

# A Quick Guide To Speedglas® Fresh-air® Respiratory Systems





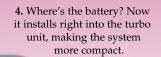




# **Particle Fume Protection For Welders**

1. The finest auto-darkening welding lens in the world; choose from 4 different Speedglas<sup>®</sup> 9000 lenses.

- 2. An ultra-modern helmet design: narrower width, extended throat protection, heat-reflecting silver front, and super lightweight comfort.
  - 3. The exclusive Speedglas SideWindows™ option for peripheral vision increases the welder's field of view by 100%.



Speedglas Fresh-air II P 9000 system for high-efficiency (HE) particulate filtration.

The world's most advanced powered air-purifying respirators with the latest in auto-darkening welding technology: the Speedglas<sup>®</sup> Fresh-air<sup>®</sup> II P & G 9000 systems.

A

• New turbo design: eliminates the battery as a separate unit, reducing its size and weight, while making it more comfortable, with heavy components closer to the welder and lighter components further away.

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- New Speedglas 9000 lenses: reliable switching; shade 3 light state; unbeatable optical clarity; environmentally-friendly batteries; plus, they accommodate conventional "drop-in" magnifying lenses.
- New Speedglas helmet: sleek design; easy access to lens cassette; and extended throat protection.

The NIOSH-approved Speedglas Fresh-air II P 9000 system provides welders with high-efficiency (HE) particulate filtration.

The NIOSH-approved Speedglas Fresh-air II G 9000 system uses three HE/OV/SD/ CL/HC (type AEP3) cartridges for protection against organic vapors, sulfur dioxide, chlorine and hydrogen chloride, as well as for high-efficiency (HE) particulate filtration. It can also be used with three HE (type P3) filters for applications requiring high-efficiency particle filtration only.

## Speedglas Fresh-air Warranty

Hornell Speedglas Inc. warrants all Fresh-air products to be free from defects in material and workmanship in normal service and under normal conditions for 180 days from the date of delivery.

Not to be used in atmospheres classified as IDLH. Not to be used in atmospheres of less than 19.5% oxygen. Final determination of respirator applicability and filter selection must be made by an on-site safety specialist or industrial hygienist.



The battery can be in the turbo unit or removed for charging. Battery changes are quick and easy...the welder doesn't even need to take off the system.



Just one large filter— instead of the traditional three small filters- is needed for the Speedglas Fresh-air II P 9000 svstem.



Simplified cartridge selection: the organic vapor AP3 cartridge has been combined with the EP3 cartridge to create the more versatile AEP3 cartridge for the Speedglas Fresh-air II G 9000 system.

Speedglas Fresh-air II G 9000 system for filtration of specific gases, vapors & particulates.



Improved airflow pattern means the air is more evenly distributed, so it doesn't feel like you're being blasted



- Control-air valve allows adjustment of the airflow rate for personal preference.
- Cool-air valve permits welder to lower the temperature of the supplied air by up to 45°F (25°C).
- Temp-air valve allows either cooling or warming of the supplied air ±45°F from the supplied air temperature.

For highly contaminated welding environments: the Speedglas Fresh-air II Supplied Air (SA) 9000 system.

The NIOSH-approved Speedglas **Fresh-air II SA 9000** system provides respiratory protection from high levels of particle fumes and gases. The lightweight, belt-mounted valves permit the welder to adjust the airflow levels from 6 to 15 cfm (170 to 425 lpm), making it ideal for very hot or strenuous jobs.



Valve Model	CFM Required	CFM Delivered	Pressure Range (psig)	Max. # of Hoses/Length*
Control-air	6-15	6-15	65-70	6 hoses/300'
Cool-air	12-25	6-15	70-105	4 hoses/100'
Temp-air	12-25	6-15	85-110	4 hoses/100'

\*Indicates maximum number of hoses and maximum total length.

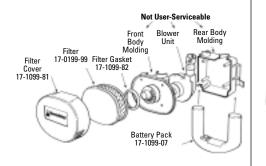
Speedglas Supplied-Air Purification & Regulation Panel (SA PRP 200-B) connects to standard "shop" compressed air systems to provide grade D filtered air to welders. See the complete Speedglas<sup>®</sup> catalog for detailed information or go to www.speedglas.com

	FA II P 9000	FA II G 9000	FA II SA 9000
Assigned Protection Factor (APF)	25	·	
Airflow	6+cfm (170+lpm) minimum		
Battery	NiCd; up to 8 hrs/charge	NiCd; 6 to 8 hrs/charge	n/a
Battery Charging Time	14 to 16 hrs	14 to 16 hrs	n/a
System Weights	Helmet assembly with 9000X lens: 1.79 lbs (0.81 kg)		
	FA II P Turbo w/ Battery,	FA II G Turbo w/ Battery,	Control-air valve w/
	Breathing Tube & Belt:	Breathing Tube & Belt:	Breathing Tube & Belt:
	3.06 lbs (1.38 kg)	3.36 lbs (1.51 kg)	1.85 lbs (0.84 kg)
	One HE (P3) radial filter:	Three AEP3 Cartridges:	Cool-air valve w/
	0.40 lbs (0.18 kg)	1.81 lbs (0.82 kg)	Breathing Tube & Belt:
			2.11 lbs (0.96 kg)
		Three HE (P3) radial filters:	Temp-air valve w/
		0.74 lbs (0.33 kg)	Breathing Tube & Belt:
			2.37 lbs (1.07 kg)
Operating Temperatures	23° to 131°F (-5° to 55°C)		
Respirator Approval	NIOSH 42 CFR 84		
Part # for Complete Systems*	14-1101-(Lens)	14-3301-(Lens) comes	Control-air: 14-5601-(Lens)
		w/ three AEP3 cartridges	
		14-3201-(Lens) comes	Cool-air: 14-5701-(Lens)
		w/three HE (P3) filters	
			Temp-air: 14-5801-(Lens)
Lenses	10, 11 or 12 (9000F lens shade 10, 11 or 12)		
	10X, 11X or 12X (9000XF lens shade 10, 11 or 12)		
	30 (9000V lens)		
	20 (9000X lens)		
Hard Hat	Add "H" for Hard Hat		
SideWindows <sup>TM</sup>	Add "SW" for SideWindows™ option		

\*Part # example: "14-3201-11XHSW" is a FA II G 9000 system with three HE filters, a 9000XF shade 11 lens, Hard Hat and SideWindows<sup>TM</sup> option.

## **Specifications & Part Numbers**

## **Accessories for Speedglas** Fresh-air II P 9000 Systems



#### **Complete Fresh-air II P 9000 Systems**

## 14-1101-(Lens Options)

### Lens Options:

- 10, 11 or 12 = Speedglas 9000F Lens shade 10, 11 or 12  $\,$
- 10X, 11X or 12X = Speedglas 9000XF Lens shade 10, 11 or 12
- 30 = Speedglas 9000V Lens
- 20 = Speedglas 9000X Lens

### Add "H" for Hard Hat and/or "SW" for SideWindows™.

#### **Replacement Filters**

17-0199-99X02	2-pack of HE (P3)
	Particle Radial Filter Replacements
	for FA II Turbo Unit "P"

#### **Turbo Unit Replacement Parts**

FA II Turbo Unit "P" Assembly without Filters or Battery Pack		
FA II Turbo Unit "P" Filter Cover		
FA II Turbo Unit "P" Filter Gasket		
Misc. Replacement Parts & Accessories		
FA II Air Flow Indicator		
FA II Turbo Unit "P" 3-Cell		
Battery Pack		
FA II Battery Charger		
FA II 10-Unit Battery Charger		
(Smart Charger)		
FA II Breathing Tube Assembly		
FA II Breathing Tube Cover		
Comfort Belt		
Carry Bag		

## **Accessories for Speedglas** Fresh-air II G 9000 Systems



#### **Complete Fresh-air II G 9000 Systems**

14-3301-(Lens Options): comes with three

HE/OV/SD/CL/HC (AEP3) Cartridges

14-3201-(Lens Options); comes with three HE (P3) Filters Lens Options:

- 10, 11 or 12 = Speedglas 9000F Lens shade 10, 11 or 12
- 10X, 11X or 12X = Speedglas 9000XF Lens shade 10, 11 or 12
- 30 = Speedglas 9000V Lens
- 20 = Speedglas 9000X Lens

Add "H" for Hard Hat and/or "SW" for SideWindows™.

#### **Replacement Filters/Cartridges**

17-0299-99X06	6 pack of HE (P3) Particle Filters
17-0299-99X36	36 pack of HE (P3) Particle Filters
17-0399-99X06	6 pack of HE/OV/SD/CL/HC

(AEP3) Cartridge Filters

#### **Turbo Unit Replacement Parts**

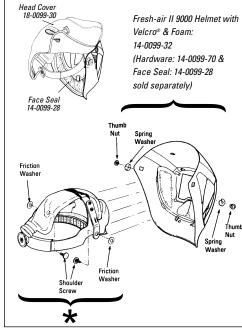
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3099-01	FA II Turbo Unit "G" Assembly without Filters/Cartridges or Battery Pack
sc. Replacem	ent Parts & Accessories

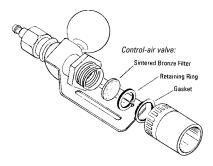
17-0099-05	FA II Air Flow Indicator
17-2099-07	FA II Turbo Unit "G"
	4-Cell Battery Pack
17-0099-08	FA II Battery Charger
17-0099-08N10	FA II 10-Unit Battery Charger
	(Smart Charger)
17-0099-10	FA II Breathing Tube Assembly
17-0099-54	FA II Breathing Tube Cover
18-0099-16	Comfort Belt
18-0099-33	Carry Bag

# Helmet Parts for Fresh-air II 9000 P, G & SA Systems



★ Fresh-air II 9000 Headband Assembly with Air Duct: 14-0099-29 (Hardware sold separately: 14-0099-70)			
18-0099-33	Carry Bag		
18-0099-27	Elastic Duct Retainer (each)		
14-0099-28	FA II 9000 Face Seal		
14-0099-29	FA II 9000 Headband Assembly with Air Duct		
18-0099-30	Head Cover		
14-0099-32	FA II 9000 Helmet (with Velcro® and foam only)		
14-0099-32SW	FA II 9000 SideWindows™ Helmet (with Velcro and foam only)		
14-0099-35	FA II 9000 Helmet Assembly Complete		
14-0099-35SW	FA II 9000 SideWindows™ Helmet Assembly Complete		
14-0099-70	FA II 9000 Helmet Assembly Hardware Kit		
04-0000-10	Speedglas 9000F Lens only, shade 10		
04-0000-11	Speedglas 9000F Lens only, shade 11		
04-0000-12	Speedglas 9000F Lens only, shade 12		
04-0000-10X	Speedglas 9000XF Lens only, shade 10		
04-0000-11X	Speedglas 9000XF Lens only, shade 11		
04-0000-12X	Speedglas 9000XF Lens only, shade 12		
04-0000-30	Speedglas 9000V Lens only		
04-0000-20	Speedglas 9000X Lens only		

## **Accessories for Speedglas** Fresh-air II SA 9000 Systems



#### **Complete Fresh-air II SA 9000 Systems**

Control-air:	14-5601-(Lens Options)
Cool-air:	14-5701-(Lens Options)
Temp-air:	14-5801-(Lens Options)

#### Lens Options:

10, 11 or 12 = Speedglas 9000F Lens shade 10, 11 or 12

- 10X, 11X or 12X= Speedglas 9000XF Lens shade 10, 11 or 12
- 30 = Speedglas 9000V Lens
- 20 = Speedglas 9000X Lens

#### Add "H" for Hard Hat and/or "SW" for SideWindows™.

#### **Replacement Valves and Valve Parts**

18-0099-46	Control-air Valve Assembly
18-0099-47	Cool-air Valve Assembly
18-0099-48	Temp-air Valve Assembly
18-0099-52	Sintered Bronze Disk (Control-air Valve only)
18-0099-55	Valve Shield
18-0099-63	Breathing Tube (Supplied Air) Hard Hat
Air Supply Hos	ses
18-0099-40	25 feet Breather Hose, with Couplings
18-0099-41	50 feet Breather Hose, with Couplings
18-0099-42	100 feet Breather Hose, with Couplings
18-0099-43	25 feet Nycoil™ Hose, with Couplings

#### 18-0099-44 50 feet Nycoil<sup>™</sup> Hose, with Couplings 100 feet Nycoil™ Hose, with Couplings 18-0099-45

099-45	TOU feet Nycoll' Hose, with Couplin
902-06	Air Source Quick Connect

#### Misc. Replacement Parts & Accessories

18-09



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