



3M™ SCOTT™ VISION C5 FULL FACEPIECE



READ ALL USER INSTRUCTIONS BEFORE USE

All information, illustrations, and specifications in this *User Instruction* are based on the latest product information available at the time of publication. 3M Scott reserves the right to make changes at any time without notice.

The contents of this *User Instruction* may not be reproduced in whole or in part without obtaining express written permission from 3M Scott.

Cautionary Notice

While the manufacturer has attempted to detail in this *User Instruction* all areas of possible danger to personnel in connection with the use and servicing of this equipment, personnel should use caution when installing, inspecting, operating, and servicing this equipment.

The manufacturer is specifically not liable for any damage or injury arising out of a user's failure to follow the instructions contained in this *User Instruction* or failure to exercise due care and caution in the installation, operation, inspection, and service of this equipment.

Import and Export

The international transport of this equipment and any related documentation is regulated under United States export laws and regulations and may be regulated by the import or export laws and regulations of other countries.

If you have any questions or concerns regarding these regulations, contact 3M Scott at 1-800-247-7257 (704-291-8300 outside the continental United States).

Questions or Concerns

If you have any questions or concerns regarding use of this equipment, contact your authorized 3M Scott distributor, or contact 3M Scott at 1-800-247-7257 (704-291-8300 outside the continental United States) or ScottTechSupport@mmm.com.



	About This User instruction	5
	Intended Readers	5
	How to Read This User Instruction	5
	Warnings, Cautions, and Notes	5
	Before You Begin	6
	Maintenance and Repairs	6
	Retirement Criteria and Considerations	6
	Safety Information	7
	All 3M Scott Fire & Safety Products.....	7
	3M Scott Full Facepieces.....	8
	Warnings and Cautions	8
Chapter 1	Introduction	11
	Before You Begin	11
	Overview	11
	Facepiece Components.....	11
Chapter 2	Inspection	13
	Before You Begin	13
	Inspecting the Facepiece	13
	Performing Operational Testing.....	14
Chapter 3	Donning	15
	Before You Begin	15
	Donning the Facepiece	15
Chapter 4	Cleaning & Maintenance	21
	Before You Begin	21
	Cleaning the Facepiece	21
	Maintenance.....	23
	Available Parts	23
	Removing and Installing the Nosecup Assembly	23
	Removing and Installing the Head Harness & Straps	25
	Installing the Neck Strap	26
Appendix A	Facepiece Fitting	29
	About Fit Testing	29
	CBRN SCBA or APR	30
	Fit Testing Procedure	30
	Negative Pressure User Seal Check	30
	Quantitative Fit Testing	30
	Routine Testing	31
	Facepiece Sizes.....	32
Appendix B	Options & Accessories.....	33

CONTENTS

ABOUT THIS *USER INSTRUCTION*

This *User Instruction* provides operating and maintenance instructions for the 3M Scott Vision C5 full facepiece.

Intended Readers

3M Scott provides *User Instructions* for individuals with different levels of training. This *User Instruction* is written for **Trained Operators**.

- A **Trained Operator** is an individual who has had minimum-level training in the use of 3M Scott Fire & Safety equipment in a hazardous environment. He or she is familiar with the instructions provided in this manual and is capable of performing basic maintenance tasks as outlined.
- A **Certified Technician** is an individual who has successfully completed the Air Supplied Certified Technician II class offered by 3M Scott. Certified technicians are able to use specialized equipment, including the Posi3 USB™¹ SCBA testing equipment, and are able to make repairs to the SCBA that involve the air flow path.

How to Read This *User Instruction*

Warnings, Cautions, and Notes

Throughout this *User Instruction*, special references are made when deemed important. The following classifications distinguish these references by their level of importance:



WARNING

Indicates a hazardous situation which, if not avoided, could result in serious injury or death



CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury and/or property damage



NOTE

Indicates a situation which, if not avoided, could result in property damage



TIP

Indicates helpful information

1. Posi3 USB is a trademark of Honeywell Analytics, Inc., Lincolnshire, IL.

Before You Begin

Before beginning any procedures, review the *User Instruction* in its entirety. Thoroughly read all warnings, cautions, and notes. Ensure that the proper tools, kits, parts, and materials are at hand and ready for use. Any required tools and other supporting materials are listed at the beginning of the procedure. When performing any maintenance checks or services on any 3M Scott Fire & Safety product or device, proceed only as far as necessary and as instructed by this *User Instruction*.

Maintenance and Repairs

Comply with all instructions and warnings contained in all applicable *User Instructions*.

It is your responsibility to obtain and use the most current *User Instructions* that apply to the operations being performed. The instructional material must include the most current materials: manuals or manual modules, *User Instructions*, Inspection and Cleaning Instructions, Installation and Use Instructions, and any additional 3M Scott approved support material required to maintain the equipment.

Current service literature is available from 3M Scott. The Certified Technician I Training Manual contains additional maintenance information that goes beyond the routine cleaning and regular operational inspection of the equipment but is less advanced than Certified Technician II-level maintenance available at a 3M Scott Authorized Service Center. A person with good mechanical ability using standard hand tools is capable of performing Technician I-level tasks. Contact 3M Scott or your 3M Scott distributor for details.

Because this equipment may be used to support human life in a hazardous atmosphere, do not attempt maintenance beyond that described in this *User Instruction* or in the Certified Technician I Training Manual. If disassembly or adjustment other than described in this *User Instruction* or the Certified Technician I Training Manual is required, the equipment must be serviced by a 3M Authorized Service Center in accordance with the appropriate 3M Scott Fire & Safety Technician Service Manuals. You can arrange service by an Authorized Service Center through your authorized 3M Scott distributor or by contacting 3M Scott.

If you note a discrepancy while performing operation or maintenance checks and services, tag the equipment as “Out of Service” and refer it to a 3M Scott Certified Technician II.

While an attempt has been made to address all foreseeable operation/service conditions, exercise careful judgment in removing from service any equipment that does not appear to function correctly, even if all operator-level maintenance checks and services have been completed. If there is any doubt regarding the safe operation of the equipment, remove it from service and tag it for repair.

Retirement Criteria and Considerations

Retirement criteria and considerations are determined by 3M Scott trained and Certified Technicians (Level II).

SAFETY INFORMATION

Read all of the safety information before beginning any of the procedures in this *User Instruction*. The safety information in this section is organized as follows:

- “[All 3M Scott Fire & Safety Products](#)” on page 7
- “[3M Scott Full Facepieces](#)” on page 8

All 3M Scott Fire & Safety Products

The following safety directives apply to all 3M Scott Fire & Safety products.

- Many 3M Scott Fire & Safety products are intended to support human life in hazardous atmospheres. Failure to carefully read, understand, and follow the instructions and warnings in this *User Instruction* may result in serious injury or death.
- Improper use of this equipment may result in serious injury or death. Improper use includes, but is not limited to, use without adequate training, disregard of the warnings and instructions contained herein, use of the equipment for purposes not included in these *User Instructions*, and failure to inspect and maintain the equipment.
- Apply only the instructions offered within this *User Instruction*. Maintenance procedures beyond the scope of this *User Instruction* must not be performed. Additional disassembly may cause operation errors and/or component failure and result in serious injury or death. If a discrepancy or malfunction cannot be corrected using the procedures contained within this *User Instruction*, the product must be tagged to indicate that it is unserviceable and referred to a 3M Scott Certified Technician II for evaluation and repair.
- Comply with all *User Instructions* and warnings contained in this and all applicable manuals and modules. While an attempt has been made to address all foreseeable operating conditions, you must exercise careful judgment when operating any equipment. If there is any doubt regarding the safe operation of equipment, remove the equipment from service and tag it for repair.
- You are responsible for any damage, improper function, or injury as a result of user-applied markings, etchings, labeling, material additions, or modifications to the equipment.

3M Scott Full Facepieces

The following safety directives, warnings, and cautions apply to 3M Scott full facepieces. *For safety information specific to 3M Scott Air-Pak respirators, see the User Instructions provided with the respirator.*

- Improper use of this equipment may result in serious injury or death. Improper use includes, but is not limited to, use without adequate training, disregard of the warnings and instructions contained herein, and failure to inspect and maintain this equipment. Read and understand all *User Instructions* before attempting to operate or service this equipment.
- The information in this *User Instruction* is meant to supplement — not replace — the instructions, training, supervision, maintenance, and other elements of your organized respiratory protection program.
- Use this equipment only in conjunction with an organized respiratory protection program.
- This equipment is designed and intended to function properly in reasonable/ordinary firefighting conditions. The functionality of this equipment may be compromised by extreme fire conditions.
- Training is required before use of this equipment. Use this equipment only if you have been trained in its use and only in conjunction with an organized respiratory protection program. Do not use this equipment for purposes other than those authorized by your respiratory protection program. Do not use this equipment underwater.
- Fit testing is required to determine the correct facepiece for each user. The Respiratory Protection Program Manager or Safety Coordinator must assist the user in selecting the correct facepiece size relative to the user's facial features and dimensions. Prior to use, fit testing must be performed with any approved 3M Scott accessory that will be installed on the facepiece, such as communications devices or thermal imaging systems. See [“Appendix A: Facepiece Fitting” on page 29](#).

Warnings and Cautions

**WARNING**

To reduce the risks associated with exposure to contaminants:

The contaminant must be identified, and effectively removed or contaminated components must be removed and disposed of in accordance with applicable regulations.

**CAUTION**

To reduce the risks associated with environmental contamination:

Dispose of all system components, including battery (when provided), in accordance with applicable local laws and government regulations.

**WARNING**

To reduce the risks associated with loss of air supply, exposure to contaminants, and oxygen-deficient atmospheres:

- Do not store the facepiece with anything attached to the docking port. Storing the facepiece in this way may cause damage.
 - Verify all moisture has been removed from all respirator components before storage. Moisture in the facepiece or working parts of the respirator, especially when exposed to freezing temperatures, may cause a malfunction of the respirator.
-

**WARNING**

To reduce the risks associated with exposure to contaminants and oxygen-deficient atmospheres:

- Verify that the facepiece is properly donned according to the donning procedure section in this *User Instruction* and nothing interferes with the face to facepiece seal.
 - Perform a quantitative fit test and facepiece leak check after donning the facepiece.
 - Do not wear the facepiece when conditions prevent a good faceséal. Such conditions may include, but are not limited to, facial hair such as growth of beard or sideburns, a low hairline that crosses or interferes with the sealing surface, thick or protruding hairstyles such as pony tails or buns that interfere with the smooth and close fit of the head harness to the head, a skull cap that projects under the facepiece, or temple pieces on glasses. Also, the absence of one or both dentures can seriously affect the fit of a facepiece.
 - Regularly inspect the facepiece and harness for loose, worn, or damaged components.
 - Take care to prevent snagging the facepiece, which may pull the facepiece away from the face.
-

**WARNING**

To reduce the risks associated with vision impairment:

Verify the nose cup and nose cup inhalation valves are properly installed.

**WARNING**

To reduce the risks associated with fire and extreme heat exposure:

Ensure that any protective head gear does not interfere with the facepiece seal or the facepiece's functions. If wearing a fire hood, ensure that its face opening sits on top of the faceséal directly behind the bezel.

**WARNING**

To reduce the risks associated with loss of air supply, reduced service life, exposure to contaminants, and oxygen-deficient atmospheres:

If you detect an air leak into the facepiece performing a User Seal Check, do not use the respirator.

**WARNING**

To reduce the risks associated with exposure to contaminants, oxygen-deficient atmospheres, and entanglement:

Ensure the facepiece neck strap is behind your head when the facepiece is donned so that the strap is not easily snagged but allows enough slack for free movement of the facepiece.

**WARNING**

To reduce the risks associated with fire and explosion:

- When cleaning the facepiece, use a dampened cloth to avoid building an electrostatic charge.
 - Do not clean or perform maintenance on the facepiece in an explosive environment.
 - Do not use an RFID tag reader that has an output power greater than 6 watts while in a flammable atmosphere.
-



WARNING

To reduce the risks associated with fire, explosion, exposure to contaminants, and oxygen-deficient atmospheres:

- Do not alter or repair the facepiece beyond the scope of these *User Instructions*.
 - Use only 3M Scott-approved parts.
 - Follow the regular operational inspection procedures exactly. If there are any operational malfunctions, remove the respirator from service and tag for repair by authorized personnel.
-



WARNING

To reduce the risks associated with loss of air supply, exposure to life-threatening contaminants, or oxygen-deficient atmospheres:

- Stay alert when operating this equipment.
 - Do not operate this equipment while under the influence of drugs, alcohol, or medication that may affect vision, dexterity, or judgment.
-



WARNING

To reduce the risks associated with fire and dermal exposure to contaminants:

Always wear the appropriate personal protective equipment in accordance with your EHS program. This respirator only provides protection to the user's respiratory system and to part of the face.

INTRODUCTION

This chapter describes the 3M Scott Vision C5 full facepiece and its major components.

Before You Begin

Carefully read “[Safety Information](#)” on page 7 before beginning any of the procedures in this *User Instruction*.

Overview

The Vision C5 full facepiece, when combined with an appropriate respiratory protection system, provides respiratory protection to an individual when entering, working in, or exiting a hazardous atmosphere. This equipment is designed to withstand exposure to certain environmental conditions as defined by the applicable approvals.

Facepiece Components

The Vision C5 facepiece consists of the components shown in [Figure 1-1](#).



Figure 1-1 3M Scott Vision C5 full facepiece

The full facepiece is available in specific models and sizes. Before use, the facepiece must be properly fitted as outlined in [“Appendix A: Facepiece Fitting” on page 29](#).

Fit testing per OSHA Standard 29 CFR Part 1910.134 Appendix A, or ANSI/AIHA/ASSE Z88.10, current edition, requires testing in the negative pressure mode using protocols deemed acceptable by those standards. For quantitative fit testing, 3M Scott Fire & Safety facepieces require use of a Fit Test Adapter or equivalent and appropriate negative pressure testing equipment. A Mask Seal Kit may also be required to attain a proper fit. See [“Appendix A: Facepiece Fitting” on page 29](#).

INSPECTION

This chapter describes how to perform a regular operational inspection of a 3M Scott Vision C5 full facepiece. Follow the procedures in this chapter when you first receive the facepiece and during daily or periodic inspection of the facepiece:

- “[Before You Begin](#)” on page 13
- “[Inspecting the Facepiece](#)” on page 13
- “[Performing Operational Testing](#)” on page 14

Before You Begin

Carefully read the “[Safety Information](#)” on page 7 before beginning any of the procedures in this chapter.

See the *User Instructions* provided with your 3M Scott Air-Pak respirator for full details about donning and using the facepiece. Remember, the facepiece alone does not provide any protection against a hazardous atmosphere without the use of the other components required for operation of the complete respirator.

Inspecting the Facepiece

Always inspect and clean the facepiece before the first use. Remove and keep the protective static cling label attached to the lens of a new facepiece; the label may be re-used during storage of the facepiece.

The facepiece must be complete and in serviceable condition with no worn, loose, or damaged components.

To inspect the facepiece

- 1 Inspect the facepiece seal and other rubber components for deformation, wear, cracks, or other damage.
- 2 Inspect the lens and lens frame.
 - a Inspect the lens for scratches, gouges, cracks, crazing, distortion, melting, or any other damage or condition that could impair the user’s vision or the operation of the facepiece.
 - b Inspect the lens frame for damage such as cracks or distortion.
 - c Verify that the lens frame screws are present and installed correctly.
- 3 Inspect the head harness.
 - a Check that all harness anchors are present and operating properly.
 - b Inspect the head harness for correct installation with all straps oriented correctly.
 - c Inspect the head harness for damage or worn components.
- 4 Inspect the voicemitters and ducts.
 - a Verify that the voicemitter ducts are properly installed.
 - b Inspect the voicemitters for damage and verify that the voicemitters are properly installed and secure in the voicemitter ducts.

INSPECTION

- 5 Inspect the nosecup.
 - a Inspect the nosecup for cuts or damage. Look for any signs of damage to the facepiece docking port side of the nosecup where the regulator attaches.
 - b Verify that both inhalation valves in the nosecup are present and properly installed.
 - c Verify that the nosecup is properly installed. Check that the nosecup is properly seated between the flanges of the voicemitter ducts and is inside the face seal (away from the wearer). See [Figure 2-1](#).
- 6 Verify that the facepiece is clean. See [“Cleaning the Facepiece”](#) on page 21.
- 7 Adjust the head straps to the full outward position.



Figure 2-1 Checking the nosecup installation

Performing Operational Testing

See the *User Instructions* provided with your 3M Scott Air-Pak respirator for full details about operational testing of the respirator with the facepiece. You should perform operational testing before each use of the respirator.

DONNING

This chapter provides the basic instructions for donning the 3M Scott Vision C5 full facepiece. Training and practice with the equipment are required before operation to ensure that you are completely familiar with its operation.

Instructions for donning the facepiece are divided into the following sections:

- “[Before You Begin](#)” on page 15
- “[Donning the Facepiece](#)” on page 15

Before You Begin

Before performing any of the procedures in this chapter:

- Carefully read “[Safety Information](#)” on page 7.
- Inspect the facepiece as described in “[Chapter 2: Inspection](#)” on page 13.

Determine what other protective gear you will use and don the facepiece accordingly.

If facepiece use is expected at temperatures near or below freezing, or if the facepiece is to be used after storage at temperatures near or below freezing, see the User Instructions provided with your 3M Scott Air-Pak respirator for full details about low temperature operation.

Donning the Facepiece

Before donning the facepiece, examine it to verify that it is complete and in serviceable condition.

For more information, see “[Inspecting the Facepiece](#)” on page 13.

Periodic fit testing (at least yearly) is required to identify any physical changes of the user which could affect the fit of the facepiece. Refer to the appropriate steps in “[Appendix A: Facepiece Fitting](#)” on page 29.

To don the facepiece

You must be familiar with and practice the prescribed donning and termination of use procedures for the facepiece prior to using the respirator.

DONNING

- 1 Adjust the head straps to the full outward position. See [Figure 3-1](#).



Figure 3-1 Adjusting the head straps to the full outward position

- 2 Hold the facepiece in one hand. Fold the head harness over the lens (see [Figure 3-2](#)), or hold the head harness up and out of the way with the other hand.



Figure 3-2 Folding the head harness over the lens

- 3 Place the facepiece centered on the face with the chin properly positioned in the chin cup. See [Figure 3-3](#).



Figure 3-3 Positioning the chin

- 4 Using the hand hold at the bottom of the netting, pull the head harness over the crown of the head and down the back of the head. Pull forcefully enough that the facepiece moves up to position your chin snugly within the chin cup and forms a close fit to your face. See [Figure 3-3](#).



Figure 3-4 Placing the facepiece on the face

- 5 Verify that no hair or clothing interferes with the face-to-facepiece seal. Verify that the head harness forms a close fit to your head.

**TIP**

Ensure that the chin is properly located in the chin cup of the facepiece throughout the donning process.

- 6 Smooth the head harness over the head and ensure that straps are lying smooth and flat against the head and neck with no twists. See [Figure 3-5](#).
- 7 Verify the head harness is centered and properly located at the back and base of the head. Maintain the head harness in this position.



Figure 3-5 Smoothing the head harness

**TIP**

Verify that the top center portion of the head harness is positioned over the crown of the head.

- 8 While holding the facepiece in place with one hand, tighten the neck straps evenly one at a time by pulling each neck strap end toward the rear of the head. Alternate hands to maintain the facepiece position on the face. See [Figure 3-6](#).



Figure 3-6 Tightening the neck straps

- 9 Verify the proper location of the face in the facepiece and the chin in the chin cup. While still holding the facepiece in place with one hand, tighten the temple straps evenly one at a time by pulling each temple strap end toward the rear of the head. Alternate hands to maintain the facepiece position on the face. See [Figure 3-7](#).



Figure 3-7 Tightening the temple straps

DONNING

- 10 Smooth the head harness down the back of the head and make sure the net is flat against the head. If necessary, adjust the bottom of the head harness to sit below the crown of the head. See [Figure 3-8](#).
- 11 Verify that the head harness is centered on the crown of the head and lying flat against the back of the head.
- 12 Again, use the hand hold at the bottom of the netting to pull the head harness down the back of the head. Pull forcefully enough that the facepiece moves up to position your chin snugly within the chin cup and forms a close fit to your face.
- 13 Once again, verify the proper location of the face in the facepiece and the chin in the chin cup.
- 14 Re-tighten the straps. All straps must be snug and the facepiece should feel secure. See [Figure 3-9](#).



Figure 3-8 Adjusting the head harness



Figure 3-9 Verifying facepiece positioning

- 15 Perform a personal check of the facepiece and head harness and address any donning problems. If possible, have a partner verify that you have donned your facepiece properly or use a mirror to check.

Possible facepiece donning problems include the following (see [Figure 3-10](#)):

- Head harness strap is twisted.
- Head harness is off-center or not flat against the head.
- Head harness is too high on the head.
- Hair or clothing is in the facesal.
- Face seal is rolled over inside the facepiece rather than flat against the face.
- Facepiece sits too low on the face as evidenced by pressure on the forehead or the facepiece contacting the throat area, permitting a break in the seal.

Similar conditions can occur with other facepieces as well. Verify that the facepiece is donned correctly regardless of the head harness style. If any donning problems are found, remove the facepiece and re-don the facepiece correctly.

- 16 Perform a negative pressure User Seal Check by covering the facepiece docking port with your hand and inhaling gently. If you feel the facepiece collapse slightly and pull closer to your face with no leaks between the face and the facepiece, a proper seal has been obtained. If facesal air leakage is detected, reposition the facepiece on your face and/or readjust the tension of the straps to eliminate the leakage and recheck the seal.

**NOTE**

Be careful not to disturb the facepiece seal by pressing too firmly during the negative pressure User Seal Check.



Twisted head harness strap



Head harness not centered



Head harness too high



Facepiece too low

Figure 3-10 Donning problems

**TIP**

The OSHA Respiratory Protection Standard requires teams of at least two people during interior structural firefighting [29CFR1910.134(g)(4)(i)] when entering into and operating in an IDLH atmosphere. If necessary, ask your partner to verify that you have donned the facepiece properly.

CLEANING & MAINTENANCE

This chapter provides instructions for cleaning and storing the 3M Scott Vision C5 full facepiece.

- “[Before You Begin](#)” on page 21
- “[Cleaning the Facepiece](#)” on page 21

Before You Begin

Carefully read “[Safety Information](#)” on page 7 before beginning any of the procedures in this chapter.

After using the facepiece, clean it according to these *User Instructions* and perform a regular operational inspection as outlined in “[Chapter 2: Inspection](#)” on page 13. If you find any damage, remove the equipment from service and tag it for repair by authorized personnel.

Prior to handling or using any of the cleaning agents mentioned in this *User Instruction*, please consult the manufacturer’s Safety Data Sheet (SDS) for precautions and important instructions.

Cleaning the Facepiece

You will need the following supplies:

- An appropriate sanitizing and/or disinfecting cleaner



NOTE

3M Scott does not guarantee the efficacy of disinfectants for specific infectious pathogens. When using the cleaning products, follow all of the manufacturer’s instructions. Improper use or handling of these products may result in damage to the facepiece.

If an appropriate disinfectant is not available, you can disinfect the facepiece using one of the following solutions:

- **Hypochlorite solution** (50 ppm of chlorine) made by adding approximately one milliliter (1 mL) of laundry bleach to one liter (1 L) of water at or below 110° F / 43° C

-OR-

- **Aqueous solution of iodine** (50 ppm iodine) made by adding approximately 0.8 mL of tincture of iodine (6-8 grams ammonium and/or potassium iodide in 100 cc of 45% alcohol) to 1 L of water at or below 110° F / 43° C

- Spray bottle (for the sanitizing or disinfecting cleaner)
- Drinking (potable) water, either from a faucet or in a spray bottle
- Clean, lint-free cloth
- (Optional) Lubricant-free, dry breathing air, maximum 30 psig, for drying the facepiece



NOTE

When cleaning the facepiece, do **not** use the following cleaning products:

- Abrasive cleaners
- Bleach stronger than a 3% solution in water
- Solvents such as acetone, paint and lacquer thinner, benzene, or dry-cleaning fluid

In addition, do **not** do the following:

- Polish with paper towels as most paper contains abrasives
 - Autoclave or wash in an unapproved automatic washer
 - Use a vapor degreaser/polisher
-

To clean the facepiece

- 1 Remove the mask-mounted regulator from the facepiece docking port.
-



TIP

A nose cup is designed to be an integral part of the facepiece and does not need to be disassembled for cleaning unless the facepiece is heavily soiled.

- 2 If the facepiece is heavily soiled, you may have to first wash the facepiece with a solution of mild soap or detergent in warm water (110° F / 43° C maximum).
 - Using a spray bottle, apply a solution of mild soap or detergent in warm water (110° F / 43° C maximum) to the soiled surfaces. Rinse the facepiece with drinking water either from a faucet or in a spray bottle.

-OR-

 - Clean the facepiece using 3M 504 Respirator Cleaning Wipes.
 - 3 To sanitize and/or disinfect the facepiece, use a spray bottle to apply the appropriate sanitizing and/or disinfecting cleaner to all surfaces. Be sure to cover all surfaces completely with the solution.
-



NOTE

The Kevlar head harnesses are made of porous material. The recommended cleaner may not be effective on porous material.

- 4 Set the facepiece aside for the required contact time prior to rinsing. **The hypochlorite solution and the aqueous solution of iodine require a 2-minute contact time.**
- 5 Rinse the facepiece with drinking water either from a faucet or in a spray bottle.
- 6 Shake excess water off the facepiece and dry it with a clean, lint-free cloth or gently blow dry with clean, dry breathing air of 30 psig or less pressure. Do not use shop air or any other air containing lubricants or moisture.

Maintenance



NOTE

Maintenance is limited to removing or installing the nosecup, nosecup inhalation valves, head harness, head harness straps, and neck strap.

Available Parts

PART NUMBER	DESCRIPTION
201484-01	Nosecup assembly, Vision C5, Small
201486-01	Nosecup assembly, Vision C5, Medium
201488-01	Nosecup assembly, Vision C5, Large
31002788	Valve, inhalation, red
201495-03	Kevlar head net, Vision C5, Small
201495-02	Kevlar head net, Vision C5, Medium
201495-01	Kevlar head net, Vision C5, Large
804178-05	Kevlar upper strap, head harness, Vision C5
804178-03	Kevlar lower strap, head harness, Vision C5
201682-01	Neck Strap, Vision C5

Table 4-1 Available parts for the 3M Scott Vision C5 Facepiece

Removing and Installing the NoseCup Assembly

To remove the nosecup assembly

- 1 Reach inside the facepiece and, using only your fingers, flex the exterior surface of the nosecup from the two voicemitter ducts; the ducts will remain attached to the lens. See picture A in [Figure 4-1](#).
- 2 Grip the nosecup assembly and pull to remove it from the facepiece. See picture B in [Figure 4-1](#).

A



B



Figure 4-1 Removing the nosecup

To install the nosecup assembly

- 1 Insert the new or cleaned and dry nosecup assembly into the facepiece with the nosecup valves facing up. You must insert the nosecup behind the facesal (inside the facepiece) away from the wearer.
- 2 Press the center of the nosecup tube through the hole in the front of the facepiece air deflector. It will seat in the air deflector hole. See Picture A in [Figure 4-2](#).

- 3 Stretch each 2" diameter hole in the nosecup onto the end of the voicemitter ducts and posts until fully around each duct. See Picture B in [Figure 4-2](#).

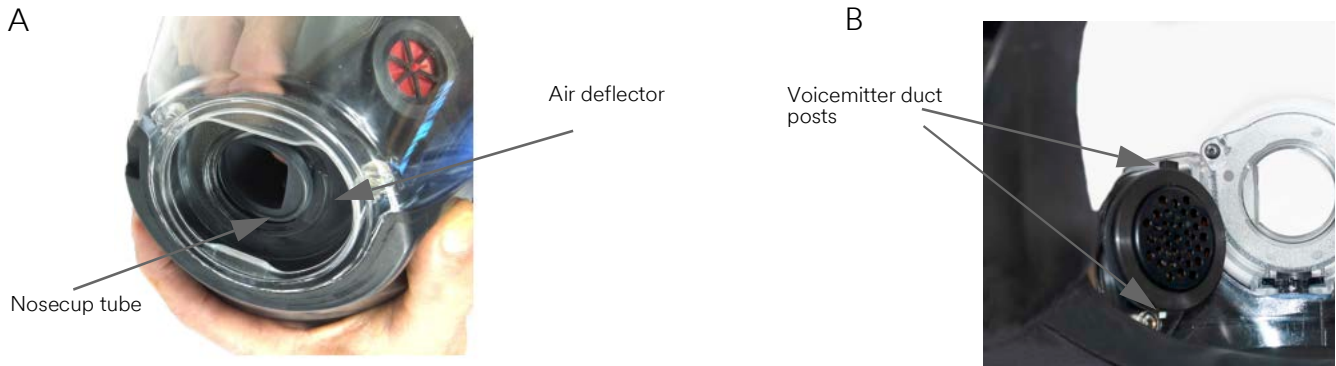


Figure 4-2 Pressing the nosecup tube

- 4 Check the nosecup to verify the following:

- The inhalation check valves are facing up and toward the inside of the nosecup.
- The nosecup is properly seated in the facepiece air deflector and around the voicemitter ducts and posts.
- The nosecup is inside the faceseal (away from the wearer). See [Figure 4-3](#).



Figure 4-3 Nosecup inside the faceseal

To remove and install the nosecup inhalation valves

Typically, the two inhalation valves installed in the nosecup assembly are **not** removed during maintenance; however, if replacement is required, proceed as follows:

- 1 Grip the nosecup inhalation valve disc with your fingers and pull of the valve seat. See [Figure 4-4](#).

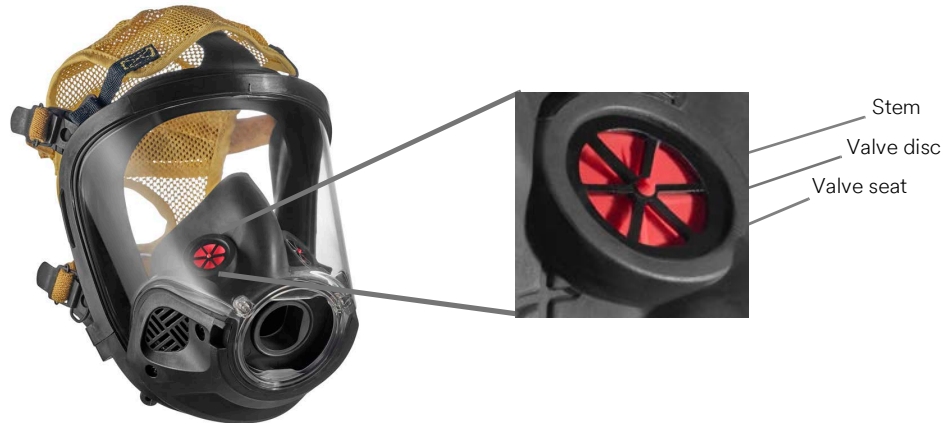


Figure 4-4 Valve assembly

- 2 Select new noseclip inhalation valves and moisten the stem of the valve with a drop of clean water.
- 3 From inside the noseclip, slip the stem of the valve into the center hole of the valve seat. From outside the noseclip, gently pull the stem to seat the valve in the valve seat. See [Figure 4-5](#).
- 4 Repeat with the other valve and trim excess stem as required.

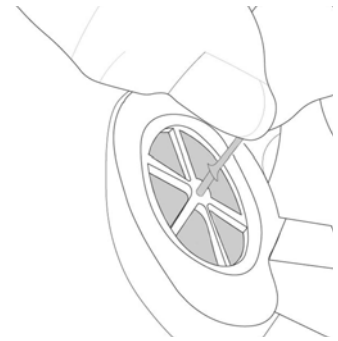


Figure 4-5 Replacing the valve

Removing and Installing the Head Harness & Straps



Figure 4-6 Head harness and straps

To remove and install the head harness

- 1 Locate one of the four buckles positioned around the facepiece holding the head harness straps. See picture A in [Figure 4-6](#).
- 2 Lift the buckle release lever and pull the adjusting head harness strap until the end of the strap is against the buckle and the strap is fully extended. Repeat the process for the other buckles on the facepiece. See picture B magnification in [Figure 4-6](#).
- 3 Pass the ends of the adjusting straps through the buckles to release them from the facepiece.
- 4 The black temple straps and yellow forehead strap are held in place with sewn tabs. Push them away from their retainer, then while lightly squeezing the sewn tab, push it back through its individual retainer slot until the head harness is free. See pictures A, B and C in [Figure 4-7](#).

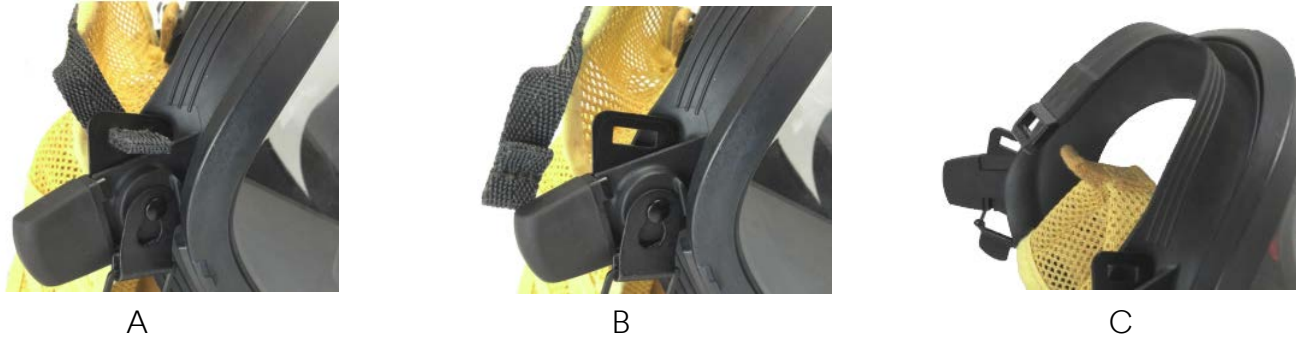


Figure 4-7 Removing black temple strap and yellow forehead strap

- 5 Place the new head harness in front of you with the sewn part number tag facing down.
- 6 Work the black temple straps and yellow forehead strap through their corresponding retainer slots by pushing them through from the inside of the facepiece, out. Push until the sewn tab is completely through the slot, then pull back slightly to lock the sewn tab into place. See picture A in [Figure 4-7](#).
- 7 Thread each adjusting strap through the slot closest to the buckle attachment with the pull loop sewn side down. Thread over the buckle roller and back through the slot between the buckle roller and the release lever. When assembled properly, the pull loop will be above the strap. See picture A in [Figure 4-6](#).

To remove and install the adjusting head harness straps

- 1 Follow items 1, 2 and 3 in “[To remove and install the head harness](#)” on page 25 to free straps from the facepiece.
- 2 Pull the adjusting strap to be changed from the head harness path until the strap is free of the harness.
- 3 Pass the new strap (with the pull loop sewn side down) through the corresponding top and/or bottom paths on the head harness.
- 4 Follow items 6 and 7 in “[To remove and install the head harness](#)” on page 25 following the installation of new head harness straps.

Installing the Neck Strap

To install the neck strap

- 1 Clip one end of the neck strap to one of the holes on the bottom of the facepiece (you can attach the clip from any direction). See [Figure 4-8](#).

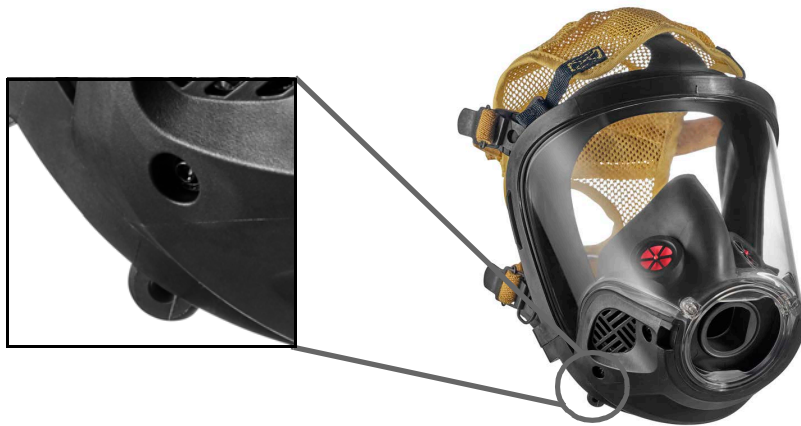


Figure 4-8 Neck strap hole

- 2 Use the other end of the strap to clip to the hole on the opposite side of the facepiece.

- 3 Place the neck strap over the head with the opening of the facepiece toward your body so that the inside of the facepiece is against your body and protected from debris. See picture A [Figure 4-9](#).
- 4 Turn the facepiece right-side up with the opening in front of you face and with the neck strap still in place. The neck straps will criss-cross. See picture B in [Figure 4-9](#).
- 5 Don the facepiece (see "[Chapter 3: Donning](#)" on page 15), taking care that the criss-crossed neck strap does not prevent a proper face seal. See picture C in [Figure 4-9](#).



Figure 4-9 Installing the neck strap

FACEPIECE FITTING

A respirator fit test must be performed to ensure the correct respirator facepiece size has been selected and assigned to the user. The respiratory protection's program manager or safety coordinator is responsible for assisting the user in selecting the correct respirator size relative to the user's facial features and dimensions. Any approved 3M Scott Fire & Safety accessories that will be used with the respirator (such as a communications device, etc.) must be in place during fit testing. If changing from a standard facepiece to a facepiece with an installed accessory, such as a communications device, a new fit test be performed.

About Fit Testing

Before occupational use of this respirator, a written respiratory protection program must be implemented meeting all local, state, federal government or jurisdiction having authority requirements. In the United States, employers must comply with OSHA 29 CFR 1910.134, which includes medical evaluation, training, and fit testing.

Respirator fit tests are explained fully in the following:

- American National Standard Respiratory Fit Testing Methods, ANSI/AIHA/ASSE Z88.10, current edition
- Occupational Safety and Health Standards, OSHA 29 CFR 1910.134 Appendix A
- In Canada, fit tests are explained in Selection, Use and Care of Respirators, CAN/CSA Z94.4

Quantitative fit testing per OSHA Standard 29 CFR Part 1910.134 Appendix A, or ANSI/AIHA/ASSP Z88.10 (current edition) requires testing in the negative pressure mode using Quantitative Fit Test (QNFT) protocols deemed acceptable by those standards. For quantitative fit testing, 3M Scott facepieces require use of the appropriate negative pressure QNFT test protocol, such as the ambient aerosol condensation nuclei counter (e.g., TSI PortaCount® Respirator Fit Tester¹) or controlled negative pressure (CNP) fit test device (e.g., OHD Quantifit²) along with the following 3M Scott products as required to support the selected protocol:

- A new CBRN CAP-1 Canister (P/N 045135) or P100 Cartridge (P/N 052683)
- Probed Fit Test Adapter: P/N 201520-01 for Vision C5
- Mask Seal Kit (P/N 805655-01)
- Appropriate accessory (such as a communications device) properly installed on the facepiece

1. PortaCount® Respirator Fit Tester is a registered trademark of TSI, Incorporated, St. Paul, MN
2. Quantifit is a registered trademark of OHD, LLLP, Birmingham, AL

CBRN SCBA or APR

If you are fit testing for CBRN SCBA Open Circuit mode of operation (minimum fit factor equal to or greater than 500 minimum) or CBRN APR (minimum fit factor equal to or greater than 2000 minimum), appropriate negative pressure testing equipment must be used. For example:

- If you are fit testing for CBRN SCBA Open Circuit or CBRN APR, use a P100 Filter (P/N 052683) and Fit Test Adapter (P/N 201520-01).
- If you are using a facepiece that has been specially modified for a fit testing program such as that described in NIOSH Procedure No. RB-CET-STP-CBRN-0352, *Determination of Laboratory Respirator Protection Level (LRPL) Quantitative, Medium Flow, Deep Probe, Corn Oil, Fit Factor Performance Test For Chemical, Biological, Radiological and Nuclear (CBRN) Full Facepiece Respiratory Protection Devices (RPD) Standard Testing Procedure*, install the appropriate filtration element directly into the 40 mm facepiece adapter.

Fit Testing Procedure

Negative Pressure User Seal Check

The size and style facepiece must be selected based on the user's measured face size. For the initial fitting of the facepiece, conduct a negative pressure User Seal Check as described in step 16 of the ["Donning the Facepiece"](#) section of the *User Instructions* provided with the respirator. Follow the procedure carefully. If the selected facepiece does not pass the negative pressure User Seal Check or does not fit securely without movement in the chin or chin cup area, or if the user experiences discomfort in the chin or throat, try the next nearest size, larger or smaller. After passing the negative pressure User Seal Check, the facepiece size selected must be verified by successfully passing a respirator fit test.

A leak that is detected from a location other than the face-to-facepiece seal may indicate damaged or defective equipment. Remove the defective equipment from service and tag it for repair by authorized personnel. Repeat the testing with equipment known to be operating properly.

Quantitative Fit Testing

Before fit testing, test subjects must pass a medical evaluation and be in good health. Any and all conditions that might interfere with a good face-to-facepiece seal must be addressed and corrected before performing the fit testing.

To verify the fit factor of the respirator, testing must be performed to local, state, federal or government jurisdiction having authority following established protocols.

Fit test exercises must be performed as if the respirator is being used in a hazardous atmosphere. Users must not bump the facepiece, filter, or adapter into the body through exaggerated motions. Users must not talk except when directed to by the test administrator.

3M Scott requires that users of 3M Scott Fire & Safety respirators and facepieces must achieve a fit factor of at least 500 for CBRN SCBA (Open Circuit) use or at least 2000 for CBRN APR use with their assigned facepiece style and size using the fit test procedures and exercise regimen stated above. If a fit factor of at least 500 for CBRN SCBA (Open Circuit) use or at least 2000 for CBRN APR use cannot be achieved with any facepiece size or style, the user must **not** use this respirator.

If the respirator user passes a negative pressure User Seal Check but does not pass a respirator quantitative fit test, try the next nearest size, larger or smaller and repeat the negative pressure User Seal Check and the quantitative fit test. If an air leak is still detected, either per these *User Instructions* or the fit testing process, the use of Mask Seal Kit P/N 805655-01 may be required to attain a proper fit. Refer to the Mask Seal Kit Installation and Use Instructions (P/N 89462-01) included with the Mask Seal Kit. After installing the Mask Seal Kit, repeat the fit testing process to confirm a proper fit. If an air leak is still detected, do not use the respirator.

Routine Testing

Once the proper size is selected and assigned to the user following successful fit test to achieve minimum fit factors required, the respirator user must perform and pass a negative pressure User Seal Check **every time** the facepiece is donned to ensure proper fit before using the respirator in a hazardous atmosphere.

A respirator fit test must be routinely (at least yearly) carried out as outlined above for each user of this respirator to determine or confirm the amount of protection that the respirator provides. Periodically repeating the fit testing is required to identify any physical changes of the user that could affect the fit of the facepiece.

Facepiece Sizes

3M Scott facepieces are available in small, medium, and large sizes. Depending on the facepiece model, the size is identified by the sizing studs located inside the face seal and on the outside tab (see [Figure A-1](#)).

- Small - green stud
- Medium - black stud
- Large - red stud

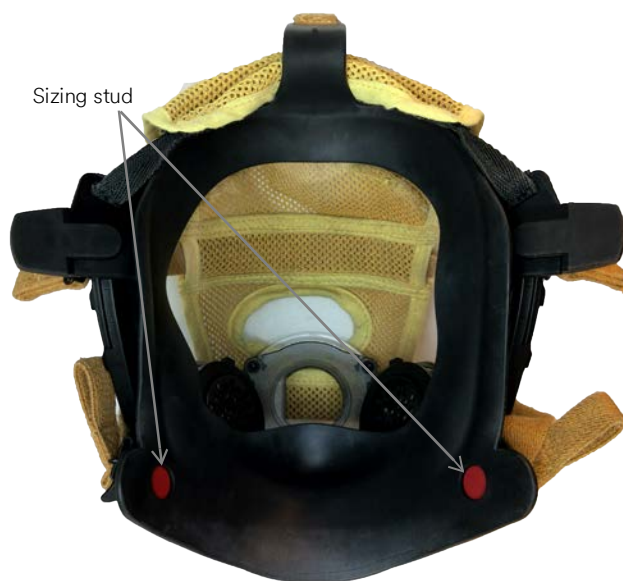


Figure A-1 Determining facepiece size

OPTIONS & ACCESSORIES

The 3M Scott Vision C5 full facepiece may be equipped with one or more accessories or options. The user must determine which accessories or optional components are installed on the facepiece. In addition, the user must receive training in the operation of the facepiece, including the operation of all options and/or accessories installed.

Become thoroughly familiar with the operation and maintenance of the accessories and options as explained in this *User Instruction* and in all other instructions provided with this facepiece or the option or accessory. These and other options may be added to a facepiece after purchase. Refer to the *User Instructions* provided with the accessories or optional components for details of the operation and the required changes to the regular operational inspection.

Available options and accessories include the following:

- Spectacle corrective lens kit
- Neck carrying strap for the facepiece

For information about available options and accessories for the Vision C5 facepiece, contact 3M Scott or your authorized 3M Scott distributor.

3M SCOTT FIRE & SAFETY

LIMITED WARRANTY ON VISION C5 FACEPIECE AND ACCESSORIES

3M Scott Fire & Safety (3M SCOTT) warrants Vision C5 Facepiece products (THE PRODUCTS) to be free from defects in workmanship and materials for as long as THE PRODUCTS are owned by the original end-user purchaser. This warranty applies to all components of THE PRODUCTS including all accessories and optional equipment purchased and supplied at the time of original sale of THE PRODUCTS, except electronically operated devices, consumable supplies, and storage bags. 3M SCOTT further warrants all consumable supplies and storage bags to be free from defects in workmanship and materials for one (1) year from the date of original manufacture by 3M SCOTT. 3M SCOTT's obligation under this warranty is limited to replacing or repairing (at 3M SCOTT's option) THE PRODUCTS or components shown to be defective in either workmanship or materials.

Only personnel of 3M SCOTT or, when directed by 3M SCOTT, authorized 3M SCOTT agents are authorized to perform warranty obligations. This warranty does not apply to defects or damage caused by any repairs of or alterations to THE PRODUCTS made by owner or any third party unless expressly permitted by 3M SCOTT product manuals or by written authorization from 3M SCOTT. To obtain performance under this warranty, and as a condition precedent to any duty of 3M SCOTT, the purchaser must return such products to 3M SCOTT, a 3M SCOTT authorized distributor or a 3M SCOTT authorized service center. Any product returned to 3M SCOTT shall be sent to "3M SCOTT FIRE & SAFETY" (Attn: Warranty Claim Dept.), 4320 Goldmine Road, Monroe, NC 28110.

This warranty does not apply to any malfunction of or damage to THE PRODUCTS resulting from accident, misuse or abuse.

THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN ADDITION, 3M SCOTT EXPRESSLY DISCLAIMS ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN ANY WAY CONNECTED WITH THE SALE OR USE OF 3M SCOTT PRODUCTS, AND NO OTHER FIRM OR PERSON IS AUTHORIZED TO ASSUME ANY SUCH LIABILITY. THIS WARRANTY APPLIES ONLY TO THE ORIGINAL END-USER PURCHASER AND IS NON-TRANSFERABLE.



4320 Goldmine Road
Monroe, NC 28110
Telephone: (704) 291-8300
Technical Support: (704) 247-7257
Web: www.3MScott.com