# USER'S MANUAL for

P/N 9910 P/N 9910D P/N 9910DS P/N 9910EF P/N 9912D P/N 9912EF



Read and understand all instructions before using this product. Open carton carefully and inspect product for damage caused by carrier. If any damage is found, report and submit claim to carrier.

## **TABLE OF CONTENTS**

	PAGE
INTRODUCTION/DESCRIPTION	3
SAFETY PRECAUTIONS	3
WARNINGS AND LIMITATIONS	3-4
CAUTIONS AND LIMITATIONS	4-5
PARTS LIST	5
AIR QUALITY AND VOLUME	6
INLET PRESSURE	6
DONNING/DOFFING INSTRUCTIONS	6-7
HOOD REPLACEMENT	8
MAINTENANCE AND INSPECTION	8
CLEANING, STORAGE AND REPAIR	9
SPECIFICATIONS	9
WARRANTY and RETURN POLICY	10-12
NIOSH APPROVAL	Additional Insert

#### INTRODUCTION

This manual provides instructions for the use and maintenance of the ALLEGRO INDUSTRIES Continuous-Flow Supplied Air Hood Respirator. You must read and understand this manual and be trained in the proper use of the equipment before using it in a contaminated atmosphere.

FOR MORE INFORMATION ON ALLEGRO INDUSTRIES' PRODUCTS, OR PARTS CATALOG, CONTACT ALLEGRO INDUSTRIES TECHNICAL SERVICE TOLL FREE AT (800) 622-3530.

#### **DESCRIPTION**

The ALLEGRO INDUSTRIES Continuous-Flow Supplied Air Hood Respirator provides a constant flow of air to the hood when connected to an external air source. When used with an approved air line at pressure ranges listed on the "Hose Length to PSI Range" table in this manual air is delivered to the respirator at a rate exceeding 6 CFM (170 liters per minute) (See NIOSH approval label).

#### SAFETY PRECAUTIONS

To protect you life and health and prevent serious injury or death, this respirator must be selected for your application; that it fits properly, that it is used, inspected and maintained as directed in this manual.

Industrial Hygienists, Safety Engineers, Occupational Physicians, Medical Department or Supervisor are among those professionals who should be consulted to be sure that you are wearing the proper respirator for the protection needed. Hoods are a type of respirator.

#### **WARNINGS – LIMITATIONS**

## Read, Understand and follow the Warnings-Limitations listed below:

- 1. Do not use this respirator in any way that does not agree with this User Manual or any applicable regulation.
- 2. This respirator must be used in accordance with a complete respirator program, such as the one specified in 29 CFR 1910.134.
- 3. Do not use this respirator in enclosed or poorly ventilated spaces where a high concentration of contaminants can occur or in an oxygen deficient atmosphere. Use only in adequately ventilated areas containing sufficient oxygen to support life.
- 4. This respirator does not supply oxygen. Use only in atmospheres containing 19.5% oxygen.
- 5. Do not use this respirator in any atmosphere that is immediately dangerous to life or health which means conditions that pose an immediate threat to life or health, or conditions that pose an immediate threat of severe exposure to an air contaminant or contaminants which are likely to have an adverse delayed effect on life or health.

- 6. The exposure limits specified in OSHA regulations, in the regulations of other government agencies, and in the most recent authoritative scientific literature shall be observed when the respirator described in this manual is used.
- 7. This respirator shall not be used in any manner contrary to the recommendations contained package label and on the Material Safety Data Sheet (MSDS) or similar document available from the manufacturer or supplier of the substance or substances being used.
- 8. Do not use this respirator during abrasive blasting (including sandblasting).
- Use only ALLEGRO INDUSTRIES component parts and combinations of parts to assemble or repair this respirator. Consult the parts list and approval label for approved parts. Use of non-approved parts voids the NIOSH approval and may result in bodily injury or death.
- 10. This respirator should be inspected and any necessary repairs made before each use. It must be cleaned, sanitized, dried and stored according to the directions in this manual.
- 11. Do not use this respirator if you have a concern that the air being supplied to the respirator face piece is not of the quality and quantity described herein.
- 12. It is important that the pressure and flow of the air entering the supplied air hose from the air supply be controlled and meets the requirements specified in this instruction manual.
- 13. During use, if any decrease in air flow to the hood is noticed, leave the contaminated area immediately, remove the hood and inspect it for any damage such as tears, holes or rips in the material. If any damage is noticed, dispose of the hood immediately as instructed by your supervisor.

### CAUTIONS AND LIMITATIONS LOCATED ON THE NIOSH APPROVAL LABEL

- A Not for use in atmospheres containing less than 19.5 percent oxygen.
- B Not for use in atmospheres immediately dangerous to life or health.
- C Do not exceed maximum use concentrations established by regulatory standards.
- D Airline 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 instruction manual.
- 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 users Instructions and/or maintenance manuals for information on use and maintenance of these respirators.
- S Special or critical User's Instructions and/or specific use limitations apply. Refer to User's Instructions before donning.

## SPECIAL USERS INSTRUCTIONS Dual Hose Usage

The blue, unrelated, tethered/bonded air-line hose and quick connects are not NIOSH approved and cannot be substituted for a respirator breathing air-line hose and quick connections. Such substitution will void the NIOSH approval of the respirator.

The blue, unrelated, tethered/bonded air-line hose must be connected at the POA to a separate air compressor system completely separate from the air compressor system that supplies Grade "D" breathing air to the respirator or the NIOSH approval is void.

## Flow Controller/Hose Length to PSI Range

Not for use in atmospheres containing less than 19.5 percent oxygen. Approved for use with respirable air meeting the requirements of the Compressed Gas Association specifications G-7.1, for type 1, Grade D air, through no more than three (3) lengths of approved hose as specified in the following chart. \*The 9100-25D and 9100-50D series hose is only approved up to 150 feet maximum combined hose length.

	9910 Hood	9911-10, 9911-20, 9911-20S Hoods	9911-10, 9911-20 Hoods
	N/A	9910-11 Down Tube Adapter	9910-11EF EF, LP Flow Adapter
Hose Length/Ft.	9100-XX L.P. Hose	9100-XX L.P. Hose	9100-XXEF L.P. Hose
25*	6-9 PSI	6-9 PSI	
50*	9-14 PSI	9-14 PSI	1.2 – 1.7 PSI
75*	12-18 PSI	12-18 PSI	
100*	15-21 PSI	15-21 PSI	1.7 – 2.4 PSI
150*	20-30 PSI	20-30 PSI	
200	24-33 PSI	24-33 PSI	2.5 – 3.6 PSI
250	28-37 PSI	28-37 PSI	
300	32-40 PSI	32-40 PSI	3.0 – 4.7 PSI

#### **PARTS LIST**

	Product Number	<u>Description</u>
	9910-09	Disposable Hood Assy
1	9911-19	Fully Disposable Hood Assy
ı	9911-19S	Fully Disposable Hood Assy, (Saran Coated)
	9911-09	Fully Disposable Hood Assy, Dual Bib
	9910-01	Down Tube/Waist Belt Assy
2	9910-11	Down Tube Adapter/Waist Belt
	9910-11EF	EF, LP Flow Adapter/Waist Belt Assy.
3	9910-02	Head Band Assembly (Standard)
4	9910-25A	Peel Off Lens Cover
	9100-25	25' Supplied Air Hose, ¼" Rectus Couplers
	9100-50	50' Supplied Air Hose, ¼" Rectus Couplers
	9100-100	100' Supplied Air Hose, ¼" Rectus Couplers
5	9100-25D	25' Dual SAR Hose, ¼" Rectus/Snap-Tite Couplers
	9100-50D	50' Dual SAR Hose, ¼" Rectus/Snap-Tite Couplers
	9100-50EF	50' Supplied Air Hose, 3/4" Parker Couplers
	9100-100EF	100' Supplied Air Hose, 3/4" Parker Couplers

#### AIR QUALITY AND VOLUME

The responsibility of maintaining the quality of the air supply is yours. The air breathed by the person wearing a supplied Air Hood Respirator must be of a proper quality and quantity (sufficient volume or flow rate) to satisfy all the respiratory needs of the wearer and to prevent any contaminated air from entering under the face seal.

Government standards require that the air supplied to the respirator contain at least 19.5% oxygen by volume. Unless safety and health codes in your area specify otherwise, the quality of the air must meet the applicable minimum grade requirements for Type 1 gaseous air set forth in the Compressed Gas Association Commodity Specification for Air, CGA G7.1 (Grade D or higher quality).

The air taken into a compressor for ultimate use in a Supplied Air Hood Respirator must meet this standard before and after compression. Use of low pressure, oil-less ambient air pumps, must be located in a contaminant-free area in order to deliver air to the respirator.

#### **INLET AIR PRESSURE**

To assure that the quantity (flow rate) of compressed breathing air into the face piece of a Supplied Air Hood Respirator, while it is being worn, is within the prescribed limits, it is necessary to consider the pressure of the air supplied to the supplied air hose where it is attached to the air supply system, and the length supplied air hose.

#### WARNING!

ALLEGRO INDUSTRIES air hose is approved for use with this Supplied-Air Hood Respirator. Using any other hose will automatically void the approval of the respirator and may be hazardous to the wearer.

#### **PUTTING ON (DONNING) THE RESPIRATOR**

When properly worn, this Supplied Air Hood Respirator is attached to the wearer at two points. One is around the waist by a belt which is attached to a breathing tube; the other is by the headband assembly inside the hood assembly.

The assembled respirator should be put on in uncontaminated air, as follows:

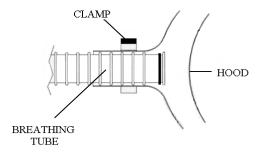
- 1. Remove the headband assembly from the hood and adjust the headband to assure a snug but comfortable fit.
- 2. Reinstall the headband assembly into the hood by lining up the Velcro® tabs.
- 3. Remove the protective tissue from the front of the hood's lens.
- 4. Attach a removable lens cover (if required) to the outside of the lens to protect it from overspray.
- 5. Ensure the breathing tube is not kinked or crushed and that it is fully inserted into the collar of the hood assembly.

- 6. Secure the waist belt around your waist. Don the hood and headband assembly. Connect the approved air supplied hose to the male connector plug on the end of the breathing tube.
- 7. Once connected to the air hose turn on the ambient air pump, check to ensure you are receiving enough airflow and enter the work area.

#### HOOD REMOVAL AND REPLACEMENT INSTRUCTIONS FOR P/N'S 9910

- 1. Exit from the hazardous environment and remove the supplied air hood.
- 2. Turn off the ambient air pump and disconnect the breathing tube from the air line hose at the waist. (Note: When using an ambient air pump, always turn the pump off first prior to disconnecting the respirator from the supplied airline coupler. Failure to follow this procedure will cause damage to the pump.)
- 3. Unbuckle and remove the waist belt.
- 4. Remove the plastic hose clamp from the hood and breathing tube.
- 5. Remove the breathing tube from the hood. Dispose of the hood.
- 6. Decontaminate breathing tube.
- 7. Install the breathing tube into the replacement hood. Ensure the breathing tube is fully inserted into the collar of the hood. (See drawing "Underside View")

#### **Underside View for 9910**



8. Install the white clamp over both the hood and breathing tube. Squeeze the clamp until the clamp teeth engage. Ensure the clamp is snug so the breathing tube does not disengage.

#### WARNING!

DO NOT kink or crush the breathing tube. This could restrict air flow and allow the user to be exposed to contaminants.

9. Return to instructions for putting on (donning) the respirator.

## HOOD REMOVAL AND REPLACEMENT INSTRUCTIONS FOR P/N's 9910D, 9910DS, 9910EF, 9912D & 9912EF

- 1. Exit from the hazardous environment and remove the supplied air hood.
- 2. Turn off the ambient air pump (if used) and disconnect the breathing tube from the air line hose at the waist. (See note on Page 6)
- 3. Unbuckle and remove the waist belt.
- 4. Remove the Down Tube Adapter or "EF", LP Flow Adapter/Waist Belt Assembly from the Down Tube by unthreading the swivel nut.
- 5. Dispose of the hood as instructed by your employer if required.

#### **MAINTENANCE**

Before each use, a respirator must be carefully inspected to assure that it is complete and in good operating condition. A respirator that is not complete must not be used until such time as it is completely repaired. Only approved parts should be used as replacements and to make repairs. Using other parts will void the NIOSH approval for the respirator and may result in bodily injury or death.

The hood and its components used by an individual should be, inspected and if possible cleaned and sanitized after each day of use.

The 9910D and 9910DS series hoods are intended to be a disposable type hood. If the hood is damaged, torn or contaminated in any way that would affect its performance or cause any possible hazard to the user it should be disposed of properly.

#### INSPECTION

Inspect the hood for damage such as tears or rips.

Inspect the lens for scratches, cracks, creases, dents or any other type of damage. Inspect all sewn seams.

Inspect the breathing tube for signs for cracks, holes, kinks or other damage, as well as flaking or deterioration of the foam baffle inside the breathing tube.

Inspect the fitting to be sure they are attached properly.

Inspect belt for unusual wear such as cuts, tears, fraying or damaged hooks or buckles.

#### **WARNING!**

Inspect the hood assembly before each use.

#### CLEANING

Replace lens cover when it becomes difficult to see through the lens. Replace hood when contaminant penetration occurs or when soiled or damaged. Clean the breathing tube of the 9910 outer surface with mild soap and warm water. Rinse with clean water. Shake to remove excess water and let air dry.

#### WARNING!

Be careful not to allow the foam baffle inside the breathing tube to get wet. Do not use solvents to clean any part of the hood.

#### **WARNING!**

DO NOT damage the lens with abrasive cleaners or pads.

#### **STORAGE**

Store the Supplied Air Hood away from dust, sunlight, temperature extremes, moisture and chemicals.

Before storing these hood assemblies, they should be inspected, repaired, if necessary, cleaned, dried and given a final inspection. Only fully operable hood assemblies should be stored.

While in storage, the hood assemblies should be protected from distortion from the weight or pressure of surrounding objects or being placed in too small of a place.

#### **REPAIR**

Replacements are limited by the user to those components listed on the NIOSH label.

## **SPECIFICATIONS**

Weight:	Complete Assembly	7.7 oz
weight.	Replacement Hood	3.8 oz.
	Hood Assembly	Poly Coated Tyvek®
Material:	Hood Assembly	Saran Coated Tyvek®
	Breathing Tube Waist Belt	Vinyl Hose Nylon Webbing
	9910-11 Down Tube Adapter/Waist Belt	6-40 PSI @ 6-11 CFM
Air Consumption:	Assy.	
	9910-11EF "EF", LP Flow Adapter/Waist	1.2 – 4.7 PSI @ 6-15 CFM
	Belt Assy.	

## ALLEGRO INDUSTRIES LIMITED WARRANTY AND WARRANTY SERVICE AND RETURN POLICY

### **Express Warranty**

The warranty obligations of Allegro Industries ("Allegro") are limited to the terms set forth below:

All products, equipment and parts (collectively "Product" or "Products") sold by Allegro, either directly to its customers, or indirectly from its suppliers or distributors to their customers, are warranted, to the original end-user purchaser who/that receives the original, unaltered Product ("Purchaser"), to be free from defects in workmanship and materials under normal use for one (1) year from the date of sale to the Purchaser, when installed properly and used normally and in accordance with written operation instructions, if any ("Limited Warranty") ("Warranty Period"). No other express or implied warranty is given, and no affirmation of Allegro, by words or action, will constitute a warranty.

This Limited Warranty is conditioned upon proper use of the Product by Purchaser and applies only to Products manufactured by or for Allegro that can be identified by the Allegro trademark, trade name or logo affixed to them. This Limited Warranty does not apply to or cover: (a) defects or damage caused by or resulting from external causes including, but not limited to, accident, carrier handling, improper packaging in shipment; abuse, misuse, neglect, unusual physical stress, cosmetic damage, flood, fire, earthquake or other natural disasters; (b) normal wear and tear; (c) any modification of any part of the Product; (d) damage caused by using the Product outside the permitted or intended uses described by Allegro or written instructions; (e) malfunctions resulting from the use of the Product in conjunction with accessories, products or ancillary/peripheral equipment not furnished or approved by Allegro; (f) defects or damage caused by improper testing, operation, maintenance, installation or adjustment; or (g) defects or damage caused by installation and/or service performed by anyone who is not authorized by Allegro.

Each Purchaser agrees and acknowledges that the use, installation and/or operation of the Products shall be at Purchaser's own risk and may result in severe injury, death and/or damage to persons or real and/or personal property.

No Allegro supplier, distributor, officer, agent or employee is authorized to make any modification, extension, change or amendment to this Limited Warranty without the express prior written consent and authorization by the President of Allegro.

Allegro reserves the right to make improvements or changes to its Products at any time, without incurring any obligation to Purchasers, suppliers, distributors or customers who/that previously purchased Products directly or indirectly from Allegro.

EXCEPT AS SET FORTH IN THE EXPRESS WARRANTY CONTAINED HEREIN, PURCHASER TAKES THE PRODUCT "AS IS." THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS BEYOND THOSE STATED IN THIS LIMITED WARRANTY STATEMENT. ALLEGRO DISCLAIMS ALL OTHER WARRANTIES AND CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY OF THE PRODUCTS AND THEIR FITNESS FOR ANY PARTICULAR PURPOSE.

NOTHING CONTAINED IN ANY WRITTEN INSTRUCTIONS OR WRITTEN INSTRUCTION OR OPERATION MANUAL OR CATALOG SHALL BE CONSTRUED TO CREATE A WARRANTY OF ANY KIND WHATSOEVER WITH RESPECT TO THE PRODUCT.

IN ADDITION, TO THE FULLEST EXTENT PERMISSIBLE BY APPLICABLE LAW, ALLEGRO SHALL NOT BE LIABLE FOR ANY INJURY OR DAMAGE TO PERSONS OR PROPERTY OF ANY KIND, OR FROM ANY LOSS OF TIME, INCONVENIENCE, OR LOSS OF USE, INCLUDING ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES ARISING DIRECTLY OR INDIRECTLY OUT OF OR IN CONNECTION WITH THE USE, INSTALLATION AND/OR PERFORMANCE OF THE PRODUCT OR PRODUCTS, WHETHER SUFFERED BY SUPPLIER, DISTRIBUTOR, CUSTOMER, PURCHASER OR ANY OTHER PARTY, AND REGARDLESS OF THE LEGAL THEORY UPON WHICH THE CLAIM IS BASED, EVEN IF ALLEGRO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. WITHOUT OTHERWISE LIMITING THE FOREGOING, IN NO EVENT SHALL RECOVERY OF ANY KIND AGAINST ALLEGRO BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE PRODUCT. THIS WARRANTY GIVES YOU LIMITED SPECIFIC LEGAL RIGHTS.

## Warranty Service and Return Policy during Warranty Period

The following requirements must be followed before returning any Product or Products to Allegro:

- 1. All Purchasers must obtain a Return Merchandise Authorization Number ("RMA#") before returning any Product to Allegro. Allegro will refuse to accept any Product returned that does not have the RMA# clearly marked on the outside of the package or box. The Purchaser may obtain this RMA# by telephoning Allegro's Customer Service number at (800) 622-3530, or by requesting it in writing by mailing the written request to Allegro Industries, 1360 Shiloh Church Road, Piedmont, South Carolina 29673, or by faxing the written request to Allegro Industries at (800) 362-7231.
- 2. Upon Allegro's issuance of RMA # to a Purchaser, the Purchaser must decontaminate and clean the Product to remove any hazardous materials which may have settled on the Product during use. Allegro reserves its rights to refuse, and will refuse, to accept any Product suspected of being contaminated and/or containing any dangerous chemical(s) or material(s), and will return that Product or those Products to the Purchaser, freight collect.
- 3. All Purchasers must return the Product or Products to Allegro freight prepaid, with the RMA# clearly marked on the outside of the box or package. Each Product to be returned should be packaged in its original Product packaging materials or equivalent, and be well padded, to prevent damage when in transit, and should be adequately insured by Purchaser. All Purchasers must bear the risk of loss of the Product during transit from Purchaser to Allegro. Inside the Product's package, please enclose your name, address, and telephone number, a description of the problem and a model and/or serial number for each Product returned.

Upon Allegro's receipt of a returned Product from a Purchaser that meets the above requirements, Allegro will determine in its sole discretion whether the Product is defective. If Allegro determines that the Product is not defective and/or does not meet the terms of this Limited Warranty, Allegro will return the Product to the Purchaser freight collect. If Allegro determines that the Product is defective, Allegro will determine in its sole discretion whether to repair or replace the defective Product covered by this Limited Warranty.

Each Purchaser's sole and exclusive remedy for defects in Products covered by this Limited Warranty is limited to Allegro's correction of the defect by repair or replacement.

4. Authorized returns of saleable merchandise, other than shipments made in error by Allegro, will be subject to a 20% restocking charge.

### Warranty Terms

This Limited Warranty represents the complete and exclusive agreement covering this subject matter between Allegro and Purchaser and supersedes any prior agreements and/or communications regarding the subject matter hereof. The terms of this Limited Warranty shall be governed and construed in accordance with the laws of the State of California, without regard to any conflict of law principle that would result in the laws of any other jurisdiction governing this Limited Warranty. Any action or proceeding arising out of this Limited Warranty shall be litigated in the California Superior Court located in Ventura, California. Each Purchaser purchasing any Product from Allegro, directly or indirectly, shall be deemed to consent and submit to the jurisdiction of the state court located in Ventura, California. If any term or provision contained in this Limited Warranty is determined to be unenforceable in any respect, the enforceability of the term or provision in any other respect and of the remaining terms and provisions of this Limited Warranty shall not be impaired. This Limited Warranty shall not extend to anyone other than the original Purchaser of the Product(s) and shall be Purchaser's exclusive remedy. Each Purchaser acknowledges that this Limited Warranty will always be construed to be limited by its terms to the greatest extent as the law permits.

> UM010 Rev I 8/10/2016 DCN #D0933