USE OF INTERSPIRO TEST EQUIPMENT. THIS SHOULD BE CHECKED ONCE A YEAR. IF THE SOUND LEVEL OF THE LOW AIR WARNING WHISTLE SEEMS TO BE BELOW NORMAL, REMOVE THE UNIT FROM SERVICE. SERVICE THE LOW AIR WHISTLE ACCORDING TO THE INTERSPIRO SERVICE MANUAL. THIS MUST BE CARRIED OUT BY A HOLDER OF AN INTERSPIRO SERVICE CERTIFICATE.

NOTE!

IF ANY LEAKAGE OF AIR IS HEARD OR THE REVITOX MASK AND BREATHING VALVE DOES NOT FUNCTION PROPERLY, THE UNIT MUST BE REMOVED FROM SERVICE. ANY REPAIRS MUST BE CARRIED OUT BY A HOLDER OF AN INTERSPIRO SERVICE CERTIFICATE.

10. The RIT Rescue Pack regulator assembly also includes a bleed valve. When the Revitox Rescue mask is not connected to the RIT Rescue Pack regulator assembly, this bleed valve is used to relieve the air pressure from the system. Close the bleed valve after bleeding off the air pressure.

11. The Rescue Pack emergency rescue breathing apparatus is now ready for use.



RIT Rescue Pack regulator bleed valve

LIMITATION

RESCUE PACK IS ONLY APPROVED FOR USE AS AN EMERGENCY RESCUE SYSTEM BY TRAINED EMERGENCY RESPONSE TEAMS. THE RESCUE PACK IS ONLY A RESCUE BREATHING APPARATUS AND IS NOT TO BE USED AS A SELF-CONTAINED UNIT.

EMERGENCY RESCUE OF A FIREFIGHTER WEARING AN SCBA

If a firefighter already wearing an Interspiro S series SCBA is injured and/or has a low air supply, the RIT Rescue Pack can be utilized as an additional medium pressure rescue air supply. Carry the bag to the injured firefighter in need of additional air and prepare the RIT Rescue Pack for rescue of the person.

1. Open the flap and remove the supply hose. Open the cylinder valve of the RIT Rescue Pack.



Remove RIT Rescue Pack regulator hose

2. Connect the female quick coupling of the Rescue Pack supply hose "Y" connector to the extra air male quick coupling of the Spiromatic S SCBA. The locking sleeve of the quick coupling will automatically move forward and snap into place, locking the hoses together. Gently pull the hoses to ensure, that the couplings are secure.



Connecting to SCBA Buddy Breathing hose (if equipped)

NOTE

THE RIT RESCUE PACK MEDIUM PRESSURE "Y" CONNECTOR CAN BE CONNECTED TO EITHER THE BUDDY BREATHING HOSE "Y" CONNECTOR (IF EQUIPPED) OR TO THE AIRLINE CONNECTOR ON THE RIGHT SHOULDER OF THE VICTIM.

3. The rescuer shall listen for a strong flow of air from the SCBA of the person to be rescued.

A: A strong flow of air would indicate a leakage on the SCBA of the person to be rescued. If a strong flow is heard, disconnect the rescue hose before the Rescue Pack air supply is depleted. Then use the Revitox rescue mask.

B: If a strong flow of air leakage is not heard, proceed with the emergency rescue.



Connecting to SCBA airline connector

RAPID INTERVENTION CREW/COMPANY UNIVERSAL AIR CONNECTION SYSTEM

The Rapid Intervention Crew/Company Universal Air Connection System (RIC UAC) will permit replenishing the breathing air cylinder of an SCBA user from the RIT Rescue Pack breathing air supply source while the SCBA victim remains trapped or unable to be removed from the hazardous atmosphere. This RIC UAC does not take breathing air from an SCBA being worn by a member of the rescue operation but replenishes the victim's breathing air cylinder from a source of "rescue breathing air". The RIC UAC is not a "buddy breathing" device, as it does not permit the sharing of a single SCBA breathing air source between two persons.

The RIT Rescue Pack high pressure (4500 psi) hose assembly with a female UAC is contained in a sleeve with the medium pressure (~ 110 psi) hose assembly with "Y" connector.



RIT Rescue Pack high pressure (4500 psi) female UAC

The SCBA male RIC UAC is located on the regulator manifold near the cylinder valve connection of the SCBA. The stored position of the Universal Air Connection (UAC) is facing upward with the dust cap in place.



SCBA male UAC in stored position

WARNINGS AND LIMITATIONS

THE SYSTEM CAN ONLY BE USED TO FILL APPROVED SCBA CYLINDERS.

THE SYSTEM IS NOT TO BE USED AS A BUDDY BREATHING OR ANY OTHER UNAPPROVED USE.

TOPPING OFF EACH CYLINDER IS RECOMMENDED TO ENSURE PROPER SERVICE TIME.

THE AIR SUPPLY PRESSURE SHOULD BE REGULATED SO AS NOT TO EXCEED THE PRESSURE CAPACITY OF THE CYLINDER BEING FILLED.

IF ANY TIME DURING CHARGING A LEAK IS DETECTED, IMMEDIATELY DISCONTINUE CHARGING AND INSPECT TO DETERMINE CAUSE OF LEAK.

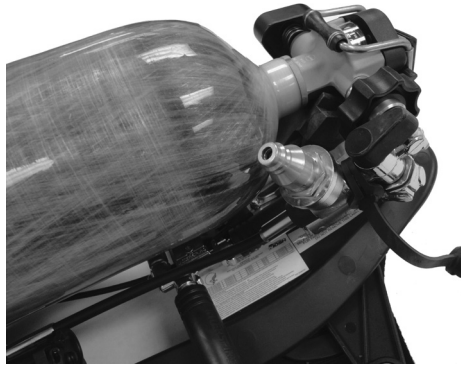
PERFORM THE OPERATION AND PRE-USE INSPECTION ON THE SCBA IMMEDIATELY FOLLOWING FILLING TO CHECK FOR LEAKS AND PROPER OPERATION.

THE CYLINDER MUST BE INSPECTED FOR DAMAGE BEFORE CHARGING.

THE SYSTEM MUST NOT BE USED TO TRANSFER AIR FROM ONE SCBA CYLINDER TO ANOTHER.

USE OF THE RIC UAC

1. Locate the victim's SCBA cylinder valve and UAC. Verify that the victim's SCBA cylinder valve is in the open position.
2. Remove the charge port dust cap from the male UAC.
3. Remove the RIT Rescue Pack charging whip with the mating female UAC. Open the cylinder valve of the RIT Rescue Pack air supply fully.



UAC dust cap removed

4. Rotate the SCBA male UAC coupling outward and firmly push the RIT Rescue Pack female UAC with pin straight onto the male charging port of the SCBA UAC. The locking sleeve of the female quick coupling will automatically move forward and snap in place, locking the charging hose into place.



Connecting the charging whip

5. Allow the cylinder to fill. Charge rate is dependent on the inlet pressure and the pressure remaining in the cylinder.
6. When any audible filling has ended or the cylinder gauge reads full, firmly grasp the female quick coupling and pull back on the locking sleeve to release the female quick coupling and remove it from the charge port.
7. Install the dust cap onto the charge port and store the tether by rotating the cap.

WARNINGS

THE SYSTEM CAN ONLY BE USED TO FILL APPROVED SCBA CYLINDERS.

THE CYLINDER MUST BE INSPECTED FOR DAMAGE BEFORE CHARGING.

THE AIR SUPPLY PRESSURE SHOULD BE REGULATED SO AS NOT TO EXCEED THE PRESSURE CAPACITY OF THE CYLINDER BEING FILLED. THE SYSTEM IS GENERALLY USED WITH 4500 PSI CYLINDERS. DO NOT OVERCHARGE A 2216 PSI CYLINDER.

IF ANY TIME DURING CHARGING A LEAK IS DETECTED, IMMEDIATELY DISCONTINUE CHARGING AND INSPECT TO DETERMINE CAUSE OF LEAK.

THE SYSTEM MUST NOT BE USED TO TRANSFER AIR FROM ONE SCBA CYLINDER TO ANOTHER. DURING USE

DURING USE

The Rescue Pack rescue breathing apparatus is equipped with an audible low air warning whistle. When the primary pressure of the rescue cylinder has dropped to approximately 25% an audible alarm will start to sound. The alarm signal is approximately 95 dBA and continues to sound until the cylinder contents are depleted.

ADDITIONAL AIR SUPPLY

If the injured firefighter is trapped or requires additional air supply, the rescue team can call for a second Rescue Pack. The “Y” coupling of the second Rescue Pack supply hose can be connected to the “Y” coupling of the first Rescue Pack without interruption of the air supply.

NOTE

AN OPTIONAL 25' EXTENSION RESCUE HOSE WITH “Y” COUPLINGS ON BOTH ENDS IS AVAILABLE IF ADDITIONAL SUPPLY HOSE LENGTH IS REQUIRED. MULTIPLE CONNECTIONS OF “Y” COUPLINGS ARE POSSIBLE TO MAKE IN AN EMERGENCY SITUATION.

WARNING

ALTHOUGH MULTIPLE CONNECTIONS OF “Y” COUPLINGS ARE POSSIBLE TO MAKE IN AN EMERGENCY SITUATION, MORE THAN ONE PERSON BREATHING FROM ONE AIR SUPPLY GREATLY REDUCES THE DURATION TIME OF THE CYLINDER AIR. RESCUER'S SHOULD ONLY MAKE MULTIPLE CONNECTIONS IN EXTREME EMERGENCY SITUATIONS AND CONTINUE THE ESCAPE TO FRESH AIR IMMEDIATELY.

EMERGENCY RESCUE OF AN INJURED PERSON

A Rapid Intervention Team wearing SCBA can respond to an emergency rescue with the Rescue Pack. The entire Rescue Pack bag can be carried or dragged inside the IDLH atmosphere. The bag not only carries the Rescue Pack but can also carry additional tools supplied by the emergency response team.

1. Open the flap and remove the Rescue Pack supply hose.

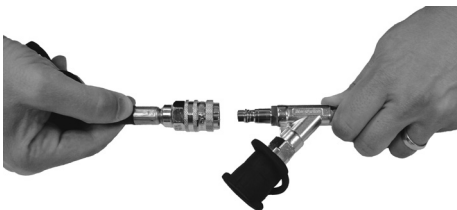
CAUTION!

TRAINING IN THE DONNING AND BEFORE USE TEST PROCEDURE SHOULD BE GIVEN BEFORE USE IN AN EMERGENCY SITUATION. THE USER MUST DEMONSTRATE KNOWLEDGE TO A RESPONSIBLE TEACHER OR SUPERVISOR.



Removing supply hose

2. Connect the female quick coupling of the Rescue Pack supply hose "Y" connector to the Revitox rescue mask supply hose female quick coupling. The locking sleeve of the quick coupling will automatically move forward and snap into place, locking the hoses together. Gently pull the hoses to ensure, that the couplings are secure.



Connecting Revitox hose

NOTE

AN OPTIONAL 25' EXTENSION RESCUE HOSE WITH "Y" COUPLINGS ON BOTH ENDS IS AVAILABLE IF ADDITIONAL SUPPLY HOSE LENGTH IS REQUIRED.

3. Open the cylinder valve.



Opening cylinder valve

IF THE INJURED PERSON IS BREATHING SPONTANEOUSLY

1. Take off any spectacles.
2. Turn on the positive pressure of the Revitox breathing valve.



Turning on positive pressure

3. Place the mask on the face of the injured person.



Place mask on victim's face

4. Place the head harness over the head and tighten the straps, the lower two first. Make sure that hair does not come between the mask and the face. The injured person will now get air. The positive pressure in the mask will preclude any inward leakage.



Tighten head harness straps

IF THE INJURED PERSON IS NOT BREATHING SPONTANEOUSLY

1. Turn the person on his back if possible on a hard surface.
2. Loosen any clothes around the neck. Take off any spectacles.
3. Remove any parts that may prevent free air passage. (i.e. dentures, secretions).
4. Turn on the positive pressure in order to blow out any toxic fumes.
5. Pull the head harness over the head and tighten the straps, the lower two first. Make sure that hair does not come between the mask and face. If there is a risk of the person vomiting do not pull the head harness over the head. Turn the injured person on a side or turn the head on a side and hold the mask against the face.
6. Bend the head backwards as far as possible.
7. Commence artificial respiration by pushing in the green button during approximately 1 second (Count nil-one).
8. Release the button completely (Count nil-two, nil-three). The exhalation is passive and the chest will return to normal position.
9. Continue the artificial respiration by alternatively pushing in and releasing the green button according to steps 7 and 8 (for children the time between pressing and releasing the button should be shorter).
10. Check that the airways are free all the time and that the artificial respiration is effective by noting the rise and fall of the chest.
11. Discontinue the artificial respiration as soon as the injured person is breathing spontaneously.



Turning on positive pressure



Artificial respiration

EMERGENCY OPERATION

There are two major failure modes which require immediate corrective action: loss of demand air supply and free flow of the air supply.

1. Should the injured person be unable to inhale easily, first verify that the Rescue Pack cylinder has not run out of air by reading the Rescue Pack cylinder pressure gauge. Then check that the cylinder valve is fully open. Call for a back-up Rescue Pack if necessary. Leave the contaminated area.
2. Should the unit free flow, you will notice air blowing into the facepiece of the injured person and out of the exhalation valve. Use the Rescue Pack cylinder valve as the control by closing the valve and opening as required. Leave the contaminated area.

EMERGENCY ACTIONS IN BRIEF

At loss of air:

1. Check Rescue Pack cylinder air pressure.
2. Fully open cylinder valve and continue rescue escape.

At free air flow:

1. Regulate flow with cylinder valve and continue rescue escape.

AFTER USE

1. If the Revitox was used, remove the face mask by loosening the lowest head harness straps first. Switch off the positive pressure by pressing in the black lever and remove the mask at the same time.
2. Close the cylinder valve.
3. Bleed off the air pressure by turning the positive pressure on (black lever away from the housing).
4. Disconnect the supply hose quick couplings by pushing in on the couplings and pulling back on the locking sleeve of the female quick coupling at the same time.
5. Unscrew handwheel connector of the regulator unit (or disconnect the quick coupling).
6. Remove cylinder from RIT Bag.
7. Charge cylinder according to cylinder charging instructions.

CLEANING AND MAINTENANCE

Regulations state that respirators must be regularly cleaned and disinfected. Furthermore, respirators that are used by more than one person must be cleaned and disinfected after each use.

CAUTION!

SERVICE BEYOND THE FOLLOWING PROCEDURES MUST BE HANDLED BY A HOLDER OF AN INTERSPIRO SERVICE CERTIFICATE.

1. Check that the positive pressure of the Revitox breathing valve is turned off.

IMPORTANT!

CHECK THE PRESSURE ON THE CYLINDER PRESSURE GAUGE AND OPEN THE CYLINDER VALVE BEFORE CLEANING THE APPARATUS. THE AIR PRESSURE IN THE CYLINDER PREVENTS WATER FROM ENTERING THE REGULATOR.

2. Put the apparatus, except the Revitox mask with breathing valve and the regulator manifold with warning device into water with a mild detergent.

CAUTION!

DO NOT USE BLEACH OR SOLUTIONS CONTAINING BLEACH AS IT CAN DEGRADE KEVLAR AND/OR RUBBER PARTS.

3. Look for bubbles indicating leaks. Any leakage should be repaired by INTERSPIRO or an authorized Service Agent.
4. Wash the apparatus. Clean the regulator manifold and warning device using a brush if necessary to remove heavy dirt. Check the regulator manifold and the warning device for leaks using a soap and water solution.
5. After cleaning, rinse in clean water.
6. Close the cylinder valve. Turn on the positive pressure of the Revitox breathing valve to vent the system.
7. Let the apparatus dry. Reassemble the apparatus.
8. Change to a fully charged cylinder. Perform leakage and function test as described on pg. 15.

CYLINDER CHARGING

The cylinder must be fully charged with air meeting the requirements of the Compressed Gas Association Specification G-7-1 for type I, Grade D air, or higher quality, as well as meeting a dew point level of -65°F (-54°C) or dryer (24 ppm v/v or less), and a maximum particulate level of 5 mg/m³ air. The container shall meet applicable DOT specifications.

CAUTION!

THE CYLINDER MUST BE INSPECTED FOR DAMAGE BEFORE CHARGING.

DO NOT OVERCHARGE THE CYLINDER. FILL ONLY TO THE PRESSURE INDICATED ON THE CYLINDER LABEL. TOPPING OFF EACH CYLINDER IS RECOMMENDED TO ENSURE PROPER SERVICE TIME.

SERVICE AND TESTING

The Rescue Pack rescue breathing apparatus was designed for ease of use and maintenance.

To ensure that your Rescue Pack is working properly a complete test at least once a year must be performed, even if it has not been used. These tests are carried out on the SPIROMATIC test equipment which enables you to test all Rescue Pack functions and identify areas requiring repair.

WARNING!

EXCEPT FOR CLEANING, LUBRICATION, INSPECTION AND TEST PROCEDURES ACCORDING TO THIS OPERATING INSTRUCTION, ONLY THE HOLDER OF AN INTERSPIRO REPAIR CERTIFICATE SHOULD SERVICE THE RESCUE PACK BREATHING APPARATUS. WORK BY UNAUTHORIZED OR UNTRAINED PERSONS AND/OR THE USE OF OTHER THAN INTERSPIRO PARTS MAY VOID THE APPROVAL AND SAFETY OF THE UNIT.

When

Every day (if used daily)

Every week (if stored)

Before use

After use

Every year

Every 5 years

What

Check cylinder pressure

Check the cylinder pressure

See this manual

See this manual

Complete service and test

Cylinder reinspection

Recommended minimum test and service

WARNING!

THE MINIMUM TEST AND SERVICE PROCEDURES ARE INTENDED FOR NORMAL USE ONLY. IF THE RESCUE PACK HAS BEEN EXPOSED TO EXTREME CONDITIONS SUCH AS EXTREME HEAT OR COLD, HARSH LIQUIDS OR CHEMICALS, HEAVY DUTY DUST PARTICLES, OR EXTREME SHOCK OR VIBRATION, THE RESCUE PACK MUST UNDERGO A TEST AND INSPECTION BY A HOLDER OF AN INTERSPIRO SERVICE CERTIFICATE. IF THE RESCUE PACK DOES NOT MEET THE VALUES IN THE SPIROMATIC TEST INSTRUCTION OR IF IT SHOWS SIGNS OF WEAR, THE RESCUE PACK MUST BE TAKEN OUT OF SERVICE AND REPAIRED.

REPLACEMENT/RETIREMENT CONSIDERATIONS

When any breathing apparatus component or part shows signs of wear and/or damage, these items must be replaced. The service life of the breathing apparatus can be maintained indefinitely as long as the breathing apparatus meets the values in the SPIROMATIC Test Instructions.

Units contaminated by chemical or radioactive materials must be disposed of or decontaminated in accordance with all applicable regulatory standards

Composite cylinders have a 15 year lifetime according to DOT exemption, provided satisfactory hydrostatic testing is accomplished. If damaged, these cylinders may be repaired or condemned according to the Guidelines for the Visual Inspection of Compressed Gas Cylinders in CGA C-6.2.

STORING THE APPARATUS

Upon completion of all required service, the Rescue Pack should be stored in the carrying case.

Store the apparatus ready for use. The apparatus should normally be stored in dry conditions, well protected from direct sunlight and extremes of temperature.

The Revitox mask assembly should be stored in the top compartment of the Rescue Pack. The supply hose should be connected to the breathing valve. The positive pressure should be turned on.

The cylinder must be fully charged and ready for use.

Follow the minimum Test and Service Requirements.

MARKING RECOMMENDATIONS AND RESTRICTIONS

Special user identification/markings on Rescue Pack breathing apparatus equipment must be accomplished in a manner that does not interfere with regulatory labels such as DOT. Further, manufacturer traceability markings such as embossed serial numbers or part numbers cannot be obscured.

Marking of cylinders and/or other breathing apparatus components may be done with a non-flammable marking medium.



INTERSPIRO

Keeps You Breathing