



RESPIREX™



Instructions For Use of Simplair A.E. Blouse



EN14605:2005+A1:2009
TYPE PB[3], TYPE PB[4]
TYPE 3, TYPE 4

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General Information

You have purchased a Respirix Simplair air supplied blouse. This equipment is for use within certain contaminated environments only. You must carefully read and follow these operating instructions closely.

The Respirix Simplair range of protective clothing is designed for use with breath- able air supplied from an external compressed air source providing positive pressure. The air flowing into the garment must conform to EN 12021 Annex A.

Respirix Simplair Blouses are supplied in a range of sizes, styles and materials. All Respiratory Protective Clothing are UKCA and CE marked to indicate compliance with European Regulation 2016/425 on personal protective equipment (PPE) and Regulation 2016/425 on personal protective equipment as brought into UK law and amended. Respirix Simplair Blouses have been tested to meet the requirements of the European standard EN 14594 for respiratory protective devices and EN 14605 for protective clothing providing protection to parts of the body against liquid chemicals. For further information on the performance results of each specific material refer to the data sheet supplied with the hood.

All declarations of conformity: <http://www.respirex.co.uk/doc>.

⚠ Limitations & Warnings

When worn alone a Simplair air supplied blouse provides only partial body protection.

If full body protection is required a blouse worn in conjunction with chemical protective trousers, gloves and safety boots will meet the performance requirements for ventilated and non-ventilated “non-gas-tight” (TYPE 2) protective clothing.

At high work rates the pressure in the garment may become negative at peak inhalation flow or during bending or squatting.

Adequate protection may not be provided by the garment in atmospheres that are immediately dangerous to life or health.

The garment must NOT be used with oxygen only or oxygen enriched air.

Care must be taken to ensure that the garment is being used from the correct length and bore of air supply hose, as a low airflow may cause a less efficient protection.

The equipment is designed to work on a range of airline pressures. The blouse is preset by Respirix to operate at the customer’s specific air line pressure (the maximum air line pressure that the blouse can be set to is 120 PSI).

Unless otherwise stated by Respirix the material fabric of the garment does not breathe. Your body temperature will rise when working in the garment therefore you are advised to leave the work area in the event you feel too much body fluid has been lost.

The garment must only be used in the hazardous area for which it is intended. Always follow the instructions carefully otherwise the protection offered by the garment may be drastically affected.

Always use compatible PPE, e.g. chemical protective trousers, jackets, gloves and safety boots advised by Respirix.

For any inquiries please contact the Respirix customer services department on Tel:

+44(0) 1737 778600, Fax: +44 (0) 1737 779441 or E-mail: info@respirex.co.uk.

Pre-checking the Air Supplied Blouse

Under the Control of Substances Hazardous to Health (COSHH) regulations 2002 and the Personal Protective Equipment at Work Regulations 1992, a thorough examination of respiratory protection equipment (RPE) is required to be under taken in a clean area at least once per month if the garment has not been used. When in use Respirix recommend that the RPE is always checked before the start of each shift cycle. These inspections are required to ensure that the RPE will perform as intended and is free from defects.

Each inspection must be recorded and the following noted date, serial number, name of examiner, condition of the equipment and details of any defect found. Relevant Health & Safety departments for a period of at least five years will keep the inspection records.

1. Visually inspect the blouse for any damage that may impair the correct working of the garment together with the gloves.
2. Check that the gloves are correctly fitted (see page 6).
3. Check correct airflow in the blouse. The blouse will be marked with its working pressure that must correspond to the factory airline pressure as indicated by the pressure gauge at your airline supply outlet point. Ensure that the silencer is clean and free of any contamination from the airline. The silencer must be re- placed if it is contaminated to any extent.
4. The blouse is free from contamination both inside and out.
5. The identification number is clearly legible in the blouse.
6. The blouse materials are free from tears and holes, including the head of the garment. Pay particular attention to the seam areas.
7. Ensure that the waist belt air attachment is secure and not damaged.
8. A clean silencer is fitted.
9. The vision from the visor is not obstructed by large scratches and heavy scuff marks. On blouses fitted with rigid visors a removable outer visor can be fitted which prevents damage to the main visor. This can be changed by simply peeling away from the Velcro fasteners and replaced with a new outer visor.
10. Respirix recommend that the exhalation valves are part of the visual pre-check. If the valve diaphragm is distorted or damaged in any way it must be replaced (see page 11).

Inspection of the compressed air supply tube (medium pressure connecting hose) which supplies breathing quality air to the operator must be carried out at least once per month and before each shift cycle and the results recorded.

During the inspection the following should be checked:

1. Lines are clean externally.
2. Lines are free from damage (holes, splits, etc).
3. Airline coupling connections are in good condition and the non-return valves are in good working order.

Submerge in water to locate any leaks if any sign of external damage is evident.

Report any defects to the supervisor and record them. The compressed air supply tube must NOT be used until the defect has been rectified.

Maximum Length And Bore Of Medium Pressure Connecting Hose

Respirix recommend a minimum of 3/8" internal diameter bore hose is used approved to EN 14594. If other Medium Pressure Hose and couplings are to be used they should be suitable for the intended use and conform to the requirements of EN 14594 (a sample must be supplied to Respirix to enable the correct air settings to be achieved).

The garment will be set by Respirix to give the correct rate of airflow to coincide with the customer's supplied airline pressure, as notified to Respirix and indicated on the airline waist belt label. The user shall assure himself that the pressure range of the air supply to the apparatus is within the limits recommended by Respirix.

Maximum And Minimum Flow In Litres/minute The airflow to the blouse must be within the range:

Maximum 340 L/Min

Minimum 270 L/Min

This must be checked prior to each use by means of the Respirix airflow meter. (See page 5).

Checking The Air Flow In The Blouse

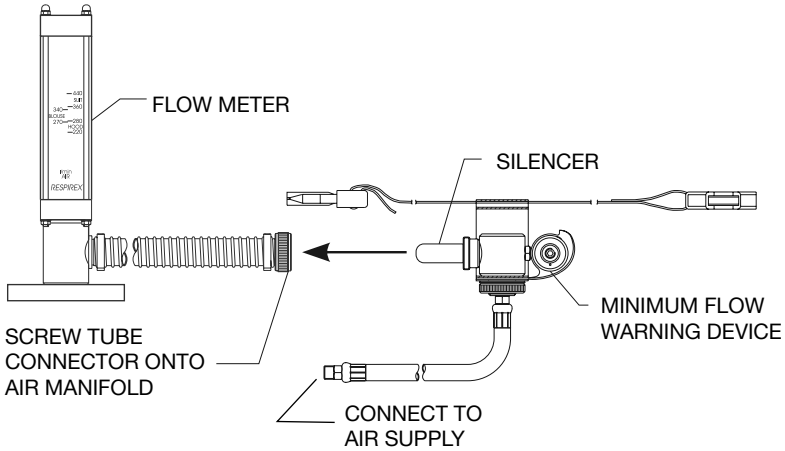


Fig.1

1. Lay open the blouse to allow access to the air system.
2. Unscrew the connecting collar from the bulkhead adaptor.
3. With the Respirex flow meter on flat a level surface; screw the tube connector from the flow meter onto the bulkhead adaptor.
4. Connect the garment onto the air supply and measure the airflow on the meter. See page 3 for correct flow rates.
5. Disconnect the flow meter and reconnect the air system.

Should you be unable to achieve the airflows indicated, then the silencer should be replaced.

Note: Respirex recommend customers set up their own silencer replacement programme. The quality of the air and the frequency of use of the garment will determine this.

Minimum Flow Warning Device

1. With the Respirex flow meter connected to the air system turn the air pressure down to obtain the minimum airflow into the garment.
2. When the minimum airflow is reached the warning device will sound a high pitch whistle.
3. After checking the minimum flow warning device, set the air pressure back to the correct working pressure.

Fitting Gloves Into The Respirax Locking Cuff

1. Firstly turn the sleeve of the garment inside out.
2. Carefully push the tapered cone into the glove so that the glove stretches over the cone (see Fig.2 & Fig.3).



Fig. 2



Fig. 3

3. Push the glove and cone into the cuff body with the little finger of the glove in-line with the seam of the sleeve (see Fig.4).
4. Make sure that the glove and cone are pushed into the cuff body with equal pressure all around its circumference (see Fig.5).



Fig.4



Fig.5

5. Locate the locking ring over the gauntlet of the glove and screw into the cuff body (see Fig.6). If necessary the gauntlet of the glove can be cut down if it is too long and interferes with the locking ring.



Fig.6

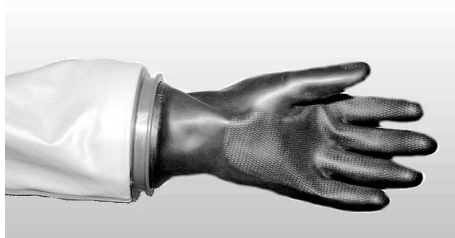


Fig.7

6. Turn the sleeve the correct way out by pulling on the glove (see Fig.7). Check that there are no creases in the glove around the cuff seal. If there are any creases or the glove is pinched in any way it should be removed and re-fitted. If the cuff and glove have been assembled as described there should now be a gas tight wrist seal.

Fitting Gloves Into The Respirex Soft Rubber Cuff

1. Carefully push the tapered cone into the glove so that the glove stretches over the cone (see Fig.2 & Fig.3).
2. Push the glove and cone down the garment sleeve and into the soft rubber cuff with the little finger of the glove in-line with the seam of the sleeve (see Fig.4).
3. Make sure that the glove and cone are pushed into the cuff with equal pressure all around its circumference so that the cone is as tight as possible in the cuff (see Fig.8).



Fig.8

Donning The Blouse

It is strongly recommended that before anybody attempts to wear or use an air- supplied garment, a competent person gives full training on wearing and decontamination, and the details of the training recorded.

1. Connect the Respirax air supply hose to the air source supplying air to EN 12021 Annex A.
2. Connect the Respirax Simclair Blouse to the air supply hose making sure that the couplings are joined together correctly. Pull on both hoses to make sure they are secure.
3. With the air flowing into the blouse, via the elasticated waist pull the blouse over your head and body whilst sliding your arms into the sleeves.
4. Arrange the waist belt comfortably and fasten firmly, see Fig. 9.
5. Pull down the elasticated waist of the blouse, see Fig.10.
6. The blouse should appear as in Figs. 11 & 12.



Fig.9



Fig.10



Fig.11



Fig.12

Inspection & Replacement Of Component Parts

Employees should conduct a regular inspection and replacement program.

The Respirax air supplied blouse and all component parts and assemblies should be inspected for damage or excessive wear before and after each use to ensure proper functioning. Immediately remove the blouse from service and replace parts or assemblies that show any sign of failure or excessive wear that might reduce the degree of protection originally provided.

Use only Respirax components and replacement parts.

Replacing The Silencer

1. Lay open the blouse to allow access to the bulkhead.
 2. Unscrew the connecting collar from the bulkhead adaptor.
 3. Pull the breathing air tube assembly away from the control waist belt.
 4. Unscrew the silencer from the bulkhead.
 5. Screw a new silencer into the bulkhead.
 6. Locate the breathing air tube assembly over the bulkhead and tighten the retaining ring.
- Check that the Air Supplied blouse is working correctly and that there are no air leaks before use.

Removing The Air Control Waist Belt From A Blouse

1. Lay open the blouse to allow access to the bulkhead.
2. Unscrew the bulkhead locknut on the exterior of the blouse and remove along with the plastic and rubber washer. It may be necessary to remove the airline coupling if it is too large to allow the locknut and washers to be removed.
3. Unscrew the bulkhead connecting collar on the inside of the blouse and then carefully guiding the medium pressure connecting hose through the orifice in the rear of the blouse, remove the control waist belt assembly.

Re-fitting The Air Control Waist Belt Into A Blouse

1. Check that the air control waist belt assembly to be fitted is not damaged and that all of the parts are correctly assembly.
2. Ensure that a new silencer has been fitted to the bulkhead assembly and check that the correct flow is achieved. This test must be carried out with the pressure and hose length that the blouse is to be used on.
3. Take the air system distribution hose to be fitted and ensure the round distribution block is facing down.
4. Make sure that the belt and loop, whistle shroud and one rubber washer are fitted to the bulkhead assembly.
5. Fit the bulkhead assembly into the blouse by first passing the medium pressure connecting hose through the orifice in the rear of the blouse (hose to be fitted from interior to exterior).
6. Push the thread of the bulkhead through the orifice and locate the rubber and plastic washer on the bulkhead, then screw on the locknut.
7. Before tightening the locknut, screw the connecting collar onto the bulkhead hand tight.
8. Check that the belt and loop are positioned correctly and that the blouse is lying flat around bulkhead, now tighten the locknut on the outside of the blouse.
9. Fit the airline coupling if necessary. The coupling must be sealed with Loctite Part No. C00221.
10. Plug the blouse onto an airline and check the flow of air through the air system.

Replacing The Removable Visor (Rigid Visor Model Only)

1. Carefully peel the removable visor from the Velcro discs.
2. If necessary clean the rigid visor before fitting a new removable visor.
3. Remove the protective film from the new removable visor.
4. Locate the centre discs at the top and bottom of the removable visor on to the centre discs on the hard visor.
5. Wrap the removable visor around each side of the hard visor, lining up all the fixing discs and pressing together (see Fig.13).

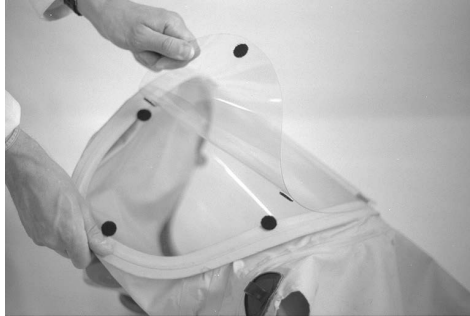


Fig.13

Replacing The Exhalation Valve Diaphragm

1. Using the Hexagon Key (Tool No. B00311) loosen the screw from the centre of the exhalation valve and remove the cap.
2. Carefully stretch the diaphragm over the centre spigot to remove from the exhalation valve body.
3. Check that there is no debris or contamination in the exhalation valve body.
4. Carefully stretch a new diaphragm over the centre spigot making sure that it is correctly orientated and that the hole in the diaphragm is located under the shoulder of the spigot. (See Fig.15).
5. Replace the exhalation valve cap making sure that the location channel on the cap is located over the location key on the valve body. (The Respirex lettering should be at the top).
6. Replace the centre screw and hand tighten using the Hexagon Key (Tool No. B00311).

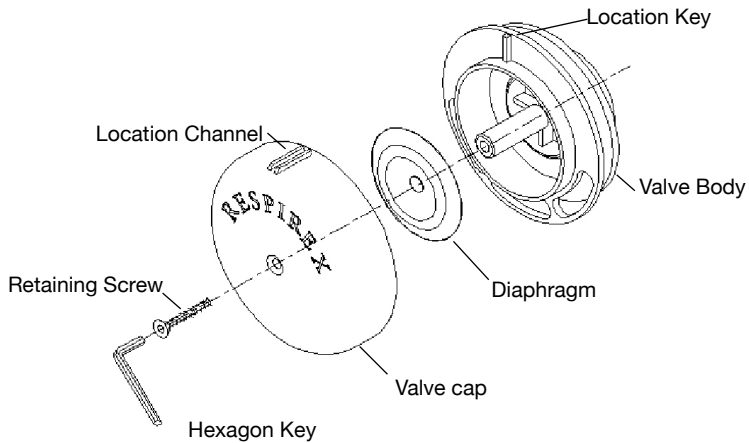


Fig. 14

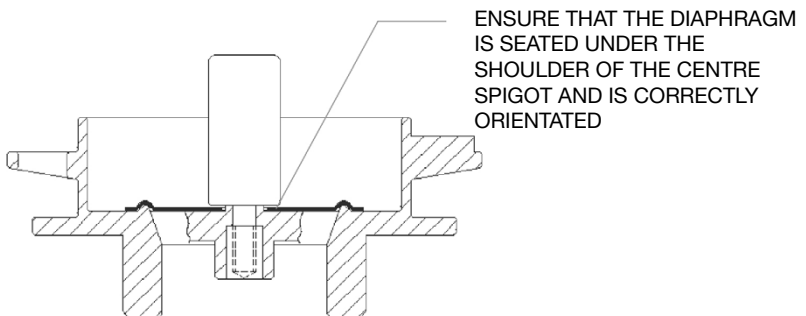


Fig.15

Removing A Complete Exhalation Valve Assembly

1. Lay the blouse on a clean flat surface and open fully at the waist to allow access to the interior of the hood.
2. Using a two pin wrench (Tool No. G01486) locate the pins into the two holes in the exhalation valve-retaining ring and unscrew.
3. Remove the rubber sealing washer.
4. Then from the outside of the blouse carefully remove the exhalation valve assembly.

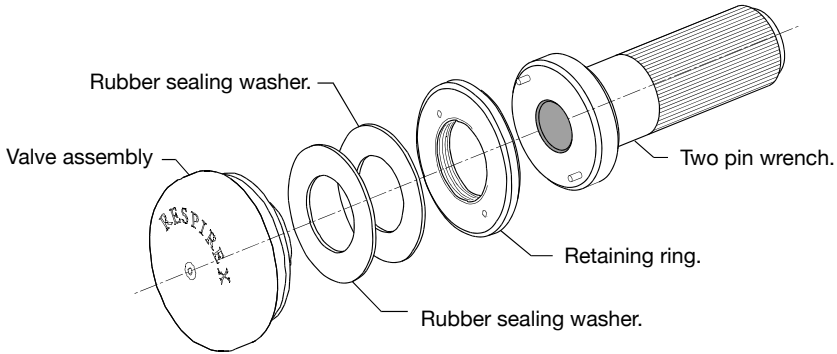


Fig.16

Replacing A Complete Exhalation Valve Assembly

1. The new exhalation valve will have all the parts screwed together, so remove the retaining ring and one of the rubber sealing washers.
2. Check that the remaining rubber sealing washer is laying flat against the valve body.
3. Locate the thread on the exhalation valve assembly through the hole in the back of the blouse.
4. Locate the second rubber sealing washer around the thread on the valve body so that it is lying flat against the material of the blouse.
5. Hand tighten the retaining ring onto the exhalation valve.



Fig.17

6. Check that the exhalation valve is orientated correctly (the Respirex lettering should be at the top of the valve and the three slots under the cover must be at the bottom).
7. Tighten the retaining ring using the two pin wrench (Tool No. G01486, see Fig. 17).

Cleaning

The Simclair air supplied blouse should be cleaned and sanitised at least weekly, or more often if subjected to heavy use. Blouses used by more than one person must be cleaned, inspected and sanitised after each use. If not cleaned contamination may cause illness or disease.

Respirex do not recommend laundering the blouse. When the blouse becomes dirty it should be wiped with a sponge using warm water and Citikleen, rinsed and air-dried. The inner surfaces of the blouse should be sanitised using Synodor.

Do not use solvents or strong cleaning and disinfecting agents as these could damage the visor and parts of the blouse.

Do not get water inside the breathing tubes or in any part of the flow control waist belt assembly.

The air supply hose should be cleaned by wiping with a sponge using warm water and a mild detergent, rinsed and air-dried. Do not get water inside the air supply hose.

The blouse should be hung in a warm room to dry (temperature should not exceed 30°C/86°F) and if there is any possibility of water or cleaning agent getting into the air system, air should be passed through the air system until it is dry.

Warnings

DO NOT MACHINE WASH 

DO NOT SPIN

DO NOT DRY CLEAN 

DO NOT BLEACH 

DO NOT IRON 

DO NOT TUMBLE DRY 

DO NOT USE SOLVENT ON PVC FABRIC

DO NOT USE AGGRESSIVE CLEANING POWDERS

DO NOT SCRUB THE SURFACE OF THE FABRIC

Storage

The Respirix Simplair Blouse is supplied with a three point hanging system; there are loops on the head and shoulders that allow the suit to be hung on a three point hanging frame. The hanging frame is designed to allow the suit to be hung without distortions to the visor. (See Fig.18).

If the blouse is to be stored in a box or container it should be folded so that the breathing air and cooling tubes are not twisted and the visor or is not distorted.

In order to maintain the level of protection offered, care should be taken to minimize the risk of damage occurring to the Simplair Blouse during transportation between work areas. It is recommended that all Simplair Blouses are transported in a suitably sized rigid container resistant to penetration by sharp objects, abrasive surfaces, chemicals, oils, solvents etc.

ALWAYS STORE THE BLOUSE IN A DRY CONDITION.



Fig.18

Servicing and Maintenance

Garments manufactured in polymer rubber materials e.g. Neoprene, can be re- paired using a Respirex repair Kit. Respirex DO NOT guarantee repairs carried out by the customer. Garments manufactured from thermoplastic materials e.g. PVC, require specialist equipment and will need to be returned to the manufacturer for repairs.

Respirex recommend that periodically you return used garments to our care and maintenance department for overhaul, repairs where necessary and report on the condition of your equipment. When your garment should be returned for inspection will depend upon the extent to which the garment is used.

There is no pre-determined life expectancy for these garments as this will depend upon usage, maintenance and washing. However, your garment's protection will be seriously reduced by the existence of the following conditions:

- a) Lifting tape
- b) Holes/Tears.
- c) Thinning of the materials.
- d) Degradation of the fabric of the garment.
- e) Broken closures.
- f) Stretched or worn cuff seals.
- g) Excessive dirt.

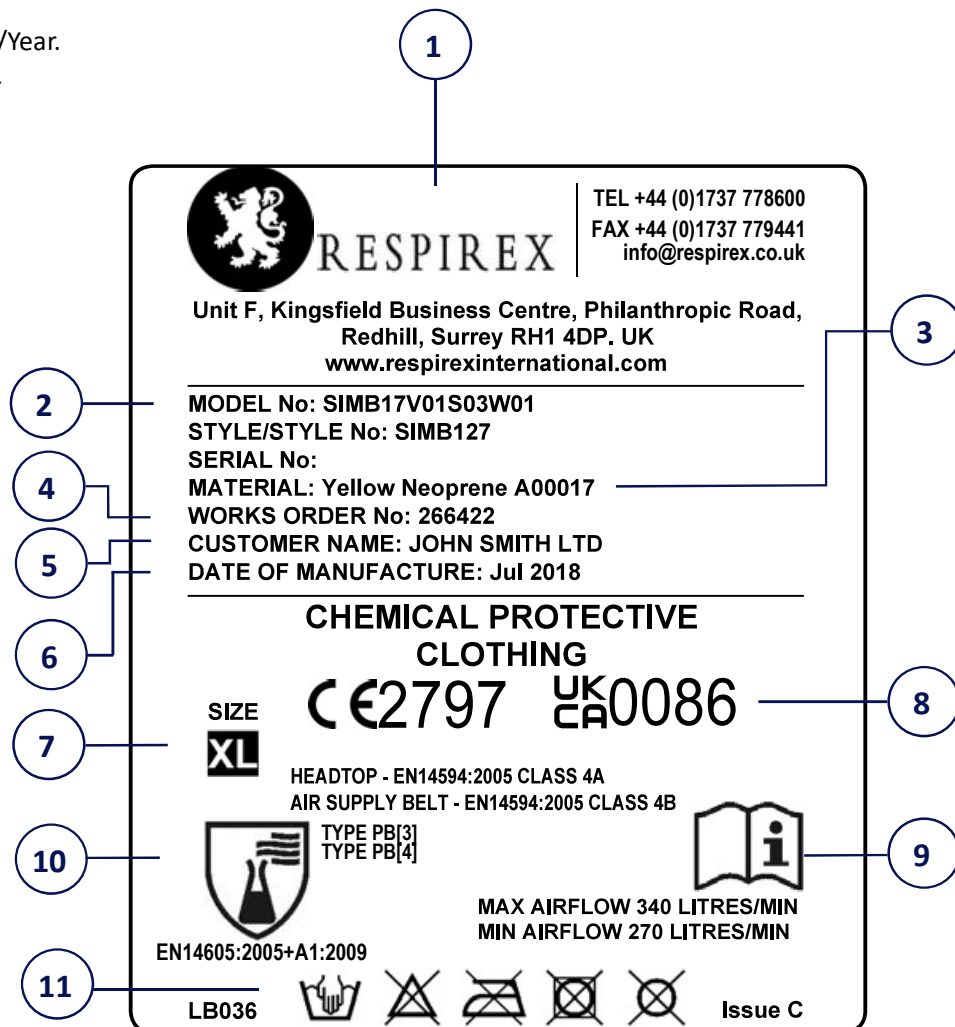
For further enquiries on servicing & maintenance contact Respirex customer services on:






Tel: +44 (0) 1737 778600, Fax: +44 (0) 1737 779441 or Email: info@respirex.co.uk.

Product labelling

1. Manufacturer of garment and address:
Respirex International Ltd.
2. Manufacturer's Model number
3. Material of Manufacture.
4. Manufacturer's Order No.
5. Customer Name.
6. Date of manufacture: Day/Month/Year.
7. Standard Garment Size for wearer

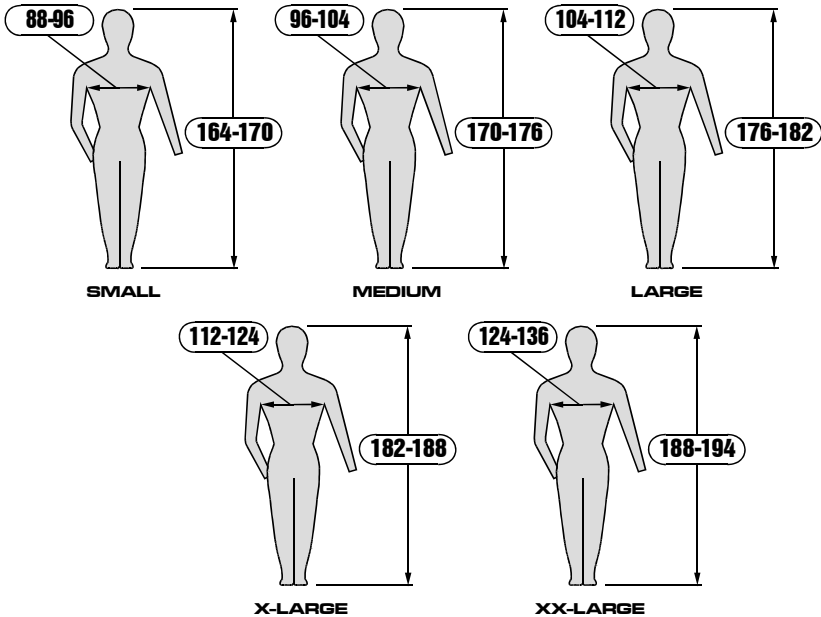
Size	Chest (cm)
S	88 - 96
M	96 - 104
L	104 - 112
XL	112 - 124
XXL	124 - 136



8. CE and UKCA mark with Notified Body and UK Approved Body code.
9. "Open Book Pictogram"; wearer must refer to the "Instructions for use" for further information.
10. Protection against liquid chemicals
11. Five care pictograms indicating that clothing is not suitable for cleaning and reuse.
 - Pictogram 1 Hand wash 
 - Pictogram 2 Do not bleach 
 - Pictogram 3 Do not iron 
 - Pictogram 4 Do not machine dry 
 - Pictogram 5 Do not dry clean 

Sizing

The following pictograms designate the range of height & chest sizes suitable for specific sizes of Simplair blouse, check your body measurements and select the correct size of blouse. Body measurements in cm (inch).



Size	Body Height	Chest Girth
S	164-170 (5'4½" - 5'7")	88-96(35" - 38")
M	170-176 (5'7" - 5'9")	96-104(38" - 41")
L	176-182 (5'9" - 5'11½")	104-112(41" - 44")
XL	182-188 (5'11½" - 6'2")	112-124(44" - 49")
XXL	188-194 (6'2" - 6'4½")	124-136(49" - 53½")



RESPIREX™

EU DECLARATION OF CONFORMITY

RESPIREX INTERNATIONAL LTD
Unit F Kingsfield Business Centre,
Philanthropic Road,
Redhill,
Surrey RH1 4DP
United Kingdom

Declares that the PPE described hereafter:

SIMPLAIR A.E. Blouse

Is a reusable partial body chemical protective blouse and hood combination designed for use with breathable air supplied from an external compressed air source providing positive pressure.

Meets the minimum requirements to:

BS EN 14594:2005

Respiratory protective devices – Continuous flow compressed air line breathing apparatus – Requirements, testing marking

BS EN 14605:2005+A1:2009

Protective clothing against liquid chemicals – performance requirements for clothing with liquid-tight (Type 3) or spray-tight (Type 4) connections, including items providing protection to parts of the body only (Types PB [3] and PB [4])

satisfying Annex II of the PPE Regulation (EU) 2016/425.

It is identical to the PPE, which is subject of Module B EC type-examination certificate CE 690887 and subject to the procedure set out in Module D of the European PPE Regulation (EU) 2016/425 under the supervision of the notified body:

BSI Group The Netherlands B.V.
Say Building, John M. Keynesplein 9, 1066 EP
Amsterdam, Netherlands
EU Notified Body No 2797

These garments are described in the manufacturer's technical file TF009, Issue B.

Done at: RESPIREX, Redhill, Surrey, on 24th July 2018

Signed:

Mark Bellas Simpson (Managing Director)



FM 30801

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