

rpb NOVA 3

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Read all instructions and warnings before using this product.
Keep this manual for future reference.

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Rev: 1



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COMPRESSED AIRLINE BREATHING APPARATUS
THIS APPARATUS IS APPROVED ONLY IN THE FOLLOWING CONFIGURATION

Model	Model	
	Model	Model
NV3-720	Helmets	X
03-101	Flow Regulator and Belt	X
NV3-750	Alternate Capes	X
NV3-751		X
NV3-752		X
NV3-753		X
NV3-754		X
NV3-755	Alternate Quick Disconnect	X
NV2025		X
NV2024		X
NV2032	Alternate Hoses	X
NV2027		X
NV2028	Breathing Air Tube	X
NV2029		X
NV2021B	Visor	X
NV3-726	Alternate Lenses	X
NV3-722		X
NV3-724		X
NV3-725	Lens Frame	X
NV3-723		X
NV3-739	Head Gear	X
09-903	Accessories	X
	Cautions and Limitations?	ARBCDEMINOS

1. PROTECTION

CF – Continuous Flow SA – Supplied Air

2. CAUTIONS AND LIMITATIONS

- A - Not for use in atmospheres containing less than 19.5% oxygen.
- B - Not for use in atmospheres immediately dangerous to life or health.
- C - Do not exceed maximum use concentrations established by regulatory standards.
- D - Air-line apparatus can be used only when the apparatus are supplied with respirable air meeting the requirements of EN12021 — AS/NZS 1715 or higher quality.
- E - Use only the pressure ranges and hose lengths specified in the User's Instructions.
- J - Failure to use and maintain this product properly could result in injury or death.
- M - All approved apparatus shall be selected, fitted, used and maintained in accordance with Local Government and other applicable regulations.
- N - Never substitute, modify, and, or omit parts. Use only exact replacement parts in the configuration specified by the manufacturer.
- O - Refer to user instruction and/or maintenance manuals for information about use and maintenance of these apparatus.
- S - Special or critical User's Instructions and/or specific use limitations apply. Refer to User's Instructions before donning.



!WARNINGS!

1. Do not use this apparatus until you have been trained in the apparatus use, maintenance and limitations by a qualified individual (appointed by your employer) who has extensive knowledge of the RPB NOVA 3 Series. All training must be in accordance with this Users Instruction Manual.
2. Before using this apparatus ensure your employer has determined that airborne contaminant concentrations do not exceed those allowed by applicable Government Regulations and recommendations for a Compressed Air line Breathing Apparatus. It is required that the employer measures and monitors airborne contaminant levels in the work area.
3. Do not wear this apparatus if any of the following conditions exist
 - Atmosphere is immediately dangerous to your life or health
 - You CAN NOT escape without the aid of the apparatus
 - Atmosphere contains less than 19.5% oxygen
 - Work area is poorly ventilated
 - Contaminants are in excess of regulations or recommendations
4. Do not modify or alter this apparatus. Use only parts and components that are part of the EN14594 and AS/NZS 1716 approved apparatus assembly. The use of non RPB® parts voids the EN14594 and AS/NZS 1716 approvals of the entire apparatus assembly.
5. Inspect all components of the apparatus daily for signs of damage or wear and tear that may reduce the level of protection originally provided.
6. Do not use silica sand or abrasives containing silica, lead, arsenic or sharp glass particles - use of abrasive containing these elements could result in serious injury or death.
7. Do not wear this apparatus until you have passed a complete physical exam including a lung X-ray conducted by qualified medical personnel.
8. Improper use of this apparatus or use not in accordance with this User Instruction Manual may cause injury or death. Improper use may also cause life threatening delayed lung diseases such as silicosis, pneumoconiosis or asbestosis.
9. This apparatus, when properly fitted and used, significantly reduces but does not completely eliminate the breathing of contaminants by the apparatus wearer.
10. Be certain your employer has determined that the breathing air source provides at least EN12021, AS/NZS 1715 breathable air. The apparatus must be supplied with clean breathable air at all times. For supplied air it is recommended that a carbon monoxide monitor be used at all times. Contact your RPB® Safety



INTRODUCTION

ambient usage temperature is below -10 °C or above +60 °C. Moisture content of breathable air should be controlled when the apparatus is to be used in temperatures below +4 °C to avoid freezing the apparatus.

15. Leave work immediately if:

- Any apparatus component becomes damaged.
- Airflow stops or slows down
- Breathing becomes difficult
- You become dizzy, nauseous, too hot, too cold or ill.
- Vision is impaired.

16. NOVA 3 apparatus does not provide hearing protection. Approved ear plugs must be properly fitted when exposed to noise levels that exceed Government permissible exposure levels.

RECOMMENDATION:

When using a NOVA 3 Supplied Air apparatus, it is recommended to use a Radex Airline Filter (04-900) and a carbon monoxide monitor (08-200)

distributor for a Radex 08-200 CO Monitor.

11. RPB® Safety cannot accept any liability of whatsoever nature arising directly or indirectly from the use or misuse of RPB® Safety products, including purposes that the products are not designed for. RPB® Safety is not liable for damage, loss or expense resulting from the failure to give advice or information or the giving of incorrect advice or information, whether or not due to RPB® Safety's negligence or that of its employees, agents or sub-contractors.

12. Do not connect the apparatus's air supply hose to nitrogen, oxygen, oxygen enriched air, toxic gases, inert gases or other nonbreathable non EN12021, AS/NZS 1715 breathable air source. Check the air source before using the apparatus. This apparatus is not designed for use with compressed air cylinders, i.e. SCBA cylinders. Failure to connect the supply hose to the proper air source could result in serious injury or death.

13. DO NOT use this apparatus in poorly ventilated areas or confined spaces unless the area is well ventilated and that the contaminant concentrations are below those recommended for this apparatus. Follow all procedures for confined space entry, operation and exit as defined in applicable regulations and standards.

14. DO NOT wear this apparatus if the

APPARATUS OPERATION

AIR QUALITY

This Apparatus must be supplied with clean breathable air, EN12021, AS/NZS 1715 or better, at all times. The NOVA 3 does not purify air or filter contaminants. Breathable air must be supplied to the point of attachment of the EN14594 approved NOVA 3 air supply hose.

Supplied breathing air must at least meet the requirements for EN12021, AS/NZS 1715 and local Government Regulations.

AIR SOURCE

Locate the air source in a clean air environment, always use a filter on the inlet of your air source. Do not park vehicles beside your air inlet as this will cause carbon monoxide to be drawn into your air supply.

Use suitable aftercoolers / dryers with filters and carbon monoxide alarms to assure clean breathable air is supplied at all times.

The air should be regularly sampled to ensure that it meets EN12021, AS/NZS 1715 requirements.

TESTED AND CERTIFIED BY:

INSPEC International
56 Leslie Hough Way
Salford M6 6AJ
United Kingdom

The NOVA 3 COMPRESSED AIRLINE BREATHING APPARATUS EN14594 is specifically designed for use during Abrasive Blasting. The Nova 3 has been designed for use in atmospheres NOT IMMEDIATELY DANGEROUS TO LIFE OR HEALTH, and from which a user can escape without the aid of the breathing apparatus, or that do not exceed the concentrations allowed by Government regulations and recommendations.

The NOVA 3 is tested and approved to EN14594:2005 and AS/NZS 1716:2003 to provide breathing protection in abrasive blasting applications. The cape is designed to protect the wearer's upper body from rebounding abrasive.

NOVA 3 provides an assigned protection Factor of greater than APF1000. Due to the high noise levels experienced during abrasive blasting, hearing protection must always be worn.

All RPB® Safety products are covered by a manufactures warranty of 3 months. The manufacturer warranty covers defects in material, workmanship and does not cover damage caused by misuse or abuse. RPB® Safety's only obligation and your exclusive remedy shall be to repair, replace or refund the purchase price of such parts or products upon the presentation of proof of purchase. Maximum liability is in no case to exceed the value of the RPB® Safety Product involved.



RPB NOVA 3

COMPRESSED AIRLINE BREATHING APPARATUS COMPONENT CONCEPT

The RPB® Nova 3 consists of 3 main components: Helmet assembly, breathing tube and air supply hose illustrated in Fig. 1.1. All 3 components must be present and properly assembled to constitute a complete EN14594 and AS/NZS 1716 approved Compressed Airline Breathing Apparatus.

BREATHING AIR SUPPLY HOSES AND FITTINGS

EN14594, AS/NZS 1716 approved NOVA 3 airline hoses must be used between the point of attachment and the apparatus breathing air connection at the wearer's belt. EN14594, AS/NZS 1716 approved NOVA 3 quick disconnect fittings must be used to connect the hose lengths together. The hose sections must be within the approved length and the amount of sections must be within the number specified in the Breathing Air Pressure Table.

BREATHING AIR PRESSURE

The air pressure must be continually monitored at the point of attachment while the air is flowing to the apparatus. Air pressure must be read from a reliable pressure gauge whilst the apparatus has air flowing through it.

!WARNING!

Failure to supply the apparatus with the minimum required pressure at the point of attachment for the length of airline hoses used could result in contaminants being inhaled as the pressure in the helmet may become negative due to peak inhalation flow when working at very high work rates. The NOVA 3 BREATHING AIR PRESSURE TABLE on Page 9 defines the air pressure ranges

needed to provide the apparatus with a volume of air which falls in the required range of 235-425 lpm.

!WARNING!

Make sure you understand the Breathing Air Pressure table before using this apparatus:

1. Determine your air source (column 1)
2. Identify your breathing tube assembly (column 2)
3. Be sure your air supply hose is EN14594, AS/NZS 1715 approved NOVA 3 breathing air hose.
4. Check your NOVA 3 air supply hose is within the EN14594, AS/NZS 1715 approved length in column 4.
5. Set the air pressure at the point of attachment within the range specified in column 6 for your breathing tube assembly, hose length and amount of hose sections. Make sure air is flowing through your apparatus when setting the pressure.

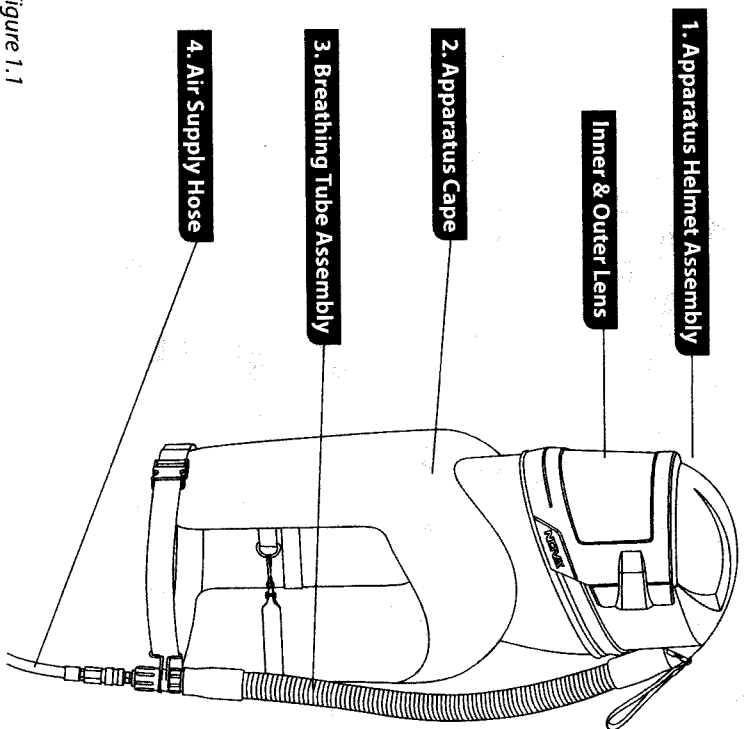


Figure 1.1

!WARNING! Failure to use genuine parts and components that are part of the EN14594, AS/NZS 1716 approved apparatus assembly will void the approval of the entire apparatus assembly.

RPB NOVA 3

APPARATUS SETUP AND USE

INNER LENS

SPECIAL OR CRITICAL USERS INSTRUCTIONS

BREATHING AIR PRESSURE TABLE

This table lists air pressure ranges needed to provide the NOVA 3 with the volume of air that falls within the required range of 235-425 lts/min according to GOVERNMENT REGULATIONS.

1. AIR SOURCE	2. BREATHING TUBE ASSEMBLY AND FLOW CONTROL DEVICES	3. AIR SUPPLY HOSE	4. SUPPLY HOSE LENGTH (METRES)	5. MAX NUMBER OF SECTIONS	6. PRESSURE RANGE (BAR AIR)
Portable or Stationary Compressor	NV2021B/ 03-101 Constant Flow Valve Assembly	NV2028 (7.5m) NV2029 (15m) NV2027 (30m)	7.5	1	0.76 - 0.85
			15	1	0.86 - 0.96
			30	1	1.03 - 1.13
			45	2	1.38 - 1.48
			60	2	1.59 - 1.69
			75	3	1.83 - 1.93
			90	3	2.07 - 2.17

Figure 2.1

Set the air pressure at the point of attachment to the pressure setting specified in column 6 for your breathing tube assembly, hose length and amount of hose sections. Make sure the air is flowing through your apparatus when setting the pressure.

!WARNING!

ALWAYS WEAR EAR PLUGS WHEN WEARING THIS APPARATUS. RPB® recommends the RPB® S100 earplugs which gives a combined NRR of 33.

RECOMMENDATION: Check that the air supply system can sufficiently supply every apparatus connected to the system according to the user instructions.

!WARNING! The Apparatus must be supplied with respirable air meeting the requirements of EN12021, AS/NZS 1715 or Higher Quality.

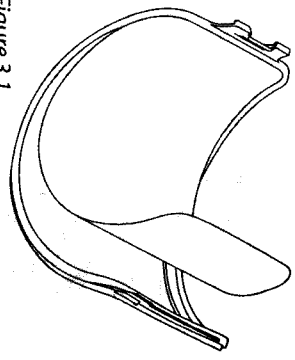


Figure 3.1

Place RPB Inner lens (NV3-722) into the left of the Inner lens frame (NV3-723) and work it round locating it into the frame and finally clipping it into place on the right.

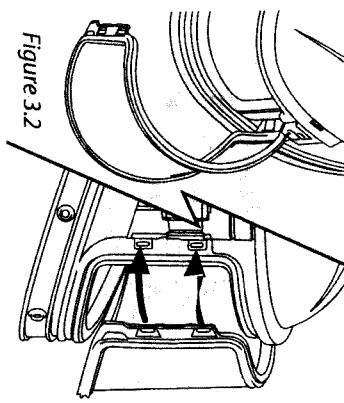


Figure 3.2

Secure locating Inner lens frame pins into visor latch mount rolling the frame round the inner lens seal and securing it onto the clips at the visor hinge mount.

TEAR OFF AND OUTER LENSES

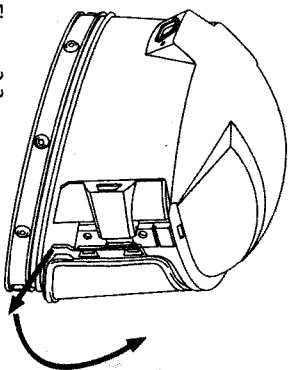


Figure 3.3

To remove the Inner lens frame pull frame from the visor hinge mount rolling it round and then dislocate the locating pins from the Visor latch mount.

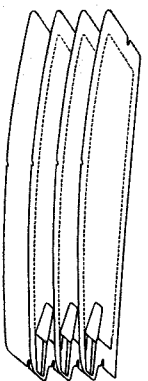


Figure 3.4

Place 3 Tear Off Lenses (N3-725) and 1 Outer Lens (N3-724) on top of each other, make sure the tabs are folded the same way.

APPARATUS SETUP AND USE

TEAROFF AND OUTER LENSES (CONTINUED)

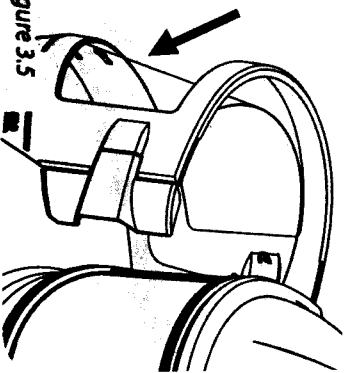


Figure 3.5
Place the lenses onto the Lens Locator at the centre of the visor (N3-726).

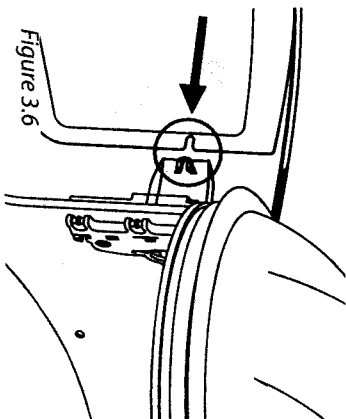


Figure 3.6
Slide the lenses under the lens locators that are positioned at the sides of the visor.

CONNECTING THE AIR SUPPLY

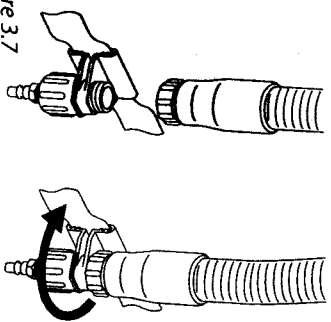


Figure 3.7

Thread on the loose running nut of the NV2021B Breathing Tube on to the Flow Control Device (03-101). Screw the running nut in a clockwise direction until tight.

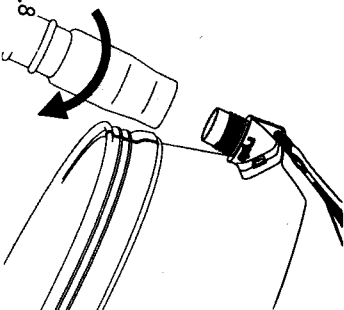


Figure 3.8

Connect the NV2021B Breathing Tube to the Helmet. This end is labelled 'Attach this end to helmet'. Turn anti clockwise until tight.

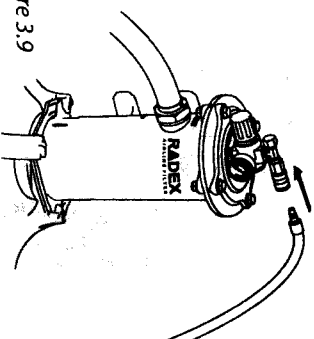


Figure 3.9

Connect the EN14594, AS/NZS 1716 approved NOVA 3 Air Supply Hose to a breathing air source supplying EN12021 or better quality air. Connect the apparatus quick disconnect fitting onto the Air Supply Hose.

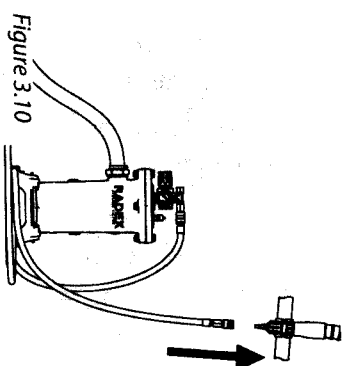


Figure 3.10

Now connect the Breathing Air Supply Hose to the Flow Control Device. Air should be now flowing through the apparatus.

!WARNING!

Check the air pressure at the point of attachment is within the range specified in column 6 of the Breathing Air Pressure Table for the hose length and amount of hose sections. Make sure air is flowing through your apparatus when setting the air pressure.

NOTE:

Check the hose connections for any air leaks and tighten if necessary – replace any worn parts.

DONNING YOUR HELMET

Once you have set up, you are ready to fit your NOVA 3 Supplied Air Apparatus. Firstly check inside the helmet to ensure that it is free of dust, dirt or contaminants.

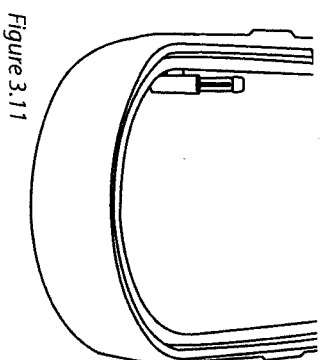


Figure 3.11

Airflow in the apparatus must be above 235lit/min and the yellow indicator is not visible when the flow drops below this rate. DO NOT use the apparatus when the indicator is not showing.

APPARATUS SETUP AND USE

DONNING YOUR HELMET (CONTINUED)

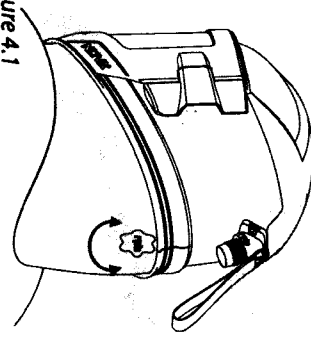


Figure 4.1

Adjust the apparatus padding size by turning the ratchet knob located under the cape collar at the back of the apparatus padding.

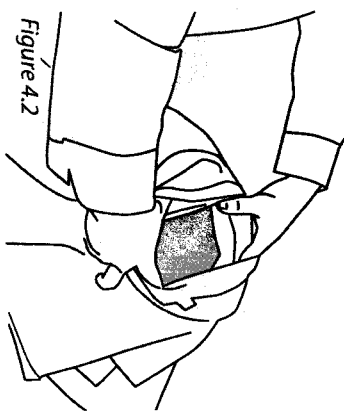


Figure 4.2

Fold back cape, open the Inner Bib and place your fingers on the Inner Bib and the side of helmet at approximately ear position. Lift the helmet and place onto your head. Make sure air is flowing into the apparatus prior to fitting.

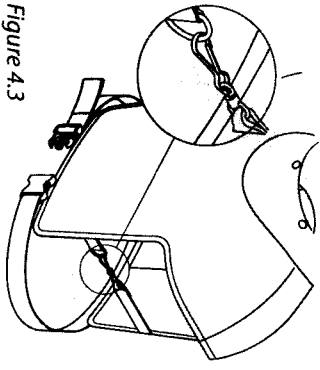


Figure 4.3

Adjust the apparatus Cape around your body and fasten the snap hooks on each side of the cape.

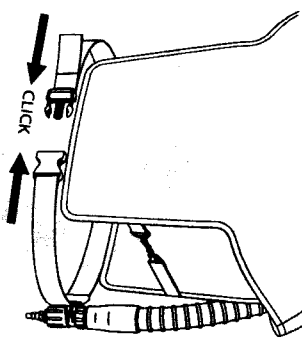


Figure 4.4

Fasten the NV2022 belt at waist or hip level and adjust for comfort. Move the Flow Control Device away from spine.

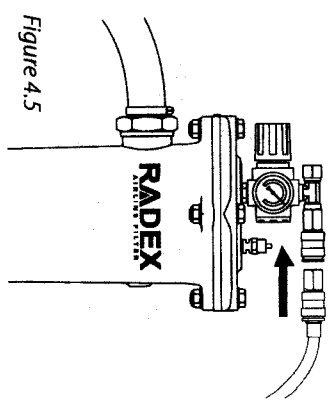


Figure 4.5

Re check the air pressure and adjust if necessary. With air flow into your apparatus you are now ready to enter the work area.

DOFFING YOUR HELMET

When you have finished working, leave the work area wearing the apparatus with air flowing into the helmet. Once outside the contaminated area remove the apparatus and disconnect the air supply hose.

!WARNING! NEVER remove your apparatus while you are in the work areas as this may result in serious injury or death.

CLEANING, DISINFECTING AND STORAGE

As the NOVA 3 Supplied Air apparatus has a limited service life, a regular inspection and replacement programme must be conducted. Before using the Apparatus all parts should be inspected for damage or wear and tear. Replace all worn or damaged parts immediately. Use only parts and components that are part of the EN14594, AS/NZS 1716 approved apparatus assembly. Refer to Parts and Accessories section on pages 20- 23 part numbers.

!WARNING!
Do not clean this apparatus with volatile chemicals.

To disinfect the apparatus we recommend using Domestic Grade Disinfectant Wipes. Domestic grade spray disinfectants may also be used inside the helmet.

HELMET AND LININGS

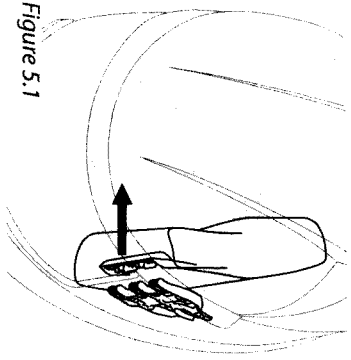


Figure 5.1

The side padding is mounted on a hinge and can be removed by pulling away from the helmet.

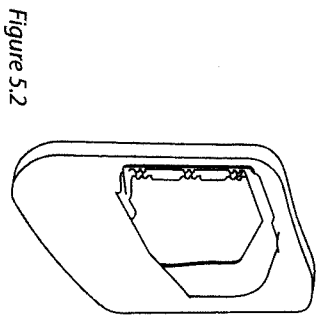


Figure 5.2

The covers can be removed from the padding and washed in a conventional washing machine or with light detergent and water.

npba NOVA 3

CLEANING, DISINFECTING AND STORAGE

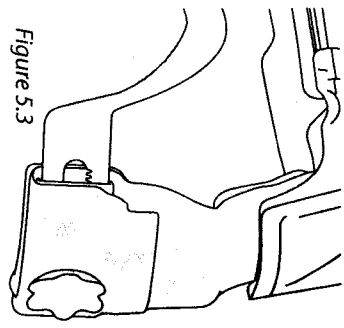


Figure 5.3

Remove rear Pad

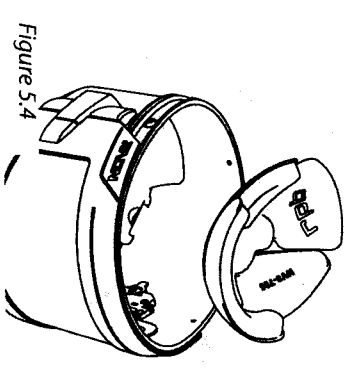


Figure 5.4

Remove Head Liner padding from the head liner, the padding can be washed or disposed. The padding is secured with hook fasteners.

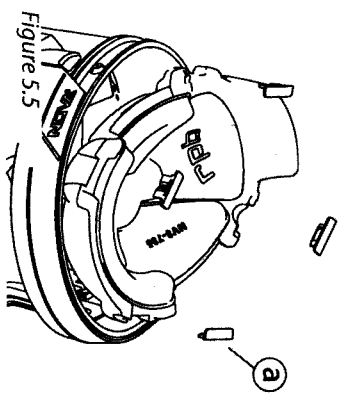


Figure 5.5

To remove the Head Liner, first remove the 4 clips (a) then lift out. To clean, rinse in a light detergent and water, or place in a conventional washing machine. Do not clean with volatile chemicals.

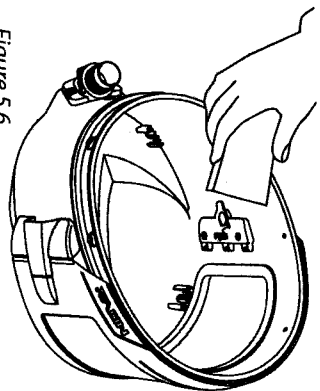


Figure 5.6

The inside of the helmet can be wiped clean with a liquid detergent.

RPB® NOVIA 3

INSPECTION, MAINTENANCE, CLEANING AND STORAGE

VISOR ASSEMBLY

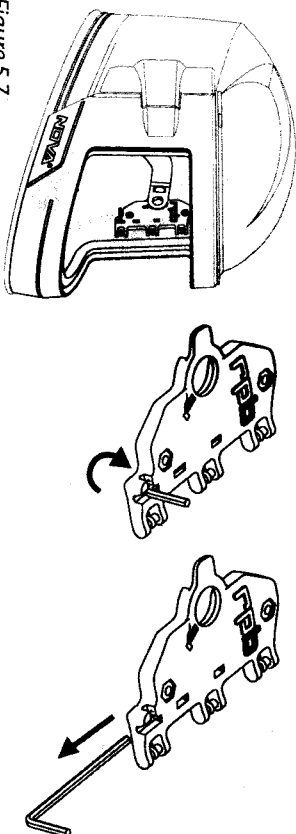


Figure 5.7

There is an Allen Key mounted in the padding connector. Rotate the Allen Key out of the holder then pull down to remove.

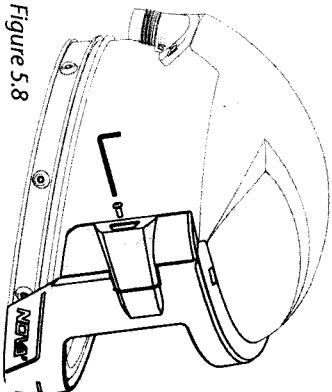


Figure 5.8

To remove the Visor, undo the hinge lock (NV3-727-2) and slide back, this will expose the hinge pin to remove the Visor.

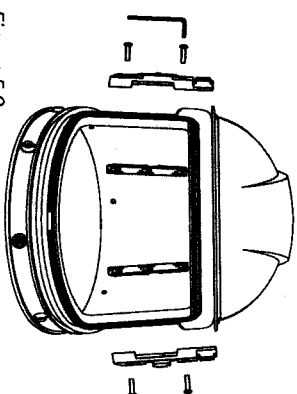


Figure 5.9

The Hinge Mount (NV3-727) and Latch Mount (NV3-728) can be removed using the Allen Key.

LENSES AND LENS GASKETS

Check Inner Lens Gasket (NV3-721) and the Inner Lens Frame (NV3-723) for splits, cracks or wear and tear. Replace any damaged or worn parts immediately with RPB® Safety genuine parts. The Inner Gasket and Inner Lens frame can be sponged with warm water and a gentle detergent, rinsed and air dried.

BREATHING TUBE ASSEMBLY

Inspect the Breathing Tube (NV2021B) for splits or excessive wear. Check that the fitting are secured into the tube and are not allowing any air to escape. Replace the tube as soon as signs of damage or excessive wear become evident. Do not remove the foam that is inside the Breathing Tube as it reduces the noise level of the incoming air.

!WARNING!
USE ONLY RPB® SAFETY AIR
SUPPLY HOSES.

AIR SUPPLY HOSE

The air supply hose should be inspected for cuts, cracks, blisters and signs of abrasion. Make sure the fittings are firmly crimped to the hose and air cannot escape. Make sure the hose has not been crushed or kinked. Replace the hose immediately if there are any signs of damage. Do not run water through the inside of the hose. Clean the Quick Disconnect Couplings with an air blow down gun to remove any sand or dirt that may jam the coupler.

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PARTS AND ACCESSORIES

STORAGE

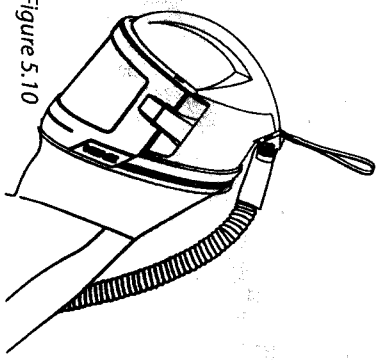


Figure 5.10

After you have used the apparatus, hang it up by the hand strap in a clean environment, this will help keep the inside free of contaminants.

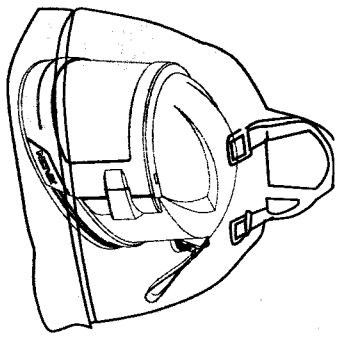


Figure 5.11

After the apparatus components have been cleaned and inspected, place them in a plastic bag or an airtight container. Store apparatus parts away from excessive heat, dust, cold, moisture and harmful chemicals.

NOTE:

The respirator equipment must be stored in a temperature range of -10°C to +45°C and relative humidity less than 85%.

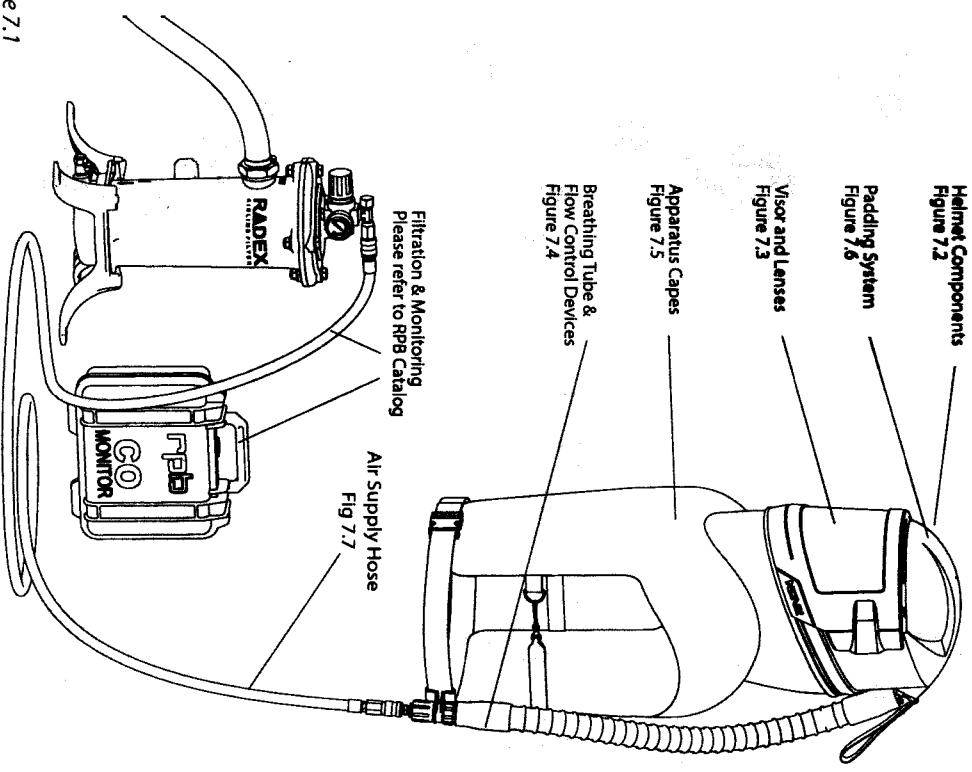


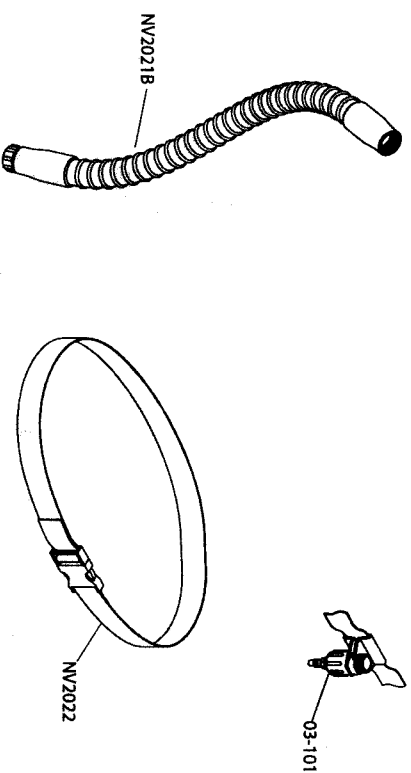
Figure 7.1

WARNING! Use only parts and components that are part of the EN14594, AS/NZS 1716 approved apparatus assembly. The use of non RPB® parts voids the EN14594, AS/NZS 1716 approval of the entire apparatus assembly.

ppb[®] NOVA 3

PARTS AND ACCESSORIES

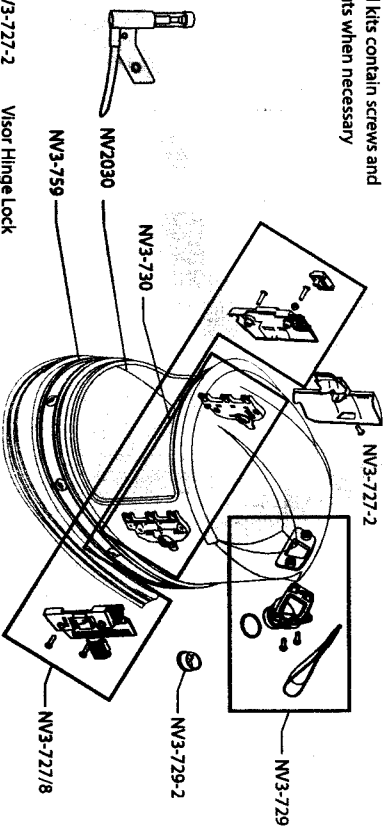
BREATHING TUBE & FLOW CONTROL DEVICE Figure 7.4



- NV2021B Breathing Tube (dark grey)
- NV2022 Belt
- 03-101 Constant Flow Valve

HELMET COMPONENTS Figure 7.2

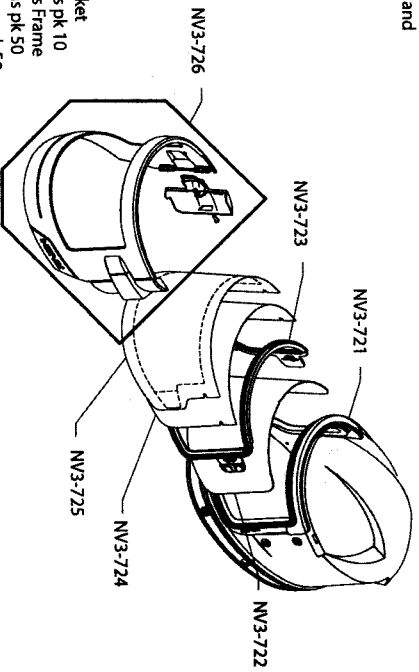
All Kits contain screws and nuts when necessary



- NV3-727-2 Visor Hinge Lock
- NV3-727/8 Visor Latch Mount Kit - Includes: Latch Mount, Hinge Mount, Covers
- NV3-729 Air Inlet Kit - Includes: Air Inlet, O-Ring, Back Plate, Hanging Strap
- NV3-730 Padding Connectors (left & right)
- NV3-759 Cape Coverband
- NV3-729-2 Low Flow Indication Adaptor
- NV2030 Low Flow Indicator

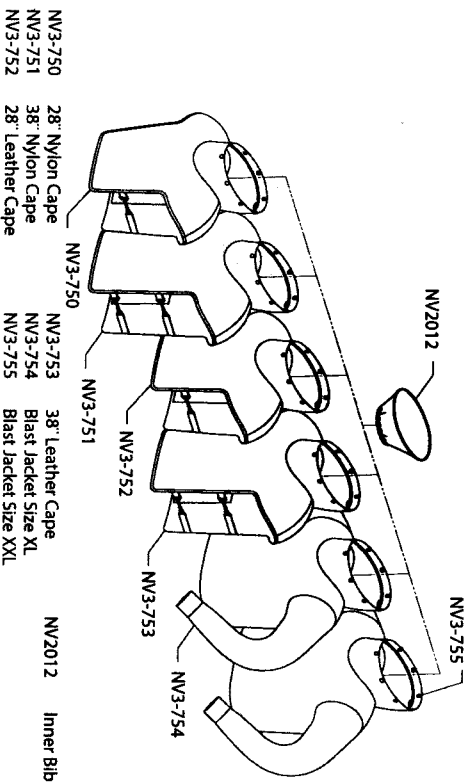
VISOR AND LENSES Figure 7.3

All Kits contain screws and nuts when necessary



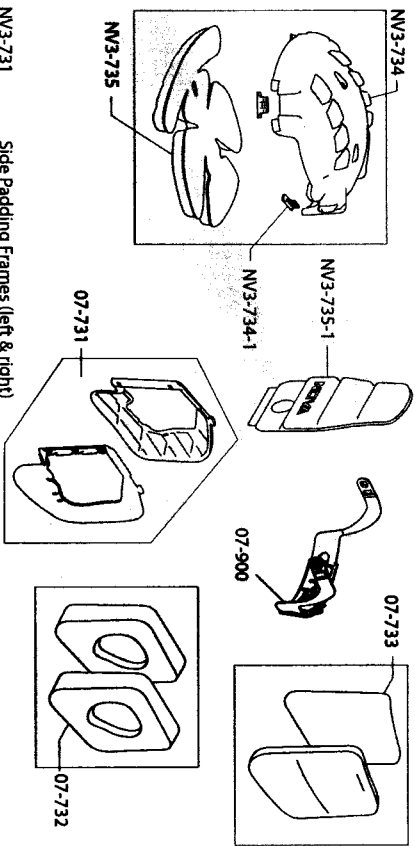
- NV3-721 Inner Gasket
- NV3-722 Inner Lens pk 10
- NV3-723 Inner Lens Frame
- NV3-724 Outer Lens pk 50
- NV3-725 Tear Off Lens pk 50
- NV3-726 Visor Kit - Includes: Visor with Hinge Pin and Latch, Hinge Lock

APPARATUS CAPES Figure 7.5



- NV3-750 28" Nylon Cape
- NV3-751 38" Nylon Cape
- NV3-752 28" Leather Cape
- NV3-753 38" Leather Cape
- NV3-754 Blast Jacket Size XL
- NV3-755 Blast Jacket Size XXL
- NV2012 Inner Bib

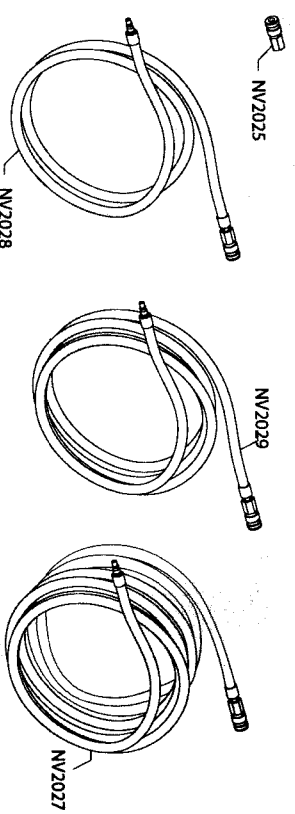
PADDING SYSTEMS Figure 7.6



- NV3-731 Side Padding Frames (left & right)
- NV3-732-XXX Side Padding Foam Pads pk 5 pairs (A10 Thin - A15 Medium - A20 Thick) **
- NV3-734 Head Liner Kit - Includes: Head Liner, Head Liner Foam Padding, Head Liner Clips x4
- NV3-734-1 Head Liner Clips, pack of 4
- NV3-735 Head Liner Padding
- NV3-735-1 Neck Pad
- 07-900 Adjustable Head Support

** Note that the A10 is for larger head sizes and the A20 is for smaller head sizes.

AIR SUPPLY HOSES Figure 7.7

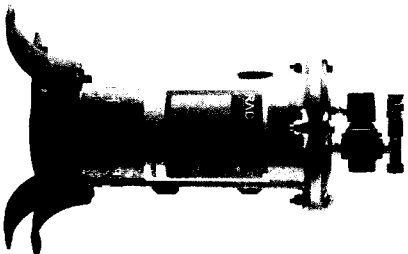


- NV2027 30m Air Supply Hose
- NV2028 7.5m Air Supply Hose
- NV2029 15m Air Supply Hose
- NV2025 Quick Release Coupler

OTHER PRODUCTS

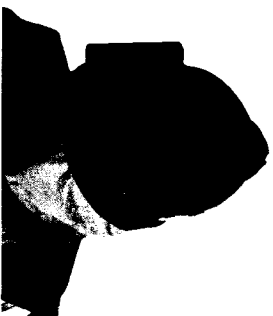
AIRLINE FILTRATION

The RPB® RADEX AIRLINE FILTER™ offers increased capacity, versatility and filtration. This optional equipment combines the versatility of either floor or wall mounting with increased filtration capacity, enabling customization to meet worker's needs and working environments.



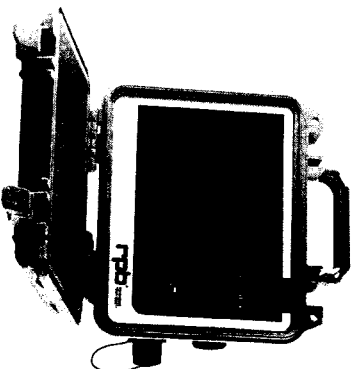
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The RPB® Astro is your number one choice of economy abrasive blasting helmet which meets safety standards worldwide.



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The RPB® RADEX CO MONITOR™ helps ensure worker safety with a unique traceability/feature that monitors and records carbon monoxide levels, and temperature. This data that provides certainty of monitor functioning and can be stored for up to two years allowing analysis of plant and field air quality.



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