



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: 6



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TYPE CE, CONTINUOUS FLOW, SUPPLIED-AIR RESPIRATOR
THESE RESPIRATORS ARE APPROVED ONLY IN THE FOLLOWING CONFIGURATIONS

RESPIRATOR COMPONENTS																			
TC -	Protection ¹	MODEL	Alternate Flow Regulator and Belt				Alternate Capes				Alternate Quick Disconnect	Alternate Hoses		Breathing Air Tube Alternate Visor	Alternate Lenses		Lens Frame	Head Gear	Cautions and Limitations ²
			NV3-720	NV2016	4000-01	4000-20	03-501	NV2-750	NV3-751	NV3-752	NV3-753	NV3-754	NV3-755	NV2025	NV2024	NV2027	NV2028	NV2029	
19C-456S	SA/CF/SB	NOVA 3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	ABCDEJMNOS

1. PROTECTION

CF - Continuous Flow SA - Supplied Air SB - Supplied-Air Abrasive Blast

2. CAUTIONS AND LIMITATIONS

- A - Not for use in atmospheres containing less than 19.5 percent oxygen.
- B - Not for use in atmospheres immediately dangerous to life and health.
- C - Do not exceed maximum use concentrations established by regulatory standards.
- D - Air-line respirators can be used only when the respirators are supplied with respirable air meeting the requirements of CGA G-7.1 Grade D or Higher Quality.
- E - Use only the pressure ranges and hose lengths specified in the User's Instructions.
- J - Failure to properly use and maintain this product could result in injury or death.
- M - All approved respirators shall be selected, fitted, used and maintained in accordance with MSHA, OSHA, and other applicable regulations.
- N - Never substitute, modify, add or omit parts. Use only exact replacement parts in the configuration as specified by the manufacturer.
- O - Refer to User's Instructions, and/or maintenance manuals for information on use and maintenance of these respirators.
- S - Special or critical User's Instructions, and/or specific Limitations apply. Refer to User's Instructions before donning.

!WARNINGS!

1. Do not use this respirator until you have been trained in the respirators use, maintenance and limitations by a qualified individual (appointed by your employer) who has extensive knowledge on the RPB® NOVA 3 Respirator. All training must be in accordance with this Users Instruction Manual.
2. Before using this respirator ensure your employer has determined that airborne contaminant concentrations do not exceed those allowed by applicable OSHA, EPA or NIOSH regulations and recommendations for continuous flow supplied air respirators. Federal law requires that the employer measures and monitors airborne contaminant levels in the work area.
3. Do not wear this respirator 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 respirator
 - 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 respirator. Use only parts and components that are part of the NIOSH approved respirator assembly. The use of non RPB® Safety parts voids the NIOSH approval of the entire respirator assembly.
5. Inspect all components of the respirator 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 respirator until you have passed a complete physical exam including a lung X-ray conducted by qualified medical personnel.
8. Improper use of this respirator 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 respirator, when properly fitted and used, significantly reduces but does not completely eliminate the breathing of contaminants by the respirator wearer.
10. Be certain your employer has determined that the breathing air source provides at least a Grade D breathable air as specified in the compressed gas association commodity specification G-7.1. The respirator must be supplied with clean breathable air at all times. A carbon monoxide monitor must be used at all times. Contact your RPB® Safety 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 respirator's air supply hose to nitrogen, toxic gases, inert gases or other unbreathable non Grade D air sources. Check the air source before using the respirator. This apparatus is not designed for use with mobile air supply systems i.e. cylinders. Failure to connect the supply hose to the proper air source could result in serious injury or death.
- 13.** If this respirator is used in confined spaces ensure the area is well ventilated and that all contaminate concentrations are below those recommended for this respirator. Follow all procedures for confined space entry, operation and exit as defined in applicable regulations and standards.
- 14.** Leave work immediately if:
 - Any respirator component becomes damaged.
 - Airflow stops or slows down
 - Breathing becomes difficult
 - You become dizzy, nauseous, too hot, too cold or ill.
 - Vision is impaired.
- 15.** RPB® NOVA 3 Respirators do not provide hearing protection. Earplugs or earmuffs must be properly fitted when exposed to noise levels that exceed the OSHA permissible exposure levels.

RECOMMENDATION:

When using a RPB® NOVA 3 Supplied Air Respirator. It is recommended to use a Radex Airline Filter (p/n: 04-900) and a carbon monoxide monitor (p/n: 08-200)

NIOSH - CAUTIONS AND LIMITATIONS

- A** Not for use in atmospheres containing less than 19.5 percent 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 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 user's instructions, and/or maintenance manuals for information on use and maintenance of these respirators.
- S** Special or critical user's instructions and/or specific limitations apply. Refer to user's Instruction page 11 (breathing air pressure table) before donning.

INTRODUCTION

The RPB® NOVA 3 Supplied Air Respirators are designed to provide protection from airborne contaminants in atmospheres NOT IMMEDIATELY DANGEROUS TO LIFE OR HEALTH, and from which a user can escape without the aid of the respirator, or that do not exceed concentrations allowed by OSHA, EPA or NIOSH regulations and recommendations.

The RPB® NOVA 3 is NIOSH approved (TC-19C-456 Type CE Supplied Air Respirator) to provide respiratory protection in general applications including abrasive blasting. The helmet meets ANSI Z89.1 Type 1C Head Protection and the Inner Lens meets ANSI Z87.1 for Eye Protection. The cape is designed to protect the wearer's upper body from rebounding abrasive.

RPB® NOVA 3 Respirators are NIOSH Approved for use with the NV2016 Flow Control Valve, 4000-01 Cold Air Tube, 4000-20 Hot Air Tube, and the 03-501 Climate Control Device.

All RPB® Safety products are covered by a manufacturer's 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.

RESPIRATOR OPERATION

AIR QUALITY

This respirator must be supplied with clean breathable air at all times. Breathable air must at least meet the requirements for Type 1 gaseous air described in the Compressed Gas Association Commodity Specifications G.7.1 (Grade D or higher) and as specified by Federal Law 42 CFR 84, subpart J.84.141(b) and 29 CFR 1910.134 (i) the RPB® NOVA 3 does not purify air or filter contaminants.

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. Always use suitable after coolers / dryers with filters and carbon monoxide alarms to ensure clean breathable air is supplied at all times. The air should be regularly sampled to ensure that it meets Grade D requirements.

BREATHING AIR SUPPLY HOSES AND FITTINGS

RPB® air supply hoses and fittings must be used between the point of attachment and the respirator breathing air connection at the wearer's belt. The hose sections must be within the correct length and the amount of sections must be within the number specified in the breathing air pressure table on page 11.

BREATHING AIR PRESSURE

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

!WARNING! Failure to supply the minimum required air pressure at the point of attachment for the length of air supply hose 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 RPB® NOVA 3 Breathing Air Pressure table on page 11 defines the air pressure ranges needed to provide the respirator with a volume of air which falls in the required range of 6-15cfm or 170-425 lts/min.

!WARNING!

Make sure you understand the Breathing Air Pressure table before using this respirator.

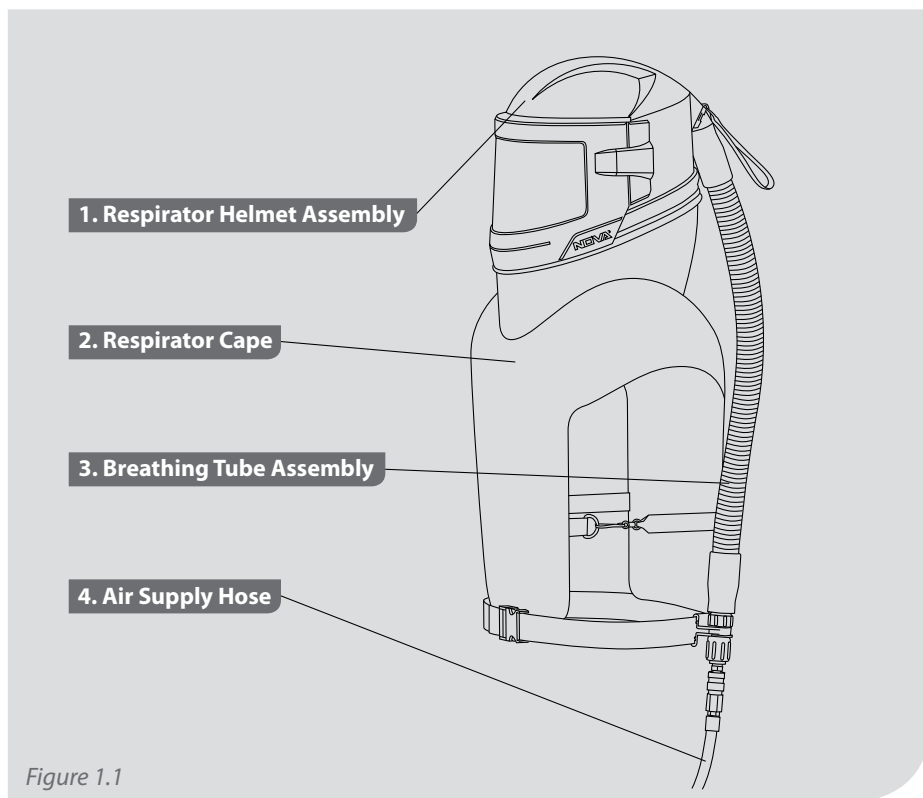
1. Determine your air source (column 1)
2. Identify your breathing tube assembly (column 2)
3. Confirm the part number of the air supply hose you are using (column 3)
4. Check your RPB® Safety Air Supply Hose is within the correct length (column 4)
5. Set the air pressure at the point of attachment within the range specified (column 6) for your breathing tube assembly, hose length and number of hose sections. (column 5)

Make sure air is flowing through your respirator when setting the air pressure.

RESPIRATOR COMPONENT CONCEPT

The RPB® NOVA 3 Supplied Air Respirator consists of 4 main components, as shown in Fig 1.1. All 4 components must be present

and properly assembled to constitute a complete NIOSH Approved Respirator.



!WARNING! Failure to use genuine parts and components that are part of the NIOSH approved respirator assembly will void the approval of the entire respirator assembly.

SPECIAL OR CRITICAL USERS INSTRUCTIONS

BREATHING AIR PRESSURE TABLE

This table lists air pressure ranges needed to provide the RPB® NOVA 3 with the volume of air that falls within the required range of 6-15cfm or 170-425 lts/min according to U.S government regulations.

1. Air Source	2. Breathing Tube Assembly and Flow Control Devices	3. Air Supply Hose	4. Supply Hose Length (ft)	5. Max number of sections	6. Pressure Range (PSIG Air)
Portable or Stationary Compressor	NV2021B/NV2016 Flow Control Valve assembly	NV2027 (100ft) NV2028 (50ft) NV2029 (25ft)	25	1	27 - 28
			50	1	28 - 29
			100	2	30 - 31
			150	3	33 - 34
			200	4	36 - 37
			250	5	38 - 39
			300	6	41 - 43
Portable or Stationary Compressor	NV2021B/4000-01 Cold Air Tube Assembly	NV2027 (100ft) NV2028 (50ft) NV2029 (25ft)	25	1	55 - 56
			50	1	56 - 57
			100	2	60 - 62
			150	3	65 - 67
			200	4	70 - 72
			250	5	77 - 78
			300	6	80 - 82
Portable or Stationary Compressor	NV2021B/4000-20 Hot Air Tube Assembly	NV2027 (100ft) NV2028 (50ft) NV2029 (25ft)	25	1	67 - 68
			50	1	69 - 70
			100	2	73 - 74
			150	3	77 - 78
			200	4	81 - 82
			250	5	86 - 87
			300	6	91 - 92
Portable or Stationary Compressor	NV2021B/03-501 Climate Control Assembly	NV2027 (100ft) NV2028 (50ft) NV2029 (25ft)	25	1	50 - 80
			50	1	55 - 85
			100	2	60 - 95
			150	3	65 - 95
			200	4	70 - 100
			250	5	75 - 100
			300	6	85 - 100

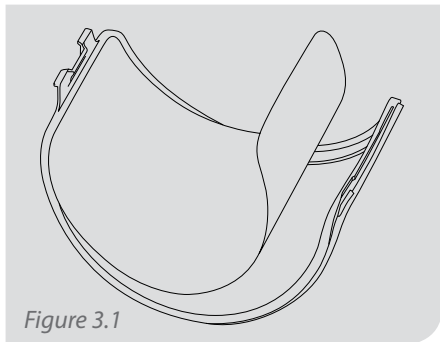
Figure 2.1

!WARNING! The NOVA 3 Supplied Air Respirator must be supplied with respirable air meeting the requirements of CGA G-7.1 Grade D or higher quality.

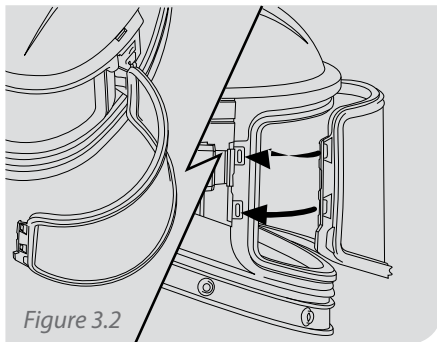
Note: Please see Appendix A for other Hose configurations.

RESPIRATOR SETUP AND USE

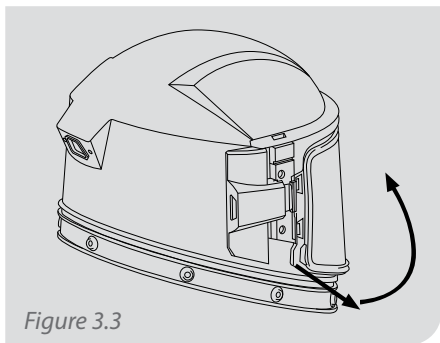
INNER LENS



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.

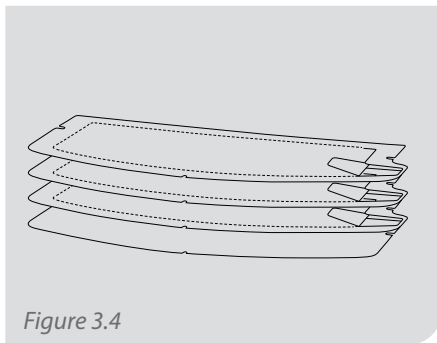


Secure locating Inner lens frame pins into visor latch mount rolling the frame round the inner lens seal and securing it onto the clips at the visor hinge mount.



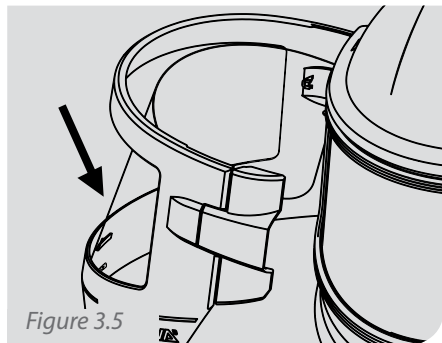
To remove the Inner lens frame pull frame from the visor hinge mount rolling it round and then dislocate the locating pins from the Visor latch mount.

TEAR OFF AND OUTER LENSES

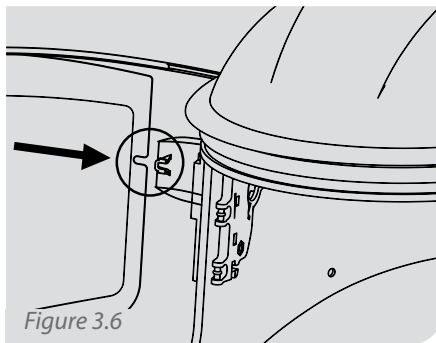


Place 3 Tear Off Lenses p/n: N3-725 and 1 Outer Lens p/n: N3-724 on top of each other, make sure the tabs are folded the same way.

TEAROFF AND OUTER LENSES (CONTINUED)

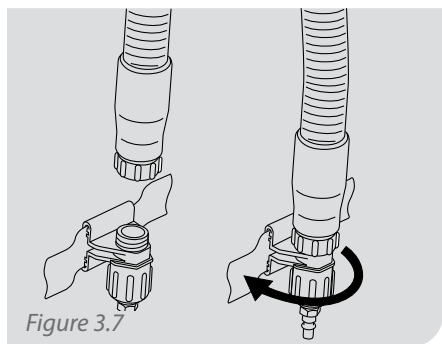


Place the lenses onto the Lens Locator at the centre of the visor/n: N3-726.

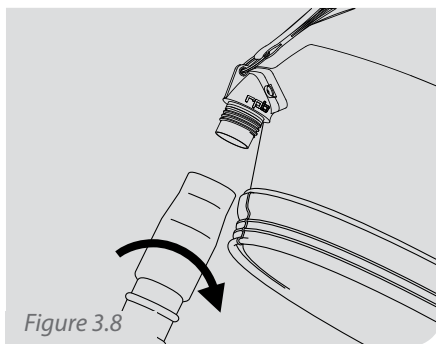


Slide the lenses under the lens locators that are positioned at the sides of the visor.

CONNECTING THE AIR SUPPLY



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



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

RESPIRATOR SETUP AND USE CONTINUED

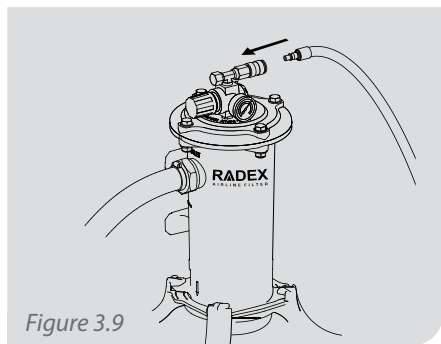


Figure 3.9

Connect the Breathing Air Supply Hose to the point of attachment (04-900 Radex[®] Airline Filter) shown.

!WARNING! Make sure that the air from the point of attachment is Grade D or higher quality and meets OSHA requirements.

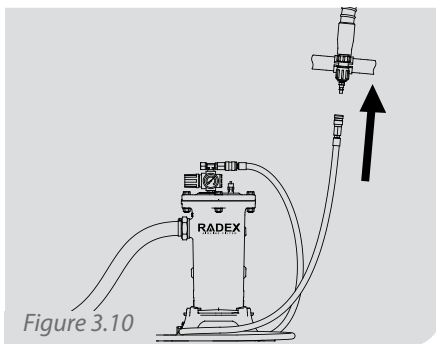


Figure 3.10

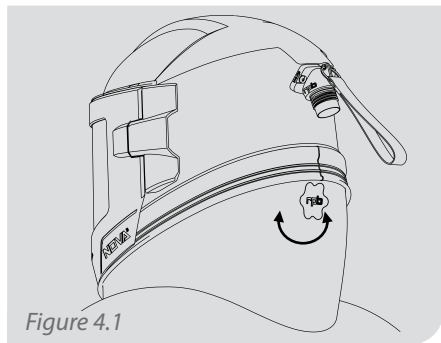
Now connect the Breathing Air Supply Hose to the Flow Control Device. Air should be now flowing through the Respirator.

!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 respirator when setting the air pressure.

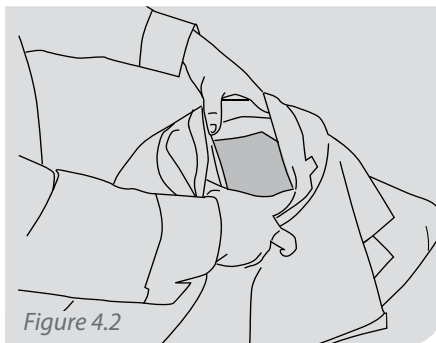
DONNING YOUR HELMET

Once you have set up, you are ready to fit your RPB[®] NOVA 3 Supplied Air Respirator. Firstly check inside the helmet to ensure that it is free of dust, dirt or contaminates.

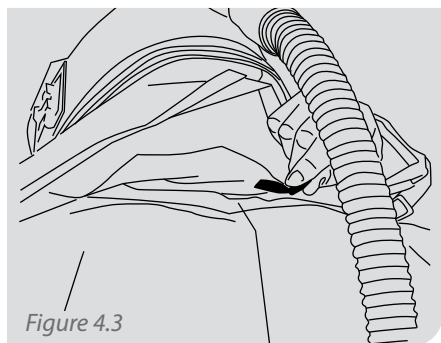
DONNING YOUR HELMET (CONTINUED)



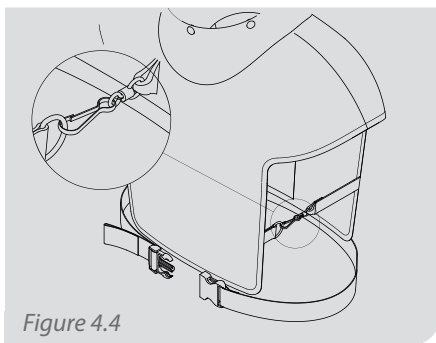
Adjust the Respirator padding size by turning the ratchet knob located under the cape collar at the back of the respirator padding.



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 respirator prior to fitting.

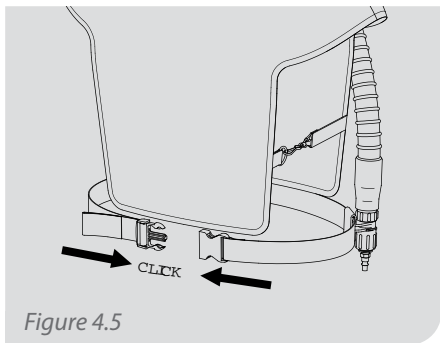


Pull the Inner Bib around your neck and adjust the elastic cord to ensure a snug fit. This helps provide a barrier to airborne contaminants.

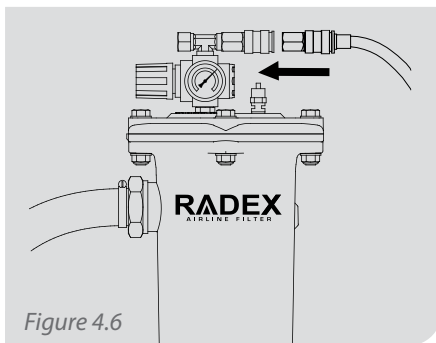


Adjust the Respirator Cape around your body and fasten the snap hooks on each side of the cape.

RESPIRATOR SETUP AND USE CONTINUED



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



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

DOFFING YOUR HELMET

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

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

INSPECTION, MAINTENANCE, CLEANING AND STORAGE

As the RPB® NOVA 3 Supplied Air Respirator has a limited service life, a regular inspection and replacement programme must be conducted. Before using the Respirator 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 NIOSH approved respirator assembly. Refer to Parts and Accessories section on pages 20-23 part numbers.

!WARNING!

Do not clean this respirator with volatile chemicals.

HELMET AND LININGS

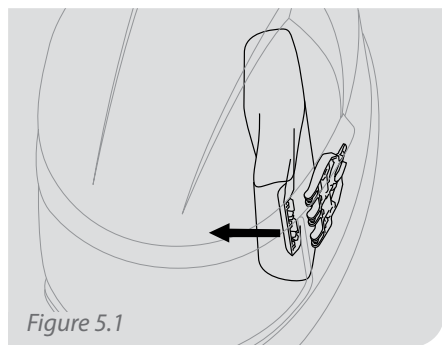


Figure 5.1

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

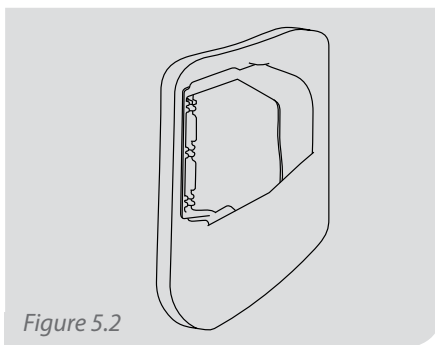
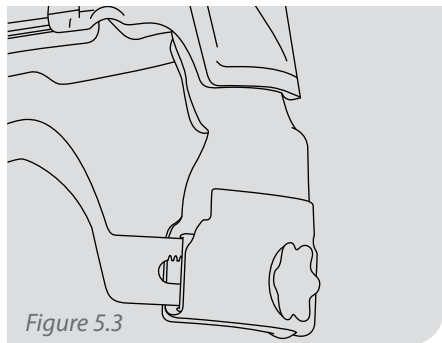


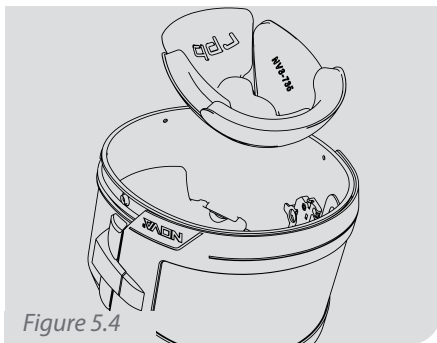
Figure 5.2

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

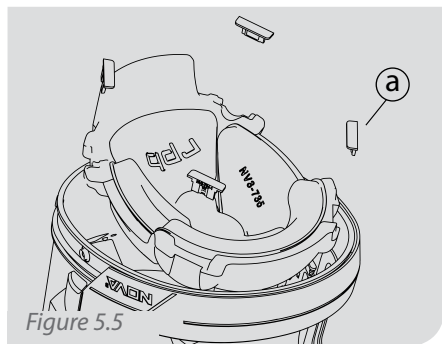
INSPECTION, MAINTENANCE, CLEANING AND STORAGE (CONTINUED)



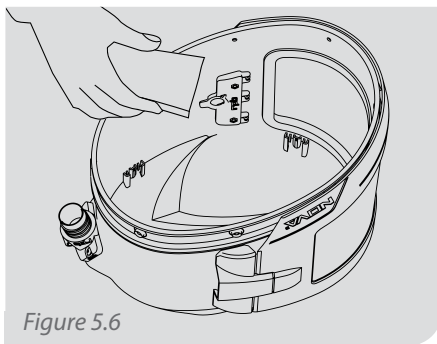
Remove rear Pad



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



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.



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

LENSES AND LENS GASKETS

Check Inner Lens Gasket p/n NV3-721 and the Inner Lens Frame p/n 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.

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.

BREATHING TUBE ASSEMBLY

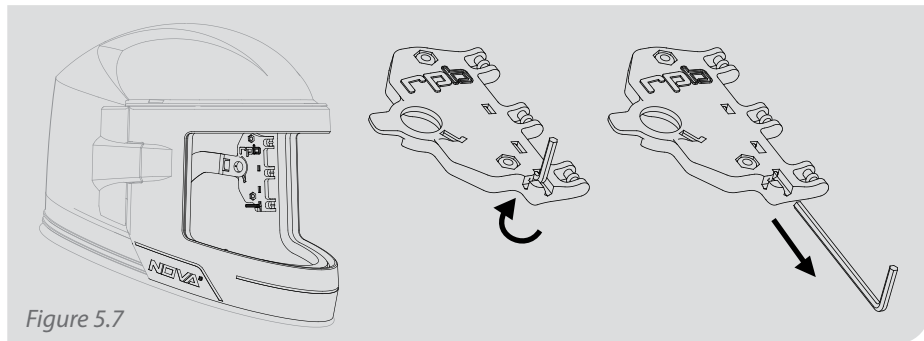
Inspect the Breathing Tube NV2021B for splits or excessive wear. Check that the fittings are secured into the tube and are not allowing any air to escape. Replace the tube as soon as signs of damage or excessive wear become evident. Do not remove the foam that is inside the Breathing Tube as it reduces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

!WARNING!

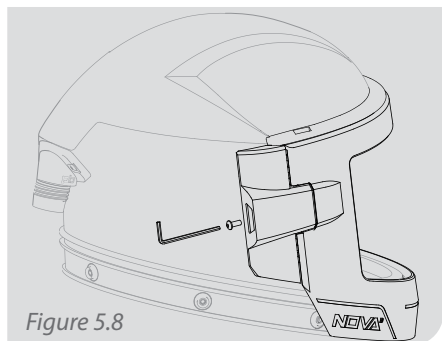
USE ONLY RPB® SAFETY AIR SUPPLY HOSES.

INSPECTION, MAINTENANCE, CLEANING AND STORAGE (CONTINUED)

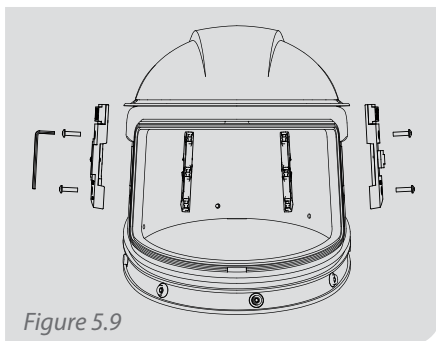
VISOR ASSEMBLY



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

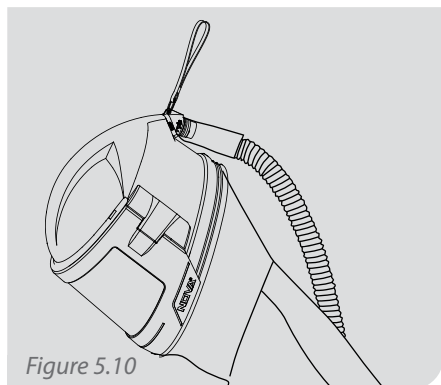


To remove the Visor, undo the hinge lock p/n NV3-727-2 and slide back, this will expose the hinge pin to remove the Visor.

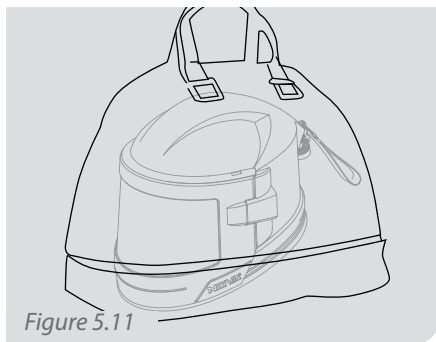


The Hinge Mount p/n NV3-727 and Latch Mount p/n NV3-728 can be removed using the Allen Key.

STORAGE

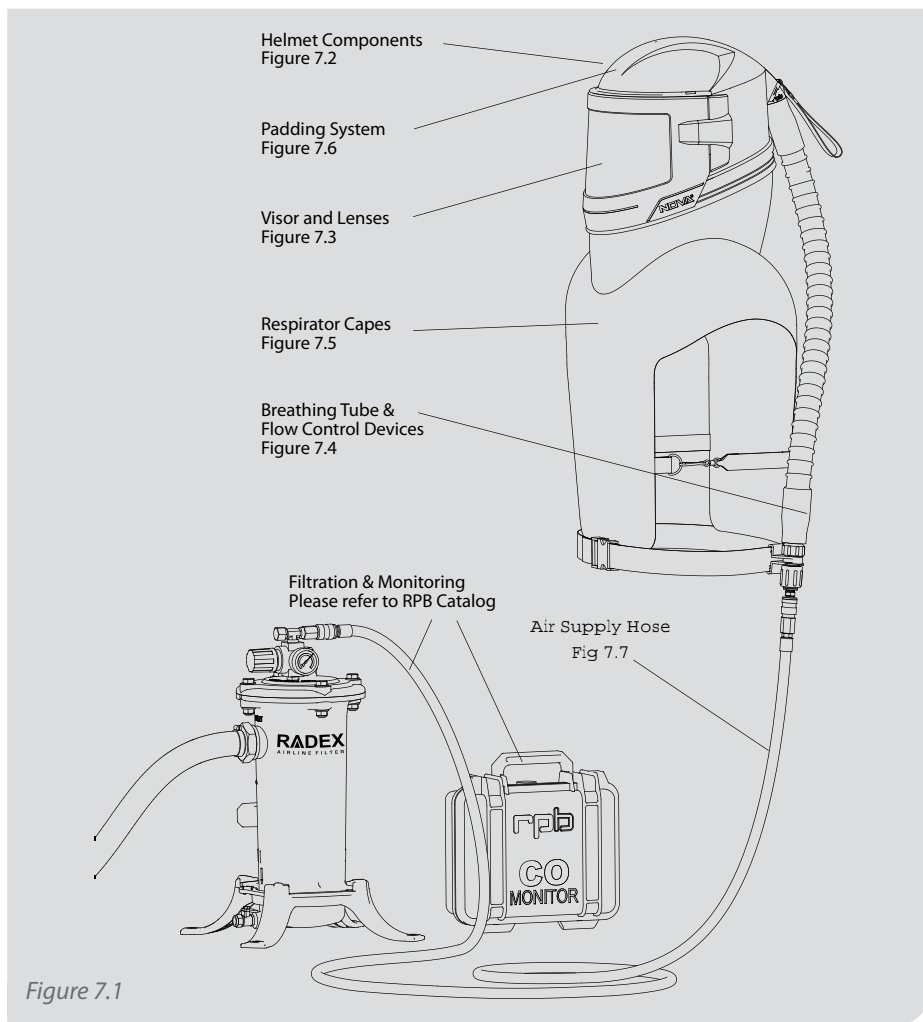


After you have used the respirator, hang it up by the hand strap in a clean environment, this will help keep the inside free of contaminants.



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

PARTS AND ACCESSORIES

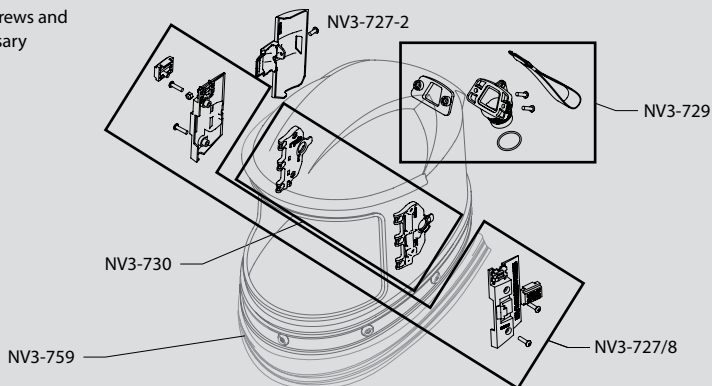


!WARNING! Use only parts and components that are part of the NIOSH approved respirator assembly. The use of non RPB[®] parts voids the NIOSH approval of the entire respirator assembly.

HELMET COMPONENTS

Figure 7.2

All kits contain screws and nuts when necessary

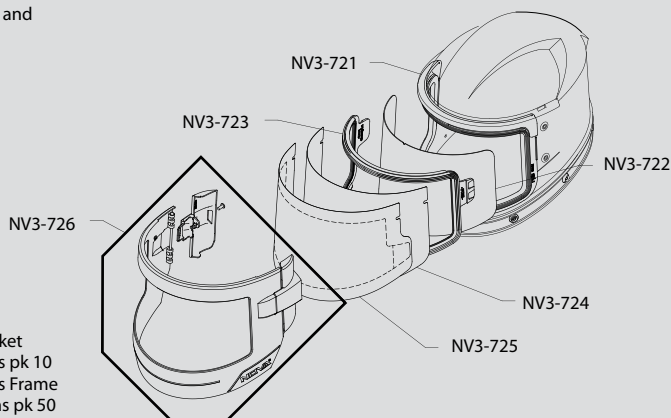


- NV3-727-2 Visor Hinge Lock
- NV3-727/8 Visor Latch Mount Kit - Includes: Latch Mount, Hinge Mount, Covers
- NV3-729 Air Inlet Kit - Includes: Air Inlet, O-Ring, Back Plate, Hanging Strap
- NV3-730 Padding Connectors (left & right)
- NV3-759 Cape Coverband

VISOR AND LENSES

Figure 7.3

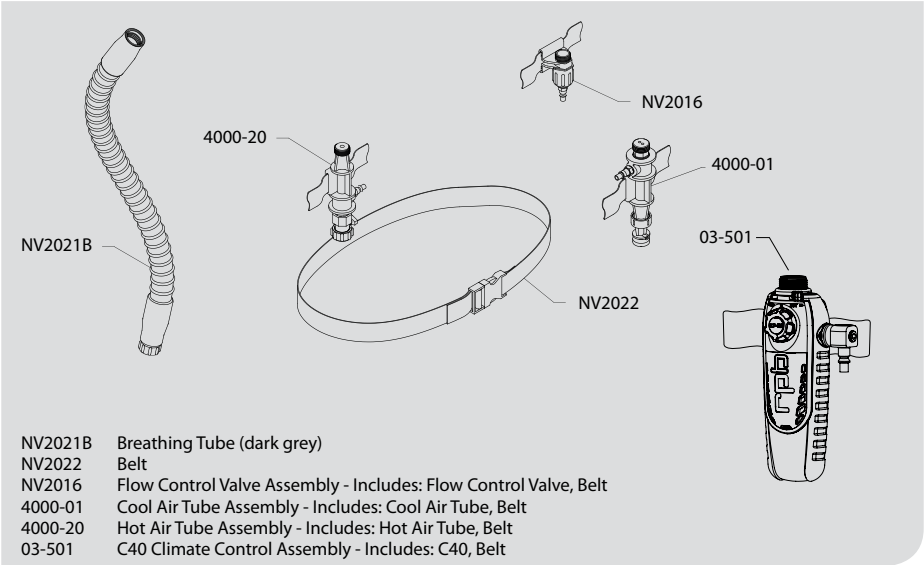
All kits contain screws and nuts when necessary



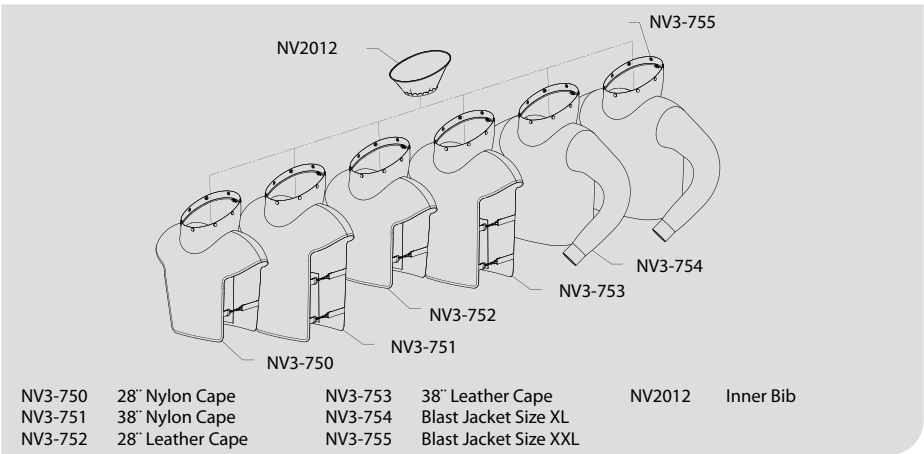
- NV3-721 Inner Gasket
- NV3-722 Inner Lens pk 10
- NV3-723 Inner Lens Frame
- NV3-724 Outer Lens pk 50
- NV3-725 Tear Off Lens pk 50
- NV3-726 Visor Kit - Includes: Visor with Hinge Pin and Latch, Hinge Lock

PARTS AND ACCESSORIES (CONTINUED)

BREATHING TUBE & FLOW CONTROL DEVICE *Figure 7.4*

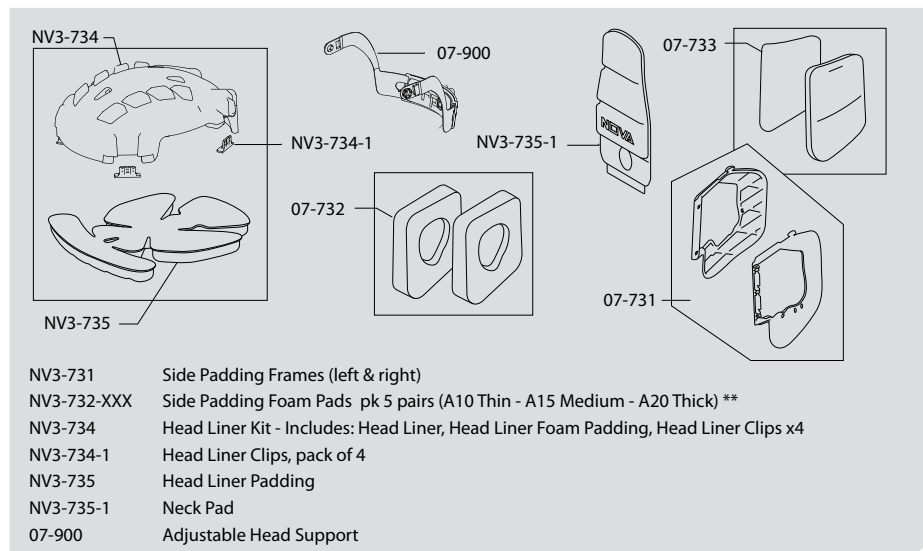


RESPIRATOR CAPES *Figure 7.5*



PADDING SYSTEMS

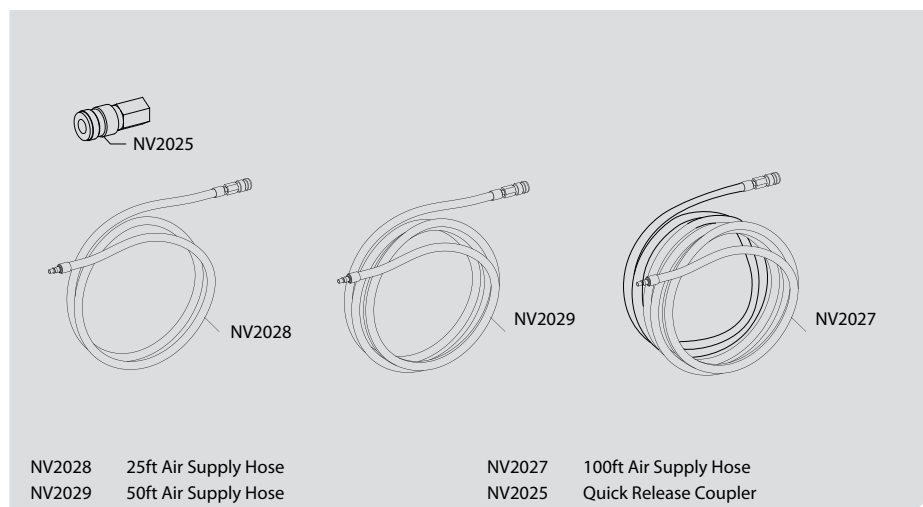
Figure 7.6



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

AIR SUPPLY HOSES

Figure 7.7



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OTHER PRODUCTS

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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.



AIR TEMPERATURE CONTROL

The RPB® 4000-01 Cool Air Tube cools compressed breathing air coming into the respirator by up to 30°F while the RPB® 4000-20 Hot Air Tube will heat the compressed air by up to 30°F. These maximize worker comfort and increase productivity in hot or cold climates.



AIR QUALITY MONITORING

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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