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ASTRO™ UI R14

GVS-RPB.COM

# Instruction Manual

## Astro™ Blasting Respirator

**Employers:** Read this manual and the flow control device instruction manual and carry out the employer responsibilities (page 8).

**Product users:** Read this manual and the flow control device instruction manual and follow the product user safety instructions (page 10).

Manuals are regularly updated. Make sure this manual is available to all users for reference.

**Current version of manual and other languages:** [gvs-rpb.com/industrial/resources](https://gvs-rpb.com/industrial/resources)



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## EXPLANATION OF SIGNAL WORDS AND SYMBOLS

The following signal word and safety symbols are used in this manual and product labeling:



**WARNING**

**WARNING** indicates a hazardous situation that, if not avoided, could result in death or serious injury.



**DANGER**

**DANGER** Indicates a hazardous situation that, if not avoided, will result in death or serious injury.



**Read the Instruction Manual.**

Additional copies of RPB® manuals can be found at [gvs-rpb.com](http://gvs-rpb.com).

**RPB® Safety LLC is an ISO9001 certified company.**

# INTRODUCTION

The RPB® ASTRO™ SUPPLIED - AIR RESPIRATOR TYPE CE is specifically designed for use during Abrasive Blasting. The ASTRO can increase productivity with the advanced tear-off lens system and other innovative features.

This product must be inspected and maintained in accordance with this instruction manual at all times.

See PROTECTION PROVIDED AND LIMITATIONS (page 4) for details.

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Form #: RPB37

Rev: 14

## IMPORTANT SAFETY INFORMATION

### **⚠ WARNING**

Improper selection, fit, use, or maintenance of this product can result in injury; life threatening delayed lung, skin or eye disease; or death.

This product is intended for occupational use in accordance with applicable standards or regulations for your location, industry, and activity (see Employer Responsibilities, page 8). Familiarity with standards and regulations related to the use of this protective equipment is recommended, even if they do not directly apply to you. If self-employed or if used in a non-occupational setting, refer to Employer Responsibilities and Product User Safety Instructions. Go to [gvs-rpb.com/industrial/important-safety-information](https://gvs-rpb.com/industrial/important-safety-information) for helpful links to OSHA and other content.

**Employers:** Read this manual and the air supply device Instruction Manual and carry out the Employer Responsibilities (page 8).

**Product users:** Read this manual and the air supply device Instruction Manual and follow the Product User Safety Instructions (page 10).

**Check website for updates.** Product manuals are regularly updated.

Visit [gvs-rpb.com/industrial/resources](https://gvs-rpb.com/industrial/resources) for the most recent version of this manual before using the product.

## PROTECTION PROVIDED AND LIMITATIONS

### RESPIRATION

The RPB ASTRO is approved by NIOSH in the category as follows:

#### Supplied Air

The RPB ASTRO respirator, when properly fitted and used with all required components, including the Breathing Tube Assembly, Flow Control Device, and RPB Breathing Air Line is a NIOSH approved Type CE respirator with an assigned protection factor of 1000. As such, it significantly reduces, but does not completely eliminate, the breathing of contaminants by the respirator wearer. Use with an airline filter, such as the 04-900 RPB RADEX® Airline Filter. Specific protection depends on the setup of the airline filter (see the RPB RADEX Instruction Manual). The is respirator is approved with the 03-500 C40™ Climate Control Device, and the NV2016 Flow Control Valve Flow Control Devices.

#### HAZARD LIMITATIONS

The RPB ASTRO Respirator is **NOT FOR USE** if:

- In atmospheres immediately dangerous to life or health (IDLH).
- Wearer cannot escape without the aid of the respirator.
- Atmosphere contains less than 19.5% oxygen.
- For protection against hazardous gases (e.g., carbon monoxide).
- Contaminants are in excess of regulations or recommendations.
- Contaminants or contaminant concentrations are unknown.

- Work area is poorly ventilated.
- The temperature is outside the range of 14°F to 140°F (-10°C to +60°C).

**FACE AND EYES:**

- The ASTRO respirator with Inner Lens meets ANSI/ISEA Z87.1 requirements and designed for abrasive blasting, grinding, and other industrial applications.
- The ASTRO is not is not designed or tested to provide protection against molten metals or corrosive liquids.
- **Note:** Safety glasses may be required to be worn depending on the job hazard analysis. The ASTRO does not protect against the potential transfer of impact to glasses worn underneath the Visor. It does not provide complete eye and face protection against severe impact and penetration and is not a substitute for good safety practices and engineering controls.

**HEAD:**

- The ASTRO meets the ANSI/ISEA Z89.1 Type 1C requirements for physical head protection as a hard hat. The helmet is design to provide limited head protection by reducing the force of falling objects striking the top of the head. Ensure the helmet is adjusted to properly fit the user by adjusting the head harness and side pads.

**HEARING:**

- Hearing protection must be worn and properly fitted when exposed to noise levels that exceed the OSHA permissible exposure levels.

PLACE NIOSH APPROVAL LABEL HERE.

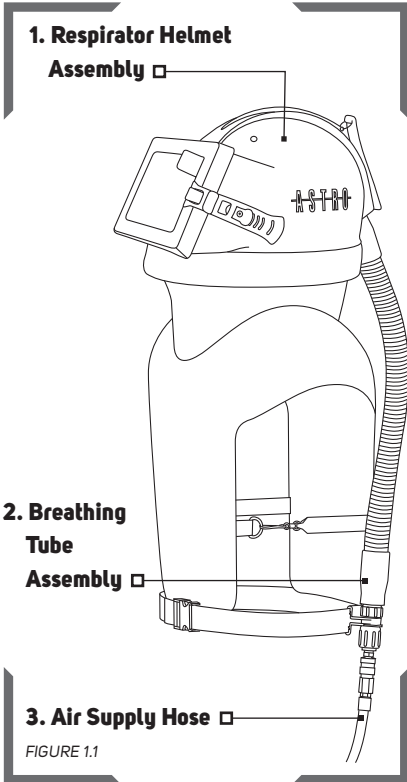


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## RESPIRATOR COMPONENT CONCEPT

The RPB ASTRO Respirator consists of three main components: Respirator Helmet Assembly, Breathing Tube Assembly, And Air Supply Hose. All three components must be present and properly assembled to constitute a complete NIOSH approved Respirator.



- 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 13-14 (Breathing Air Pressure Table) before donning.

### 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

# AIR SOURCE, FITTINGS, AND PRESSURE

## AIR SOURCE

### Supplied Air

Locate the air source in a clean air environment, always use a filter on the inlet of your air source. Make sure the air source is somewhere that vehicles, forklifts, and other machinery are not running near the 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. A Radex® Airline Filter (04-900) and a GX4® Gas Monitor (08-400) are recommended. The air should be regularly sampled to ensure that it meets Grade D requirements.

### 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 ASTRO does not purify air or filter contaminants. A carbon monoxide monitor must be used at all times.



### **DANGER**

Do not connect the respirator's air supply hose to nitrogen, toxic gases, inert gases or other non-breathable 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. Connecting the supply hose to a non-breathable air source will result in serious injury or death.

### BREATHING AIR SUPPLY HOSES AND FITTINGS

RPB® breathing 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 pages 13-14.

### 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.

## EMPLOYER RESPONSIBILITIES

Your specific responsibilities may vary by location and industry, but in general RPB expects that employers will:

■ **Follow all applicable standards and regulations for your location, industry, and activity.**

Depending on your location and industry, a number of standards and regulations may apply to your selection and use of respirators and other personal protective equipment. These may include such things as federal (e.g., OSHA, MSHA, Canadian Occupational Health and Safety), local (e.g., state, provincial), or military standards and regulations and consensus standards such as ANSI and CSA. There are also requirements specific to particular contaminants, e.g. silica (see [gvs-rpb.com/industrial/important-safety-information/](http://gvs-rpb.com/industrial/important-safety-information/) for more information), asbestos, organic pathogens, etc. Know which requirements apply to your location and industry.

■ **Have appropriate safety programs in place.**

Have and follow:

- A workplace safety program.
- A written respiratory protection program in accordance with applicable standards and regulations (e.g., OSHA 29 CFR 1910.134; ANSI/ASSE Z88.2; CSA Z94.4, etc.).

■ **In accordance with the above,**

- Perform a hazard analysis and select appropriate equipment for each activity.** A hazard analysis should be performed by a qualified person. Controls should be in place as appropriate and a qualified person should determine what kind of respiratory, face and eye, head, and hearing protection is appropriate for the intended activities and environments of use. (For example, select a respirator appropriate to the specific airborne hazards, with consideration of workplace and user factors and with an Assigned Protection Factor (APF) that meets or exceeds the required level for employee protection, select welding face and eye protection appropriate to the type of welding to be done, etc.) As applicable, check your workplace safety program, respiratory protection program, and standards and regulations for your activity or industry for related protection requirements, and see this manual (Protection Provided and Limitations, page 4) and the flow control device Instruction Manual for product specifications.

- Be sure employees are medically qualified to use a respirator.**

Have a qualified physician or other licensed health care professional (PLHCP) perform medical evaluations using a medical questionnaire or an initial medical examination per OSHA 29 CFR 1910.134.

- Train employees in the ASTRO's use, maintenance, and limitations.**

Appoint a qualified individual who is knowledgeable about the RPB ASTRO per ANSI/ASSE Z88.2 guidelines to provide training:

Section 8.1 Qualifications of the Respirator Trainer. Anyone providing respirator training shall:

- a) be knowledgeable in the application and use of the respirator(s);

- b) have practical knowledge in the selection and use of respirator(s) and work practices at the site;
- c) have an understanding of the site's respirator program; and
- d) be knowledgeable of applicable regulations.

Train each ASTRO user in the product's use, application, inspection, maintenance, storage, fitting, and limitations in accordance with the content of this Instruction Manual and the approved flow control device instruction manual and standard or regulatory requirements. Ensure that each intended user reads both these manuals.

**☐ Ensure that equipment is properly set up, used, and maintained.**

Make sure that equipment is properly set up, inspected, fitted, used, and maintained, including selection of the appropriate air filter cartridge and, when applicable, welding filter shade adjustments, for the application.

**☐ Measure and monitor airborne contaminants in the work area.**

Measure and monitor airborne contaminant levels in the work area in accordance with applicable requirements. Make sure work area is well ventilated.

**☐ Ensure abrasive is used that is suitable for abrasive blasting.**

Check the material safety data sheets for manufacturers warnings and recommendations and verify the blasting media conforms with applicable standards/regulations (e.g. regarding respirable silica). Refer to [gvs-rpb.com/industrial/important-safety-information/](http://gvs-rpb.com/industrial/important-safety-information/) for links to websites that can provide regulatory guidance.

**☐ If you have any questions, contact RPB.**

■ Call Customer Service Department:

Tel: 1-866-494-4599

Email: [sales@gvs.com](mailto:sales@gvs.com)

Web: [gvs-rpb.com](http://gvs-rpb.com)



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## PRODUCT USER SAFETY INSTRUCTIONS

### BEFORE INITIAL USE - BE TRAINED AND MEDICALLY QUALIFIED

Do not use this respirator until you have read this manual and the flow control device Instruction Manual (additional copies available at [gvs-rpb.com/industrial/resources/](http://gvs-rpb.com/industrial/resources/)) and been trained in the respirator's use, maintenance, and limitations by a qualified individual (appointed by your employer) who is knowledgeable about the RPB ASTRO respirator.

Do not wear this respirator until you have passed a medical evaluation using a medical questionnaire or an initial medical examination by a qualified physician or other licensed health care professional (PLHCP).

**Allergens:** No known common allergens are used in this product.

Some materials could cause an allergic reaction in susceptible individuals. If you have a known allergy or develop irritation, inform your employer. Irritation may occur from lack of cleaning. Following all cleaning and care instructions provided in the instruction manuals for this and any other RPB® products you are using.

### MAKE SURE THE SYSTEM IS READY FOR USE

**Make sure you have a complete system.** Verify that you have all required components for the ASTRO to serve as a complete NIOSH approved respirator:

- Respirator Helmet Assembly (ASTRO)
- Breathing Tube Assembly
- Flow Control Device (Flow Control Valve or C40™ Climate Control Device)
- Breathing Air Line

*See Respirator Component Diagram (page 6).* The RPB ASTRO is only approved to be used with the RPB® Flow Control Valve, RPB C40 Climate Control Device, or RPB Low Pressure Constant Flow Valve. Use only authentic RPB brand parts and components that are part of the NIOSH approved respirator assembly. Using incomplete or inappropriate equipment, including the use of counterfeit or non-RPB parts, can result in inadequate protection and will void the NIOSH approval of the entire respirator. Do not modify or alter any part of this product.

**Inspect** all components daily for signs of damage or wear and tear that may reduce the level of protection originally provided. Remove any damaged component or product, including any helmet or visor that has been subject to impact, from service until repaired or replaced. Scratched or damaged safety lenses or other components should be replaced with genuine RPB brand replacement parts. When safety and impact lenses are replaced, make sure to remove any additional protective film from both sides of the lens. If the film is left in place, it could affect the optical clarity of the lens and cause eye strain. Inspect the inside of the respirator for respirable dust or other foreign objects. Keep the inside of the respirator clean at all times.

**Make sure that the helmet is correctly assembled** in the configuration that suits your application. Never use the respirator without all lenses in place. This includes the Inner and Outer Lenses. These lenses, when installed properly, are part of the respiratory seal to prevent toxic or

hazardous gases, liquids or dust from entering the helmet. An incomplete or improperly installed lens system could provide inadequate impact and respiratory protection. *See Respirator Setup and Care (page 15). See Donning (page 17) for fit information.*

### **VERIFY THAT YOU HAVE THE APPROPRIATE EQUIPMENT FOR YOUR ACTIVITY**

Verify that the ASTRO provides appropriate protection for your activity. As applicable, check your workplace safety program, respiratory protection program, and standards and regulations for your activity or industry. (See PROTECTION PROVIDED AND LIMITATIONS, page 4.)

#### **BEFORE DONNING THE ASTRO:**

##### **Verify airborne contaminants are within recommended limits for respirator use:**

- Determine the type and level of contamination. Verify that airborne contaminant concentrations do not exceed those allowed by applicable OSHA, EPA, or NIOSH regulations and recommendations for powered air purifying respirators or supplied air respirators.

##### **Filtering the breathing air:**

- **Supplied Air Respirator:** Once the contamination levels have been confirmed, check to make sure the airline filter is working correctly. Follow the Radex® Airline Filter Instruction Manual.

##### **Make sure the area is ventilated and monitored:**

- Make sure that the area is well ventilated and that regular air samples are taken to confirm the atmosphere stays within the levels recommended by OSHA and other governing bodies. For Supplied Air, it is recommended to use a GX4® Gas Monitor. Follow the GX4 Gas Monitor Instruction Manual.

If you have any questions, ask your employer.

##### **DO NOT ENTER THE WORK AREA** if any of the following conditions exist:

- Atmosphere is immediately dangerous to life or health.
- You cannot escape without the aid of the respirator.
- Atmosphere contains less than 19.5% oxygen.
- Contaminants are in excess of regulations or recommendations.
- Contaminants or contaminant concentrations are unknown.
- Work area is poorly ventilated.
- The work area is a confined space (unless proper measures are taken for confined spaces).
- The temperature is outside the range of 14°F to 140°F (-10°C to +60°C).

##### **LEAVE THE WORK AREA IMMEDIATELY IF:**

- Any product component becomes damaged.
- Vision is impaired.
- Airflow stops or slows down.



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## **PRODUCT USER SAFETY INSTRUCTIONS CONTINUED**

- Breathing becomes difficult.
- You become dizzy, nauseous, too hot, too cold, or ill.
- Your eyes, nose, or skin become irritated.
- You taste, smell, or see contaminants inside the helmet.
- You have any other reason to suspect that the respirator is not providing adequate protection.

### **PRODUCT CARE**

Never place the helmet on hot surfaces. Do not apply paints, solvents, adhesives or self-adhesive labels except as instructed by RPB. This product may be adversely affected by certain chemicals.

Clean and disinfect with warm water and a soft cloth, being careful to avoid scratching the product. See the "Respirator Setup and Use" section for more specific cleaning instructions.

### **INSTRUCTIONS FOR SPECIFIC USES OR ENVIRONMENTS**

#### **Confined Spaces**

If this respirator is used in confined spaces, ensure the area is well ventilated and that all contaminant 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.

#### **Abrasive Blasting**

Do not use hazardous abrasives (e.g. those that violate applicable standards/regulations, such as abrasives containing more than trace amounts of silica, lead, arsenic, etc.) - these could result in serious injury or death. Consult your abrasive supplier and read the material safety data sheets for the abrasives to be used to determine suitability for blasting applications.

# BREATHING AIR PRESSURE TABLE

## S - SPECIAL OR CRITICAL USERS INSTRUCTIONS - SAR TABLE 1.1

This table lists air pressure ranges needed to provide the RPB ASTRO with the volume of air that falls within the required range of 6-15cfm or 170-425 lts/min according to US government regulations. Maximum hose pressure is 300 psi.

1. AIR SOURCE	2. AIR SUPPLY HOSE	3. FLOW CONTROL DEVICES NV2021B BREATHING TUBE ASSEMBLY	4. SUPPLY HOSE LENGTH (FT)	5. MAX NUMBER OF SECTIONS	6. PRESSURE RANGE (PSIG AIR)
Portable or Stationary Compressor	NV2028 (25ft) NV2029 (50ft) NV2027(100ft) 04-352-25-RZ (25ft) 04-352-50-RZ (50ft) 04-352-100-RZ (100ft)	NV2016 Flow Control Valve Assembly	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		
	03-500 C40 Climate Control Assembly	25	1	55-80	
		50	1	60-85	
		100	2	65-95	
		150	3	70-95	
		200	4	75-100	
250		5	80-100		
300	6	90-100			
04-342-25 (25ft) 04-342-50 (50ft) 04-342-100 (100ft)	NV2016 Flow Control Valve Assembly with Schrader Fittings	25	1	28-30	
		50	1	30-32	
		100	2	33-35	
		150	3	36-38	
		200	4	40-42	
		250	5	44-46	
300	6	48-50			
03-500 C40 Climate Control Assembly with Schrader Fittings	25	1	65-80		
	50	1	70-85		
	100	2	75-95		
	150	3	80-95		
	200	4	85-100		
	250	5	90-100		
300	6	95-100			

SEE WARNINGS ON THE NEXT PAGE.

## BREATHING AIR PRESSURE TABLE CONTINUED

**⚠ WARNING**

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

1. Select the correct air source (column 1).
2. Confirm the part number of the air supply hose you are using (column 2) and the flow control device (column 3) you are using.
3. Check your RPB® Safety Air Supply Hose is within the correct length (column 4) and the correct number of hose sections (column 5).
4. Set the air pressure at the point of attachment within the range specified (column 6).

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

Failure to supply the minimum required air pressure at the point of attachment for the length of air supply hose will decrease the level of protection provided. In addition, 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. Low airflow will decrease the level of protection provided.

If the Breathing Air Lines and Flow Control Device have RZ™ fittings, they will only attach to other RZ fittings. They will not work with Universal Couplers. Do not modify air line fittings. RZ fittings prevent connection to unsafe air sources.

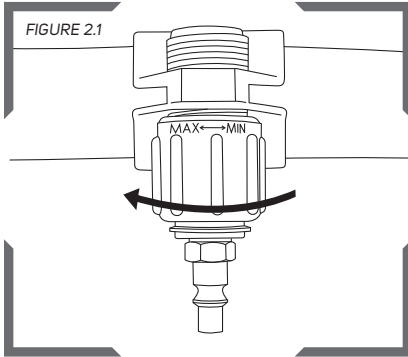
**⚠ WARNING**

**The ASTRO Supplied Air Respirator must be supplied with respirable air meeting the requirements of CGA G-7.1 Grade D or higher quality that meets OSHA or other governing body requirements.**

## RESPIRATOR SETUP AND CARE

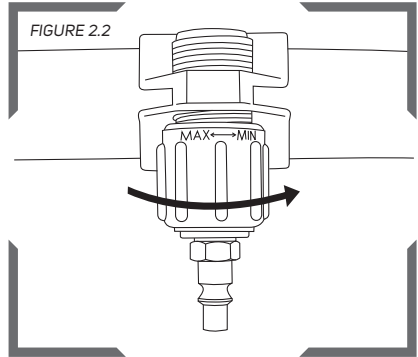
### AIRFLOW CONTROL VALVE

FIGURE 2.1



Air flowing into the helmet is controlled using the regulator as shown in Fig 2.1 and 2.2. For how to use other flow control devices, see their Instruction Manual.

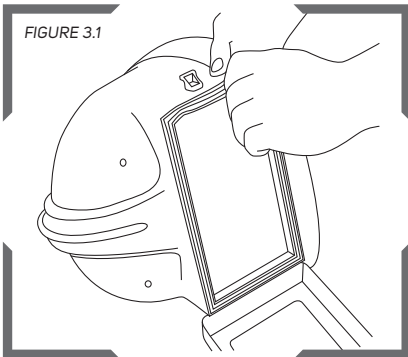
FIGURE 2.2



**NOTE:** The minimum of 170 l/min should be flowing through the helmet when the regulator is in the closed position as in Fig 2.2 and the pressure set in accordance with the table on page 13.

### LENSES

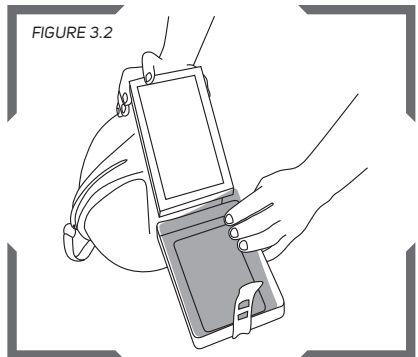
FIGURE 3.1



#### Inner Lens

Place one end into the gasket first, then slowly roll the gasket over the sides of the lens, working towards the other end.

FIGURE 3.2

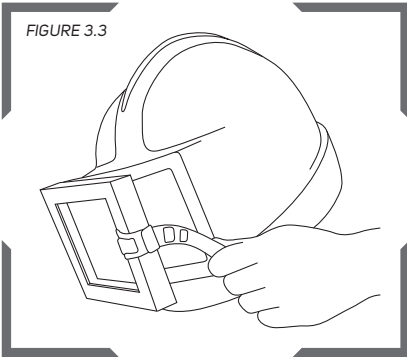


#### Outer Lens

Place the lens into the face frame and push past the locating ribs.

## RESPIRATOR SETUP AND CARE CONTINUED

FIGURE 3.3



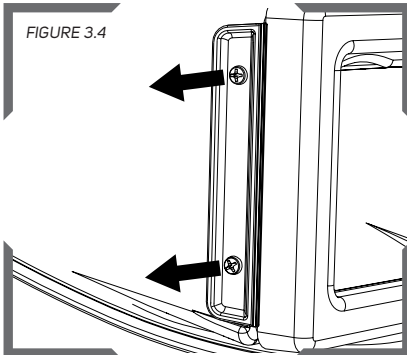
Fold the visor across the front of the helmet and lock the strap tightly over the side cleat.

### NOTE

Always make sure that a RPB Safety inner lens is securely fitted into the window frame gasket. Proceed fitting lenses as Fig 3.1, Fig 3.2, Fig 3.3.

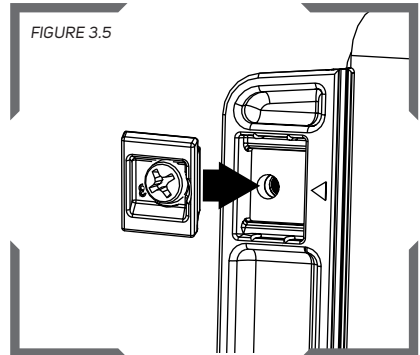
### VISOR REPLACEMENT

FIGURE 3.4



Remove the old visor by removing the screws and nuts holding on the visor.

FIGURE 3.5



To install the replacement visor with a standard lens, place the visor onto the helmet and insert the attachment spacers with "3" upside-down and then insert the screws with the nuts on the inside of the helmet.

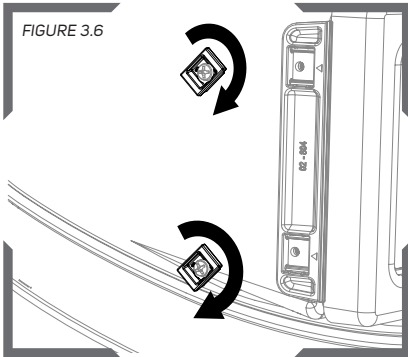


FIGURE 3.6

If you choose to use a 3mm outer lens instead of the standard 0.4mm outer lens (02-811) and tear-offs (02-816), unscrew the visor from the helmet. Remove the two spacers and rotate them so that the "3" is upright to indicate 3mm lens.

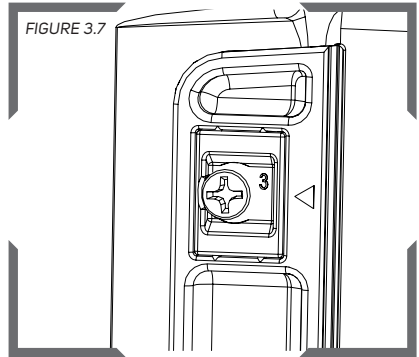


FIGURE 3.7

Secure the visor in place with the "3" next to the arrow on the visor by reinserting the screws. Make sure the screws go into the nuts of the support bracket on the inside of the helmet.

## SETTING UP

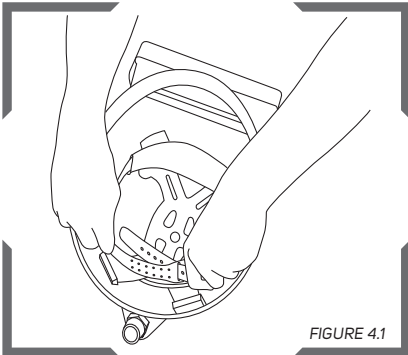


FIGURE 4.1

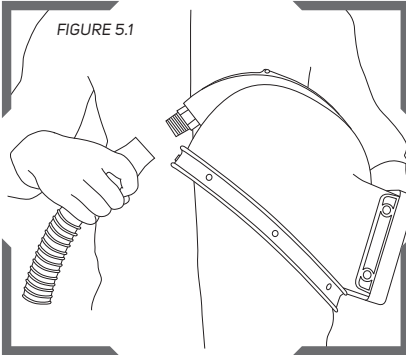
### Head Harness

To adjust the head harness first unclip the locating pegs, then slide the band in or out to the desired size. Note: slide inwards to reduce the size. Once the desired size is obtained, clip the locating pegs back together.

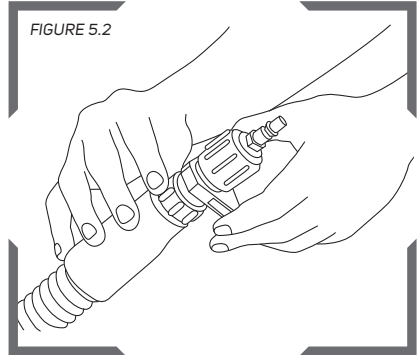
### Putting the Helmet in Place

Hold the helmet in front of you, holding the inner bib collar open. Lift the helmet and place it on your head making sure the head harness fits securely.

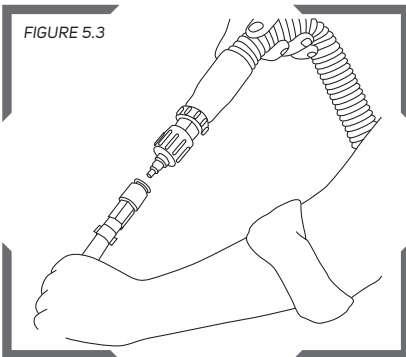
## RESPIRATOR SETUP AND CARE CONTINUED



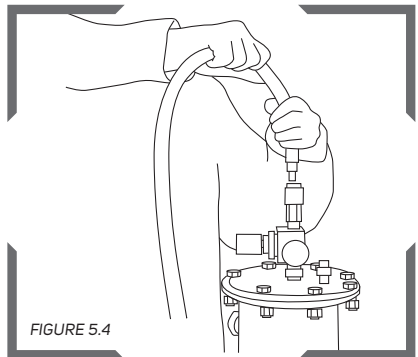
First screw on the breathing hose in a clockwise direction onto the helmet.



Screw the loose running nut in a clockwise direction onto the flow control device, e.g. NV2016.

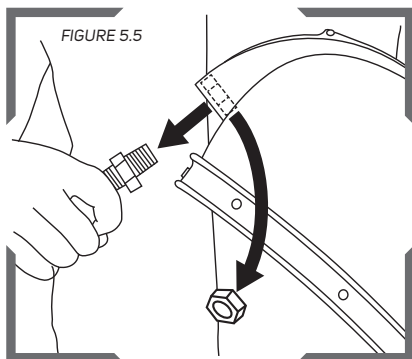


Take the quick disconnect fitting on the Air Supply Hose and push onto the tail of the Flow Control Device.

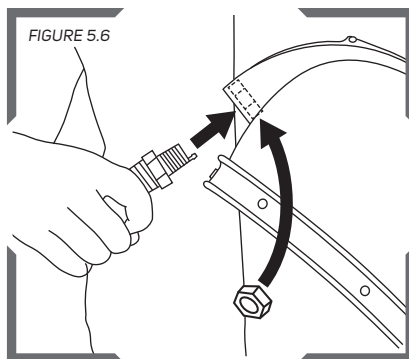


Connect the Air Supply Hose Tail to the point of attachment supplying Grade D air.

## BREATHING TUBE ADAPTOR REPLACEMENT FOR CHANGE OVER TO NV2021B



Remove the old breathing tube adaptor by unscrewing the adaptor from the nut on the inside of the helmet. A wrench may be required.



Install the new breathing tube adaptor with the smaller thread end going into the helmet. Place the nut on the inside of the helmet and screw in the breathing tube adaptor. A wrench may be required.

## DONNING AND DOFFING

### **⚠ WARNING**

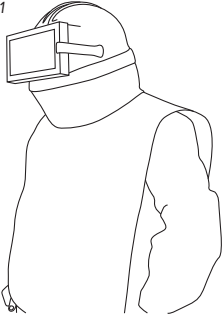
**Always check the interior of the respirator for contaminants before donning. Always don and doff the helmet while outside the work area, keeping the interior of the helmet clean and free of contaminants. Not doing these steps could expose you to hazardous materials and contaminants that could impair the function of the respirator.**

### DONNING YOUR HELMET

Once you have completed the set up, you are ready to fit your RPB ASTRO. Firstly check inside the helmet to ensure that it is free of dust, dirt or contaminants. Then open the bottom of the cape, with the air flowing from the air source, put the respirator onto your head. Pull the cape down and tighten the draw cord around your neck to complete the seal. Make sure the visor is securely latched.

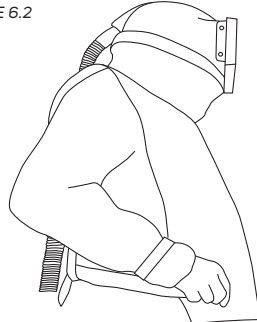
## DONNING AND DOFFING CONTINUED

FIGURE 6.1



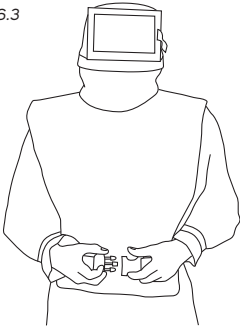
Once the helmet is fitting comfortably on your head, straighten the cape down at the front and back.

FIGURE 6.2



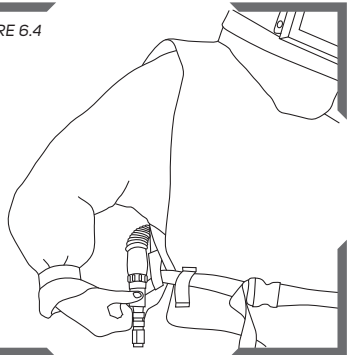
Place the Flow Control Device to your desired side at your hip.

FIGURE 6.3



Now bring both buckles together at the front and push them until you hear a click. Pull the tab to tension the belt.

FIGURE 6.4



Now the helmet is fully fitted and the belt tightened, adjust the airflow into the helmet with the Flow Control Device adjustment barrel see Fig 2.1. Again check the air pressure at the source to make sure it is still in accordance with Table 1.1 on page 13-14.

### DOFFING YOUR HELMET

When you have finished working leave the work area wearing the respirator with air still flowing into the helmet. Depending on the contaminants, it may be advisable to clean the exterior of the helmet and your work garments before removing the respirator. A workplace cleaning program may be necessary.

## **STORAGE**

After use, clean the respirator according to your company's cleaning program or the directions in this manual. Then let it dry, and store the respirator by hanging it up in a clean, dry place, away from the work area. Do not tuck the cape into the helmet if it has not been thoroughly cleaned. Before storing the respirator for an extended period of time, clean the unit following the cleaning instructions in this instruction manual. It is recommended to store the respirator in a container or storage bag. Store in a cool dry place between -10°C to +45°C (14°F to 113°F) <90%rh.

## **INSPECTION AND CLEANING**

The RPB ASTRO Supplied Air Respirator has a limited service life, therefore a regular inspection and replacement program must be conducted. Certain parts such as lenses must be replaced frequently.

All components of the respirator assembly should be inspected for damage or wear and tear before use. Replace worn or damaged parts immediately. USE ONLY RPB ASTRO parts. Refer to the parts list for the correct part numbers.

Clean the helmet and head harness with mild detergent and a soft cloth or a disinfectant wipe. Do not clean respirator with volatile chemicals. The brow and top pad can be cleaned in warm water with mild detergent. Thoroughly rinse the pads out and let air dry.

### **NOTE:**

The leather cape must be cleaned with an appropriate leather cleaner.

### **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. The outside Breathing Tube can be cleaned with warm water and a mild detergent, rinsed and air dried. Do not run water through the Breathing Tube.

### **BREATHING AIR LINE**

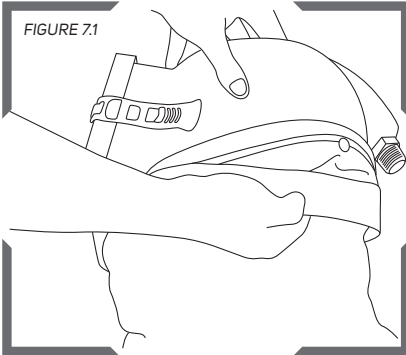
The air supply hose should be inspected for cuts, cracks, blisters and signs of abrasion. Make sure the fittings are firmly crimped to the hose and air cannot escape. Make sure the hose has not been crushed or kinked. Replace the hose immediately if there are any signs of damage. Do not run water through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

### **LENSES AND LENS GASKETS**

Check Inner Lens Gasket Seal for splits, cracks or wear and tear. Replace any damaged or worn parts immediately with RPB genuine parts. The Inner Lens Gasket Seal can be cleaned with warm water and mild detergent, rinsed and air dried.

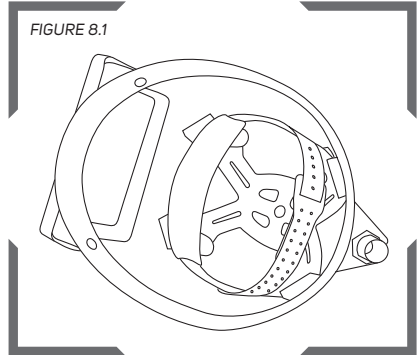
## INSPECTION AND CLEANING CONTINUED

### REMOVING THE CAPE



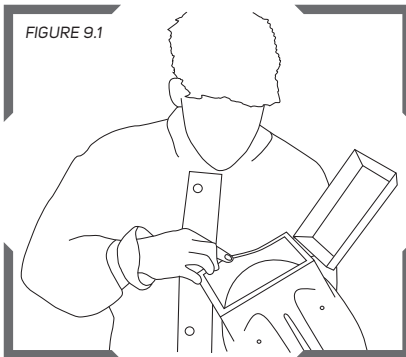
First remove the cape cover band to reveal the eight snaps. The cape can then easily be removed by undoing the snaps.

### INSPECTING THE HELMET



Having removed the cape, wipe out the inside of the helmet with a soft cloth and mild detergent or a disinfectant wipe. Check the inside for cracks in the shell, damage to the air inlet and head harness.

### INNER LENS AND GASKET

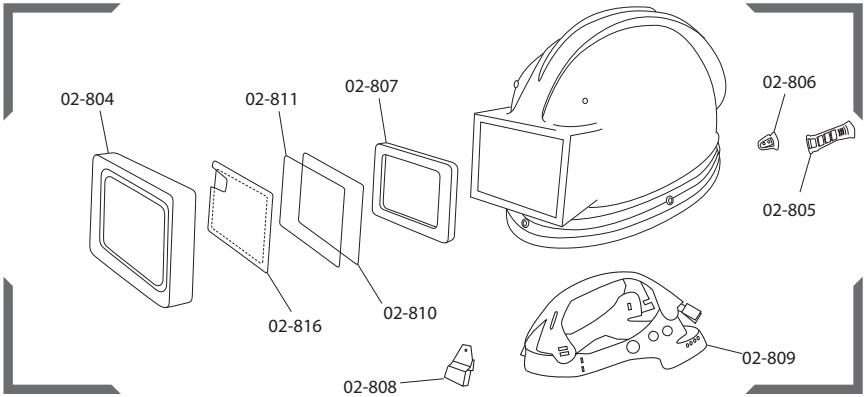


Make sure the inner lens gasket seal is securely fitted in the helmet with no cracks or tears in the seal. Check that the inner lens is correctly fitted into the gasket.

When necessary replace lenses as in Figures 3.1 and 3.2.

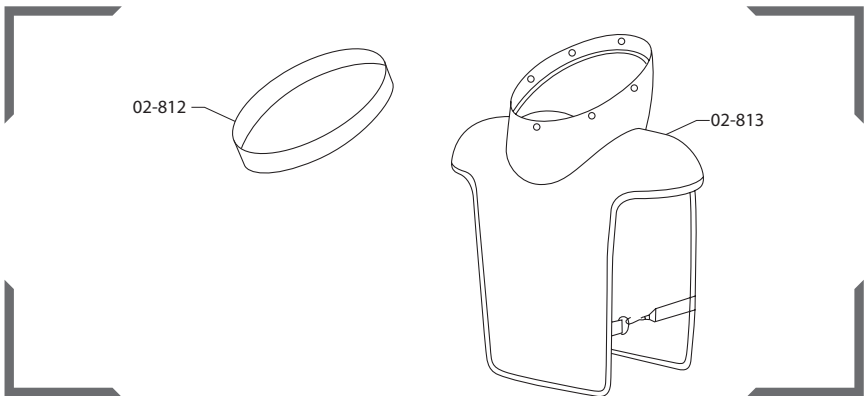
## PARTS AND ACCESSORIES

### VISOR AND LENSES *FIGURE 10.1*



<b>Part No.</b>	<b>Description</b>	<b>Part No.</b>	<b>Description</b>
02-804	Visor	02-809	Head Suspension
02-805	Visor Strap	02-810	Inner Lens (pkt 10)
02-806	Cleat	02-811	Outer Lens (pkt 50)
02-807	Gasket Seal	02-816	Tearoff Lens
02-808	Suspension Clip (pkt 4)		

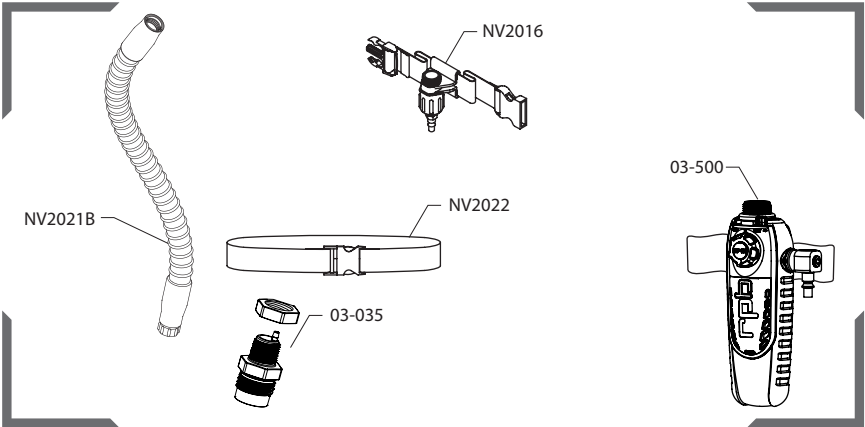
### RESPIRATOR CAPE *FIGURE 10.2*



<b>Part No.</b>	<b>Description</b>
02-812	Cape Cover Band
02-813	Nylon Cape

**PARTS AND ACCESSORIES CONTINUED**

**BREATHING TUBE & FLOW CONTROL DEVICES**      *FIGURE 10.3*








<b>Part No.</b>	<b>Description</b>
NV2021B	Breathing Tube
NV2022	1.5" Belt
07-765	2" Belt for C40
07-765-FR	Fire Retardant 2" Belt for C40
NV2016	Flow Control Valve Assembly - Includes: Flow Control Valve, Belt
03-500	C40 Climate Control Assembly - Includes: Climate Control, Belt
03-035	Breathing Tube adapter and nut

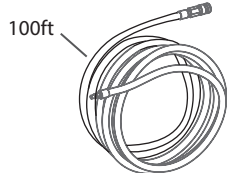
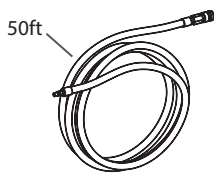
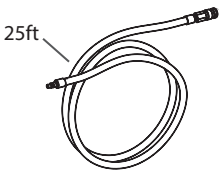
**⚠ WARNING**

Use only exact, authentic RPB® replacement parts (marked with the RPB® logo and part number), and only in the specified configuration. Using incomplete or inappropriate equipment, including the use of counterfeit or non-RPB® parts, can result in inadequate protection and will void the NIOSH approval of the entire respirator assembly.

**AIR SUPPLY HOSES**

Figure 10.4

Series	1. Couplers	2. Plugs	3. Supplied-Air Hose Assemblies
RPB Quick Disconnect	NV2025 1/4" FM NPT 	03-012-PM 1/4" M NPT 03-012-PMS 1/4" M NPT Swivel 	NV2028 RPB 25ft 3/8" NV2029 RPB 50ft 3/8" NV2027 RPB 100ft 3/8"
Schrader Twist Lock	03-042-CF 1/4" FM NPT 	03-042-PM 1/4" M NPT 03-042-PMS 1/4" M NPT SWIVEL 	04-342-25 Schrader 25ft 04-342-50 Schrader 50ft 04-342-100 Schrader 100ft
RPB RZ Quick Connect		03-052-PM-RZ RZ Plug 1/4" Male Thread 03-052-PMS-RZ RZ Swivel Plug 	04-352-25-RZ 25ft 04-352-50-RZ 50ft 04-352-100-RZ 100ft





**ASTRO™**

*Protecting you for life's best moments.*

## **LIMITED WARRANTY**

RPB® warrants that its Products will be free from defects in materials and workmanship for one (1) year, subject to the terms of this limited warranty. The Products are sold only for commercial use, and no consumer warranties apply to the Products. This limited warranty is for the benefit of the original Product purchaser, and cannot be transferred or assigned. This is the sole and exclusive warranty provided by RPB®, and ALL CONDITIONS AND IMPLIED WARRANTIES (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) ARE EXCLUDED AND DISCLAIMED FROM WARRANTY COVERAGE. RPB's® limited warranty coverage does not apply to damage resulting from accident, improper use or misuse of the Products, wear and tear resulting from the normal use of the Products, or the failure to properly maintain the Products.

RPB's® limited warranty coverage runs from the original date of purchase of the Products, and applies only to warranted defects which first manifest themselves and are reported to RPB® within the warranty period. RPB® retains the right to determine to its reasonable satisfaction whether any claimed defect is covered by this limited warranty.

If a warranted defect occurs, RPB® will repair or replace the defective Product (or a component of the Product), in its sole discretion. This "repair or replacement" remedy is the sole and exclusive remedy under this limited warranty, and under no circumstances shall RPB's® liability under this limited warranty exceed the original purchase price for the Products (or the applicable component). RPB® has no responsibility for incidental or consequential damages, including loss of use, maintenance and other costs, and ALL INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE EXCLUDED AND DISCLAIMED from this limited warranty. Contact RPB® to obtain warranty service. Proof of purchase must be provided to obtain warranty service. All costs of returning the Products to RPB® for warranty service must be paid by the purchaser.

RPB® reserves the right to improve its Products through changes in design or materials without being obligated to purchasers of previously manufactured Products.

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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 subcontractors.

## NOTES

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# OTHER PRODUCTS

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## RPB® C40™ CLIMATE CONTROL

Looking for an advanced climate control device that can heat and cool your supplied air just by the slide of a lever? Look no further than the RPB® C40™. From the searing heat of an Arizona summer to a severe Scandinavian winter the RPB® C40™ will keep you comfortable.



## 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 QUALITY MONITORING

Do you need an intelligent gas monitor that can give you complete confidence in the air you and your employees are breathing? The RPB® GX4® Gas Monitor has the ability to detect up to 4 gases simultaneously, giving you total peace of mind.



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