

Product: North Compact Air™ Powered Air-Purifying Respirators (PAPR)



CA102 standard backpad & belt shown with 4003HE OV/HEPA cart/filters



CA101D Decon backpad & belt shown without cartridges or filters

Product Description

Description: The North Compact Air PAPR is a belt mounted Powered Air Purifying Respirator (PAPR) designed to provide respiratory protection from gases, vapors and particulates depending on the air purifying elements used. The Compact Air PAPR uses a blower unit to force ambient air through filters/cartridges that remove contaminants, providing clean air to the user. To form a complete approved powered air-purifying respirator the Compact Air PAPR can only use North Safety Products head covers or facepieces and filter/cartridges listed on the NIOSH Approval labels.

Assembly Contents: Blower, battery, breathing tube, backpad and belt (standard or decon), single unit charger, cover(s) for breathing tube, flow meter, and carrying case.

Assembly Part Numbers

- CA101 Compact Air Assembly, standard backpad with nylon belt and straight breathing tube for use with Primair Series headgear assemblies.
- CA101D Compact Air Assembly, decon backpad with PVC belt and straight breathing tube for use with Primair Series headgear assemblies.
- CA102 Compact Air Assembly, standard backpad with nylon belt and 'Y' breathing tube for use with 5500, 7700, 5400 and 7600 series facepieces, including the 5400 and 7600 Series with welding adapter.
- CA102D Compact Air Assembly, decon backpad with PVC belt and 'Y' breathing tube for use with 5500, 7700, 5400 and 7600 series facepieces, including the 5400 and 7600 Series with welding adapter.

Certification

CA101 & CA101D are NIOSH approved for use with North Primair Series headgear assemblies
 CA102 & CA102D are NIOSH approved for use with North 5500, 7700, 5400 and 7600 Series tight fitting facepieces.

The Compact Air Series is approved for use with chemical cartridges, HEPA filter, and chemical cartridge, HEPA filter combinations. Complete listing is noted below.

Refer to the NIOSH Approval Labels provided with the Compact Air Blower Battery Assembly and the Compact Air cartridges and filters for specific NIOSH Approval numbers.

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Protection

For use in non-IDLH environments, not to exceed the Maximum Use Concentration of the contaminants. The Compact Air PAPR does not supply air, do not use when oxygen content is less than 19.5% per volume at sea level.

Assigned Protection Factors:

CA101 & CA101D: Compact Air for use with North Primair Loose Fitting Head Covers

Primair Loose Fitting Facepiece	25
Primair Plus Hood	1,000

CA102 & CA102D: Compact Air for use with North tight fitting facepieces

5500 & 7700 Series Half Masks	50
5400 & 7600 Series Full Facepieces	1,000

Cartridges & Filters:

North Compact Air is approved for use with the following cartridges, HEPA filter and cartridge filter combinations. Sets of three like cartridges and/or filters are required.

Filter

40HE High Efficiency Particulate Air-Purifying (HEPA) Filters

Chemical Cartridges

4001	Organic Vapor
4003	Organic Vapor, Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Fluoride, Chlorine Dioxide, Hydrogen Sulfide (escape)
4004	Ammonia / Methylamine

Chemical Cartridge / Filter Combination

4001HE	Organic Vapor with HEPA filter
4003HE	Organic Vapor, Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Fluoride, Chlorine Dioxide, Hydrogen Sulfide (escape) with HEPA filter
4004HE	Ammonia / Methylamine with HEPA filter

Material Composition

Blower & Battery

Blower Casing	Acrylonitrile-butadiene-styrene (ABS)
Battery Casing	Acrylonitrile-butadiene-styrene (ABS)
Battery	Nickel Metal Hydride (NiMH) with Thermister 8+ hours service life when fully charged. Charge time approximately 6 hours, with trickle charge. 200 Recharge Cycles
Battery for CA101 & CA101D	9 amp; 4.8 volt; provides a minimum 6 CFM to hood
Battery for CA102 & CA102D	7 amp; 4.8 volt; provides a minimum of 4 CFM to facepiece
Blower Gasket	Nitrile (Buna-N) (NBR)

Breathing Tube

Breathing Tube for CA101 & CA101D	High Density Polyethylene (HDPE)
Breathing Tube for CA102 & CA102D	High Density Polyethylene (HDPE): hose from blower to 'Y' fitting; Ethylene Propylene Diene Monomer (EPDM): hose from 'Y' fitting to swivel connectors; High Density Polyethylene (HDPE): 'Y' fitting
O-Ring	Silicone

Backpad & Belt

Belt, Standard, for CA101 & CA102	Nylon
Belt, Decon, for CA101D & CA102D	Polyvinyl Chloride (PVC)
Backpad, Standard, for CA101 & CA102	Nylon
Backpad, Decon, for CA101D & CA102D	Polyvinyl Chloride (PVC)

Filters & Cartridges

Filter / Cartridge Shell	Aluminum
Particulate Filter Media	Hydrophobic, High Efficiency Particulate media > 99.97% efficient
Chemical Sorbents	Meets NIOSH criteria for cartridges under 42 CFR Part 84

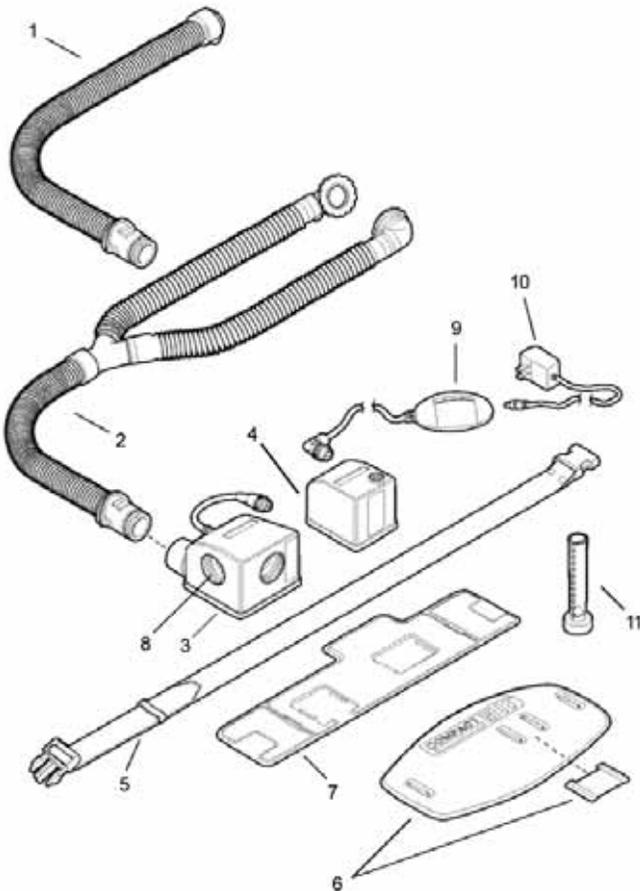
Charger Electrical Specifications

Single Unit Battery Charger CA131

UL Listing	United States & Canada
Adapter Input	100 – 120 volt AC, 50/60Hz
Output	24 volt / 1 amp DC
Charging Mode	Pulsed current with constant amplitude
Charging Current	Average 2.5 amps
Charging Time	4 to 6 hours
Over Charge Protection	Trickle charge after quick charge is completed Charger will provide a small current until power is removed.

Replacement Parts

Compact Air PAPR Replacement Parts



	<i>Prod. #</i>	<i>Description</i>
	1	CA127 Breathing Tube for CA101 and CA101D
	2	CA129 Breathing Tube for CA102 and CA102D
	3	CA121LF Blower for CA101 and CA101D CA121TF Blower for CA102, and CA102D
	4	CA122LF Battery for CA101 and CA101D CA122TF Battery for CA102 and CA102D
	5 & 6	CA125 Belt and back pad assembly, standard, for CA101 and CA102
	5 & 7	CA126 Belt and back pad assembly, PVC/decon, for CA101D and CA102D
	8	CA124 O-Ring for CA101, CA101D, CA102 and CA102D blowers
	9-10	CA131 Battery charger for CA101, CA101D, CA102 and CA102D
	11	CA132 Flow indicator for CA101, CA101D, CA102 and CA102D
Not Shown	CA133	Carrying case for CA101, CA101D, CA102 and CA102D
	CA113	Cover for CA101 and CA101D breathing tube (optional)
	CA114	Cover for CA102 and CA102D breathing tube (optional)

Weights & Dimensions, Major Components

Product weights and dimensions for the complete assembly represent the unit as it would be worn, less the cartridges or filters, and breathing tube. Shipping weights and dimensions represent full case packaging

		Product Weights and Dimensions/Each				Shipping Weights and Dimensions/Case	
Product	Description	Dimensions LxWxH Inches	Weight (lbs)	Pcs/Pkg	Pkg/Case	Pack Dimensions LxWxH Inches	Weight (lbs)
CA101 CA102	Compact Air Assy Standard Belt	14 x 8 x 5 54 L w/belt	3.0	1	4	20.0 x 14.0 x 24.0	29
CA101D CA102D	Compact Air Assy Decon Belt	21.5 x 6.8 x 5 54 L w/belt	3.2	1	4	20.0 x 14.0 x 24.0	29
40HE	HEPA Filter	4.4 x 4.5 x 2	0.2 each	3	4	13.5 x 10 x 9.0	4.2
4001	OV Cart.	4.5 x 4.5 x 4	0.5 each	3	4	13.5 x 10 x 9.0	6.9
4003	OV/AG Cart.	4.5 x 4.5 x 4	0.5 each	3	4	13.5 x 10 x 9.0	9.3
4004	AM/ME Cart.	4.5 x 4.5 x 4	0.5 each	3	4	13.5 x 10 x 9.0	8.2
4001HE	OV/HE Cart.	4.5 x 4.5 x 4	0.7 each	3	4	13.5 x 10 x 9.0	8.2
4003HE	OV/AG/HE Cart.	4.5 x 4.5 x 4	0.7 each	3	4	13.5 x 10 x 9.0	10.4
4004HE	AM/ME/HE Cart.	4.5 x 4.5 x 4	0.7 each	3	4	13.5 x 10 x 9.0	9.3
CA121LF CA121TF	Blower	4.5 x 3.5 x 5.8	0.9	1	1	12.0 x 9.0 x 6.5	10
CA122LF CA122TF	Battery	3.0 x 3.3 x 4	1.9	1	1	12.0 x 9.0 x 6.5	19
CA125	Backpad & Belt, Standard,	14 x 8 x 1/4 belt length: 54	0.3	1	10	19.0 x 9.5 x 9.5	3.5
CA126	Backpad & Belt, PVC	21.5 x 6.8 x 1/4 belt length: 54	0.5	1	10	19.0 x 9.5 x 9.5	4.5
CA127	Breathing Tube for CA101 & CA101D	33 7/8 O.D.	0.3	1	10	19.0 x 9.5 x 9.5	3.5
CA129	Breathing Tube for CA102 & CA102D	36 7/8 O.D.	0.9	1	10	19.0 x 9.5 x 9.5	10
CA133	Carrying Case	15 x 5-1/4 x 12	1.9	1	8	16.0 x 24.0 x 28.0	28

Country of Origin

Blower & Battery Assembly: The Netherlands

Cartridges & Filters: The Netherlands

Warranties: North products are covered by and subject to the terms and conditions of the North Safety Products Limited Warranty that appears in our annual price list. The North Safety Products Limited Warranty is the only written warranty of any force and effect, and all other written warranties are disclaimed in their entirety. In no event shall North Safety Products or any of its authorized dealers be liable for any damages in excess of the purchase price of the relevant product. This limitation applies to damages of any kind, including but not limited to direct or indirect damages or other special, incidental, exemplary or consequential damages, whether arising out of the use or inability to use the product, even if we or any of our authorized dealers has been advised of the possibility of the damages or any claim by any other party. Servicing of any product with parts not approved by us will void the warranty and may result in loss of any certification or approval applicable to the product.