

OPERATING INSTRUCTIONS AND REPLACEMENT PARTS

Model: EAC-97 Series



WARNING

This manual must be read carefully and followed by all persons who have or will have the responsibility for using or servicing this equipment. This equipment will perform as designed only if used according to the instructions. Otherwise it could fail to perform as designed, causing personal injury or death.

AIR SYSTEMS INTERNATIONAL, INC.

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Specifications

	EAC-97NB	EAC-97HNB
Dimensions 32"W X 58"H X 41"D		32"W X 58"H X 41"D
Weight w/o Cylinders 156 Lbs.		156 Lbs.
Frame	Powder Coated Steel Powder Coated Steel	
Cylinder Straps	s 4 Adjustable Nylon Straps 4 Adjustable Nylon Straps	
Wheels/Casters	asters 6" Soft Tread Casters (Rear) 6" Soft Tread Casters (Rea 16" Semi-Pneumatic Wheels (Front) 6" Semi-Pneumatic Wheels (F	
Whip Assemblies	Thermo-Plastic Hose Rated @ 5000 PSI with a 4:1 Safety Factor	Thermo-Plastic Hose Rated @ 5000 PSI with a 4:1 Safety Factor
CGA Connections	CGA-346 Wrench Tights	Universal (CGA-346/347) Hand-Tights
Bleeder Valves	No	Yes
Check Valves	Yes, Built Into The CGA-346 Nipple	Yes, 1/4" MPT x 1/4" MPT
Warning Alarm	Low Pressure Whistle Set @ 500 PSI	Low Pressure Whistle Set @ 500 PSI
Pressure Regulator	3000 PSI Max. Inlet/125 PSI Max. Outlet	5000 PSI Max. Inlet/125 PSI Max. Outlet
Regulator Flow Rate	Approx. 80 CFM @ 3000 PSI Inlet Pressure/ 80 PSI Outlet Pressure	Approx. 80 CFM @ 5000 PSI Inlet Pressure/ 80 PSI Outlet Pressure
Relief Valve	Relief Valve 125 PSI Preset, ASME 125 PSI	
Air Distribution	Air Distribution 4 Low Pressure Connections 4 Low Pressure	
Hoistable	Yes	Yes
Ergo Design	Ergo DesignRaising Cart: 15 Lbs. Of Force Lowering: 35 Lbs. Of ForceRaising Cart: 15 Lbs. Of Force Lowering: 35 Lbs. Of Force	

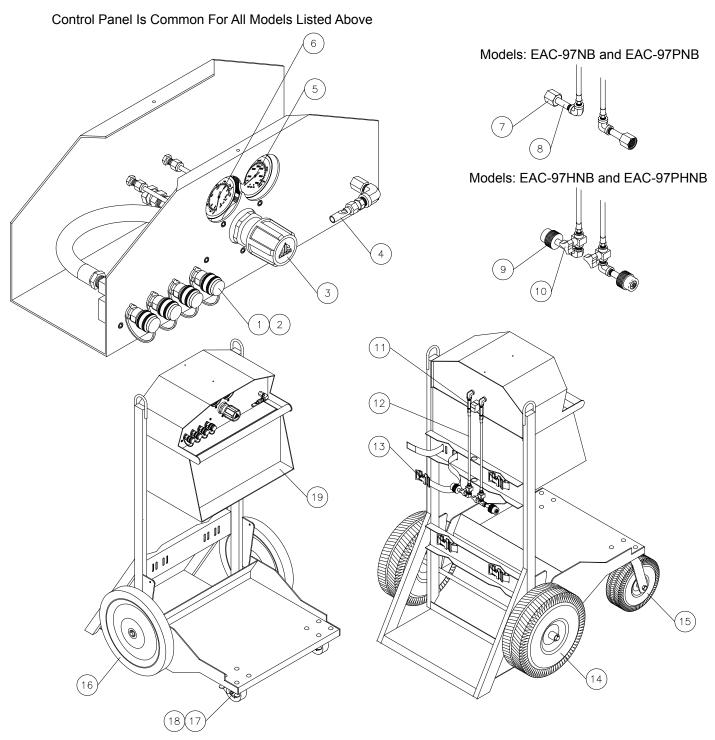
EAC-97PNB		EAC-97PHNB	
Dimensions	40"W X 58"H X 44"D	40"W X 58"H X 44"D	
Weight w/o Cylinders	156 Lbs.	156 Lbs.	
Frame	Powder Coated Steel Powder Coated Steel		
Cylinder Straps	4 Adjustable Nylon Straps	4 Adjustable Nylon Straps	
Wheels/Casters	10" Pneumatic Casters (Rear) 16" Pneumatic Wheels (Front)	10" Pneumatic Casters (Rear) 16" Pneumatic Wheels (Front)	
Whip Assemblies Thermo-Plastic Hose Rated @ 5000 PSI with a 4:1 Safety Factor		Thermo-Plastic Hose Rated @ 5000 PSI with a 4:1 Safety Factor	
CGA Connections CGA-346 Wrench Tights Unive		Universal (CGA-346/347) Hand-Tights	
Bleeder Valves No		Yes	
Check Valves	Yes, Built Into The CGA-346 Nipple	Yes, 1/4" MPT x 1/4" MPT	
Warning Alarm	Low Pressure Whistle Set @ 500 PSI	Low Pressure Whistle Set @ 500 PSI	
Pressure Regulator	3000 PSI Max. Inlet/125 PSI Max. Outlet	5000 PSI Max. Inlet/125 PSI Max. Outlet	
Regulator Flow Rate	Approx. 80 CFM @ 3000 PSI Inlet Pressure/ 80 PSI Outlet Pressure	Approx. 80 CFM @ 5000 PSI Inlet Pressure/ 80 PSI Outlet Pressure	
Relief Valve	Relief Valve 125 PSI Preset, ASME		
Air Distribution	Air Distribution 4 Low Pressure Connections 4		
Hoistable	Yes	Yes	
Ergo Design	Raising Cart: 15 Lbs. Of Force Lowering: 35 Lbs. Of Force	Raising Cart: 15 Lbs. Of Force Lowering: 35 Lbs. Of Force	

Specifications

	EAC-97ENB	EAC-97HENB
Dimensions	Dimensions 32"W X 58"H X 41"D 32"W X 58"H X 41	
Weight w/o Cylinders 156 Lbs. 156		156 Lbs.
Frame	Powder Coated Steel Powder Coated Steel	
Cylinder Straps	4 Adjustable Nylon Straps 4 Adjustable Nylon Straps	
Wheels/Casters	Casters6" Soft Tread Casters (Rear)6" Soft Tread Casters (Rear)16" Semi-Pneumatic Wheels (Front)16" Semi-Pneumatic Wheels (I	
Whip Assemblies Thermo-Plastic Hose Rated @ 5000 PS with a 4:1 Safety Factor		Thermo-Plastic Hose Rated @ 5000 PSI with a 4:1 Safety Factor
CGA Connections CGA-346 Wrench Tights		Universal (CGA-346/347) Hand-Tights
Bleeder Valves No		Yes
Check Valves	Yes, Built Into The CGA-346 Nipple	Yes, 1/4" MPT x 1/4" MPT
Warning Alarm	Electronic Alarms Set @ 500 PSI	Electronic Alarms Set @ 500 PSI
Pressure Regulator	3000 PSI Max. Inlet/125 PSI Max. Outlet	5000 PSI Max. Inlet/125 PSI Max. Outlet
Regulator Flow Rate	Approx. 80 CFM @ 3000 PSI Inlet Pressure/ 80 PSI Outlet Pressure	Approx. 80 CFM @ 5000 PSI Inlet Pressure/ 80 PSI Outlet Pressure
Relief Valve	Relief Valve 125 PSI Preset, ASME 125 PSI Preset	
Air Distribution	Air Distribution 4 Low Pressure Connections 4 Low Pressure C	
Hoistable	Yes	Yes
Ergo Design	DesignRaising Cart: 15 Lbs. Of Force Lowering: 35 Lbs. Of ForceRaising Cart: 15 Lbs. Of Force Lowering: 35 Lbs. Of Force	

EAC-97PENB		EAC97PHENB	
Dimensions	40"W X 58"H X 44"D	40"W X 58"H X 44"D	
Weight w/o Cylinders	156 Lbs.	156 Lbs.	
Frame	Powder Coated Steel Powder Coated Steel		
Cylinder Straps	4 Adjustable Nylon Straps	4 Adjustable Nylon Straps	
Wheels/Casters	10" Pneumatic Casters (Rear) 16" Pneumatic Wheels (Front)	10" Pneumatic Casters (Rear) 16" Pneumatic Wheels (Front)	
Whip Assemblies Thermo-Plastic Hose Rated @ 5000 PSI with a 4:1 Safety Factor		Thermo-Plastic Hose Rated @ 5000 PSI with a 4:1 Safety Factor	
CGA Connections	ns CGA-346 Wrench Tights Universal (CGA-346/347)		
Bleeder Valves	Bleeder Valves No		
Check Valves	Yes, Built Into The CGA-346 Nipple	Yes, 1/4" MPT x 1/4" MPT	
Warning Alarm	Electronic Alarms Set @ 500 PSI	Electronic Alarms Set @ 500 PSI	
Pressure Regulator	3000 PSI Max. Inlet/125 PSI Max. Outlet	5000 PSI Max. Inlet/125 PSI Max. Outlet	
Regulator Flow Rate	Approx. 80 CFM @ 3000 PSI Inlet Pressure/ 80 PSI Outlet Pressure	Approx. 80 CFM @ 5000 PSI Inlet Pressure/ 80 PSI Outlet Pressure	
Relief Valve	Relief Valve 125 PSI Preset, ASME 125 PSI		
Air Distribution	4 Low Pressure Connections	4 Low Pressure Connections	
Hoistable	Yes	Yes	
Ergo Design	Raising Cart: 15 Lbs. Of Force Lowering: 35 Lbs. Of Force	Raising Cart: 15 Lbs. Of Force Lowering: 35 Lbs. Of Force	

EAC-97NB - 3000 PSI Rated With Semi-Pneumatic Wheels and L.P. Whistle EAC-97HNB - 5000 PSI Rated With Semi-Pneumatic Wheels and L.P. Whistle EAC-97PNB - 3000 PSI Rated With Pneumatic Wheels and L.P. Whistle EAC-97PHNB - 5000 PSI Rated With Pneumatic Wheels and L.P. Whistle



Models: EAC-97NB and EAC-97HNB

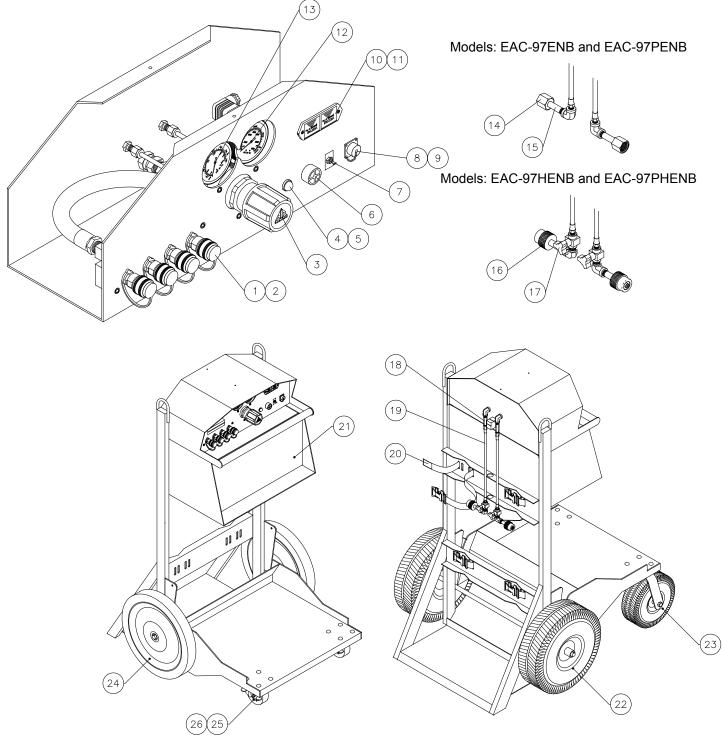
Models: EAC-97PNB and EAC-97PHNB

EAC-97NB - 3000 PSI Rated With Semi-Pneumatic Wheels and L.P. Whistle EAC-97HNB - 5000 PSI Rated With Semi-Pneumatic Wheels and L.P. Whistle EAC-97PNB - 3000 PSI Rated With Pneumatic Wheels and L.P. Whistle EAC-97PHNB - 5000 PSI Rated With Pneumatic Wheels and L.P. Whistle

PART #	DESCRIPTION	ITEM#
1	HANSEN COUPLING	QDH3SL6M
1A	SCHRADER COUPLING	QDSSL6M
2	HANSEN DUST CAP	QDH3DCAP
2A	SCHRADER DUST CAP	QDSDCAP
3	3000 PSI RATED PRESSURE REGULATOR (EAC-97NB AND EAC-97PNB)	REG-3000
3A	5000 PSI RATED PRESSURE REGULATOR (EAC-97HNB AND EAC-97PHNB)	REG-5000
4	LOW PRESSURE WHISTLE	AC-PA25
5	0-4000 PSI PRESSURE GAUGE (EAC-97NB AND EAC-97PNB)	GA254KSREG
5A	0-6000 PSI PRESSURE GAUGE (EAC-97HNB AND EAC-97PHNB)	GA256KSREG
6	0-200 PSI PRESSURE GAUGE	GA25200SRG
7	CGA-346 WRENCH TIGHT NUT	HPBR025
8	CGA-346 STEM WITH BUILT IN CHECK VALVE	HPBR027
9	UNIVERSAL HAND-TIGHT NUT AND STEM (CGA-346/CGA-347)	SS347HT
10	BLEEDER VALVE	VAL030
11	1/4" MPT X 1/4" MPT CHECK VALVE (EAC-97HNB AND EAC-97PHNB)	VC4SMMSS
12	WHIP ASSEMBLY, 1/4" MPT X 1/4" MPT (EAC-97NB AND EAC-97PNB)	PHA05024MM
12A	WHIP ASSEMBLY, 1/4" FPT X 1/4" MPT (EAC-97HNB AND EAC-97PHNB)	PHA05024MF
13	CYLINDER STRAP (4 REQ'D PER CART)	HDWR113B
14	16" PNEUMATIC TIRE (2 REQ'D PER CART)(EAC-97PNB AND EAC-97PHNB)	HDWR120
15	10" PNEUMATIC CASTER (2 REQ'D PER CART)(EAC-97PNB AND EAC-97PHNB)	HDWR101
16	16" SEMI PNEUMATIC TIRE (2 REQ'D PER CART)(EAC-97NB AND EAC-97HNB)	HDWR145
17	5" SEMI PNEUMATIC CASTER (2 REQ'D PER CART)(EAC-97NB AND EAC-97HNB)	HDWR122
18	BRAKE KIT FOR 5" CASTER	HDWR122A
19	OPTIONAL STORAGE BOX	EAC-97SBU

EAC-97ENB - 3000 PSI Rated With Semi-Pneumatic Wheels and Electronic Alarms EAC-97HENB - 5000 PSI Rated With Semi-Pneumatic Wheels and Electronic Alarms EAC-97PENB - 3000 PSI Rated With Pneumatic Wheels and Electronic Alarms EAC97PHENB - 5000 PSI Rated With Pneumatic Wheels and Electronic Alarms

Control Panel Is Common For All Models Listed Above



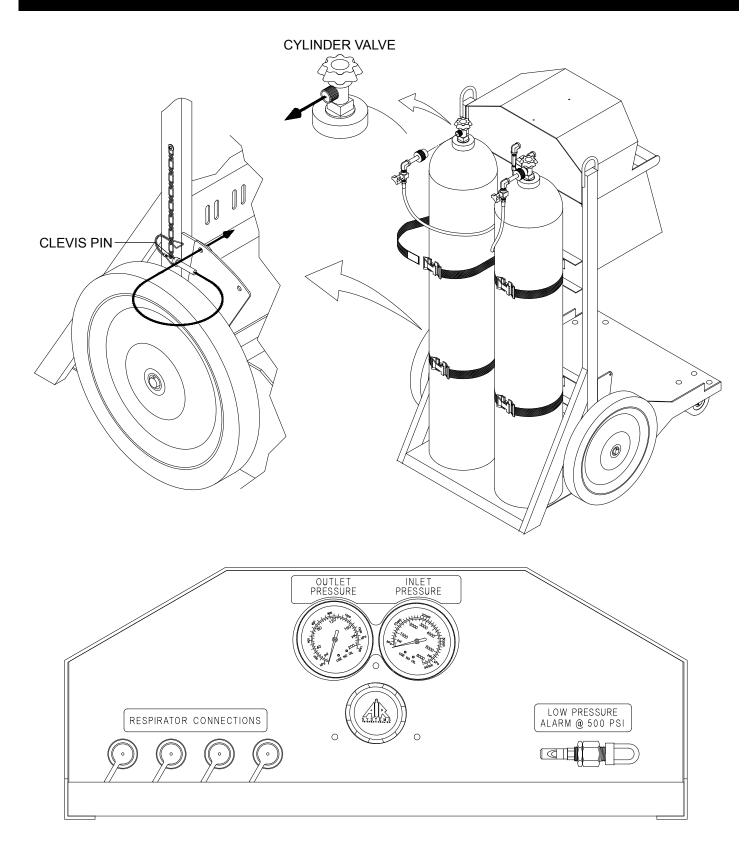
Models: EAC-97ENB and EAC-97HENB

Models: EAC-97PENB and EAC-97PHENB

EAC-97ENB - 3000 PSI Rated With Semi-Pneumatic Wheels and Electronic Alarms EAC-97HENB - 5000 PSI Rated With Semi-Pneumatic Wheels and Electronic Alarms EAC-97PENB - 3000 PSI Rated With Pneumatic Wheels and Electronic Alarms EAC97PHENB - 5000 PSI Rated With Pneumatic Wheels and Electronic Alarms

PART #	DESCRIPTION	
1	HANSEN COUPLING	QDH3SL6M
1A	SCHRADER COUPLING	QDSSL6M
2	HANSEN DUST CAP	QDH3DCAP
2A	SCHRADER DUST CAP	
3	3000 PSI RATED PRESSURE REGULATOR (EAC-97ENB AND EAC-97PENB)	REG-3000
3A	5000 PSI RATED PRESSURE REGULATOR (EAC-97HENB AND EAC97PHENB)	
4	12 VDC BULB	ELDS001
5	RED LENS	ELDS005
6	AUDIBLE ALARM	ELLS004
7	LOW PRESSURE ALARM ON/OFF SWITCH	ELSW005
8	REMOTE ALARM JACK	ELJP005
9	REMOTE ALARM JACK COVER	ELJP006
10	BATTERY HOLDER	MONC006
11	9VDC BATTERY (2 REQ'D)	ELB9V
12	0-4000 PSI PRESSURE GAUGE (EAC-97ENB AND EAC-97PENB)	
12A	0-6000 PSI PRESSURE GAUGE (EAC-97HENB AND EAC97PHENB)	GA256KSREG
13	0-200 PSI PRESSURE GAUGE	GA25200SRG
14	CGA-346 WRENCH TIGHT NUT	HPBR025
15	CGA-346 STEM WITH BUILT IN CHECK VALVE	HPBR027
16	UNIVERSAL HAND-TIGHT NUT AND STEM (CGA-346/CGA-347)	SS347HT
17	BLEEDER VALVE	VAL030
18	1/4" MPT X 1/4" MPT CHECK VALVE (EAC-97HENB AND EAC97PHENB)	VC4SMMSS
19	WHIP ASSEMBLY, 1/4" MPT X 1/4" MPT (EAC-97ENB AND EAC-97PENB)	PHA05024MM
19A	WHIP ASSEMBLY, 1/4" FPT X 1/4" MPT (EAC-97HENB AND EAC97PHENB)	PHA05024MF
20	CYLINDER STRAP (4 REQ'D PER CART)	HDWR113B
21	OPTIONAL STORAGE BOX	EAC-97SBU
22	16" PNEUMATIC TIRE (2 REQ'D PER CART)(EAC-97PENB AND EAC97PHENB)	HDWR120
23	10" PNEUMATIC CASTER (2 REQ'D PER CART)(EAC-97PENB AND EAC97PHENB)	HDWR101
24	16" SEMI PNEUMATIC TIRE (2 REQ'D PER CART)(EAC-97ENB AND EAC-97HENB)	HDWR145
25	5" SEMI PNEUMATIC CASTER (2 REQ'D PER CART)(EAC-97ENB AND EAC-97HENB)	HDWR122
26	BRAKE KIT FOR 5" CASTER	HDWR122A

EAC-97ENB - 3000 PSI Rated With Semi-Pneumatic Wheels and L.P. Whistle EAC-97HENB - 5000 PSI Rated With Semi-Pneumatic Wheels and L.P. Whistle EAC-97PENB - 3000 PSI Rated With Pneumatic Wheels and L.P. Whistle EAC97PHENB - 5000 PSI Rated With Pneumatic Wheels and L.P. Whistle



EAC-97ENB - 3000 PSI Rated With Semi-Pneumatic Wheels and L.P. Whistle EAC-97HENB - 5000 PSI Rated With Semi-Pneumatic Wheels and L.P. Whistle EAC-97PENB - 3000 PSI Rated With Pneumatic Wheels and L.P. Whistle EAC97PHENB - 5000 PSI Rated With Pneumatic Wheels and L.P. Whistle

STEP 1)

Remove clevis pin. Push the handle up to index the cart in the upright position. Reinstall the clevis pin.

STEP2)

Install the air cylinders, 5000 PSI max., so cylinder valves are indexed as shown in picture. Secure cylinders by tightening the straps at the buckle and mating the hook and loop sections.

STEP 3)

Models: EAC-97NB, and EAC-97PNB Install the CGA-346 wrench tight stem and nuts on the cylinder valves and tighten with wrench.

Models: EAC-97HNB, and EAC-97PHNB

Install the universal hand-tight stem and nuts on the cylinder valves and tighten. Close both bleeder valves by turning knobs clockwise.

STEP 4)

Open one cylinder. The low pressure alarm will sound until it sets itself at approximately 800 PSI. Check reading on inlet pressure gauge to verify cylinder is full. Close the cylinder.

STEP 5)

Set the required outlet pressure by turning the regulator knob clockwise to increase pressure or counterclockwise to decrease pressure. Bleed pressure by partially engaging a male plug in one of the respirator conections. This depressurizes the manifold and simulates low cylinder pressure. The low pressure alarm will begin to sound at approximately 500 PSI.

STEP 6)

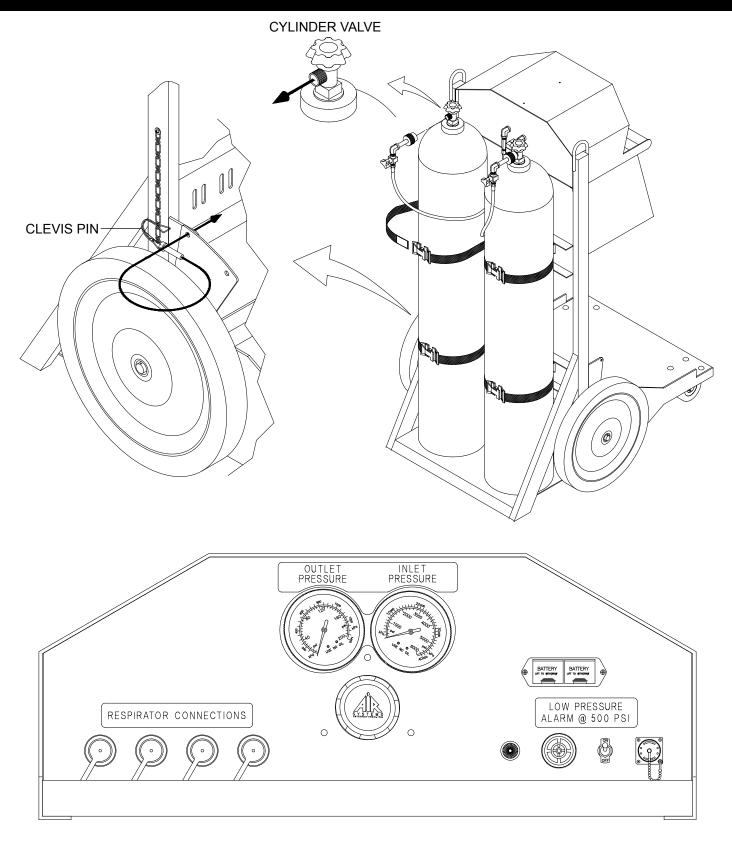
Open the second cylinder to verify cylinder is full.

STEP 7)

Couple respirator(s) and hose(s) to the respirator connections and readjust pressure if necessary. The system is now operational. When pressure drops to approximately 500 PSI the low pressure alarm will begin to sound indicating the cylinder in use needs to be replaced.

Note: The system is equipped with check valves allowing one cylinder to be replaced while the other is in use. To do this, close the depleted cylinder, open the bleeder valve if applicable, and remove the CGA connection from cylinder. Remove the cylinder from the cart and replace it with a full one and reinstall the CGA connection to the cylinder valve. Close the bleeder valve if applicable.

EAC-97ENB - 3000 PSI Rated With Semi-Pneumatic Wheels and Electronic Alarms EAC-97HENB - 5000 PSI Rated With Semi-Pneumatic Wheels and Electronic Alarms EAC-97PENB - 3000 PSI Rated With Pneumatic Wheels and Electronic Alarms EAC97PHENB - 5000 PSI Rated With Pneumatic Wheels and Electronic Alarms



EAC-97ENB - 3000 PSI Rated With Semi-Pneumatic Wheels and Electronic Alarms EAC-97HENB - 5000 PSI Rated With Semi-Pneumatic Wheels and Electronic Alarms EAC-97PENB - 3000 PSI Rated With Pneumatic Wheels and Electronic Alarms EAC97PHENB - 5000 PSI Rated With Pneumatic Wheels and Electronic Alarms

STEP 1)

Remove clevis pin. Push the handle up to index the cart in the upright position. Reinstall the clevis pin.

STEP2)

Install the air cylinders, 5000 PSI max., so cylinder valves are indexed as shown in picture. Secure cylinders by tightening the straps at the buckle and mating the hook and loop sections.

STEP 3)

Models: EAC-97ENB, and EAC-97PENB

Install the CGA-346 wrench tight stem and nuts on the cylinder valves and tighten with wrench.

Models: EAC-97HENB, and EAC-97PHENB

Install the universal hand-tight stem and nuts on the cylinder valves and tighten. Close both bleeder valves by turning knobs clockwise.

STEP 4)

Place the "ON/OFF" toggle switch in the "ON" position. The light and alarm (and the optional remote alarm if connected) will activate. If not, check and replace batteries.

STEP 5)

Open one cylinder. The low pressure alarms will sound until approximately 500 PSI. Check reading on inlet pressure gauge to verify cylinder is full. Close the cylinder.

STEP 6)

Set the required outlet pressure by turning the regulator knob clockwise to increase pressure or counterclockwise to decrease pressure. Bleed pressure by partially engaging a male plug in one of the respirator conections. This depressurizes the manifold and simulates low cylinder pressure. The low pressure alarms will begin activate at approximately 500 PSI.

STEP 7)

Open the second cylinder to verify cylinder is full.

STEP 8)

Couple respirator(s) and hose(s) to the respirator connections and readjust pressure if necessary. The system is now operational. When pressure drops to approximately 500 PSI the low pressure alarms will activate indicating the cylinder in use needs to be replaced.

Note: The system is equipped with check valves allowing one cylinder to be replaced while the other is in use. To do this, close the depleted cylinder, open the bleeder valve if applicable, and remove the CGA connection from cylinder. Remove the cylinder from the cart and replace it with a full one and reinstall the CGA connection to the cylinder valve. Close the bleeder valve if applicable.

EAC-97 Series Optional Hose Reel Packages

The lower deck on the EAC-97 series air carts can accommodate various hose reel configurations. Listed below are standard hose reel packages, specifications, and replacement parts. Pictured below is Ergo Air Cart Model: EAC-97PHNB with pneumatic tires, the optional storage box, P/N EAC-97SBU and a dual auto rewind hose reel package, P/N HR-250A.



Model	Specifications	Replacement Parts	Can Be Installed With Optional Upper Storage Box Installed
EAC-97150A	Single auto rewind hose reel. Holds 50' of 3/8" I.D. breathing air hose.	Hose Reel P/N HR-50 Ball Valve P/N HDWR082	Yes
EAC-97250A	Dual auto rewind hose reels. Each reel holds 100' of 3/8" I.D. breathing air hose.	Hose Reel P/N HR-50 Ball Valve P/N HDWR158	Yes
EAC-97210M	Dual manual rewind hose reels. Each reel holds 100' of 3/8" I.D. breathing air hose.	Hose Reel P/N HR-100 Ball Valve P/N HDWR158	Yes
EAC-97300M	Single manual rewind hose reel. Each reel holds 300' of 3/8" I.D. breathing air hose or 200' of 1/2" I.D. hose.	Hose Reel P/N HR-300M Ball Valve P/N HDWR093	Yes
EAC-97450M	Single manual rewind hose reel. Each reel holds 450' of 3/8" I.D. breathing air hose or 300' of 1/2" I.D. hose.	Hose Reel P/N HR-450M Ball Valve P/N HDWR093	Yes
EAC972100A	Dual auto rewind hose reels. Each reel holds 100' of 3/8" I.D. breathing air hose.	Hose Reel P/N HR-100 Ball Valve P/N HDWR158	No, Due to the height of these reels, they cannot be installed if upper storage box is installed.

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Warranty

Air Systems' manufactured equipment is warranted to the original user against defects in workmanship or materials under normal use for one year from the date of purchase. Any part which is determined by Air Systems to be defective in material or workmanship will be, as the exclusive remedy, repaired or replaced at Air Systems' option. This warranty does not apply to electrical systems or electronic components. Electrical parts are warranted, to the original user, for 90 days from the date of sale. During the warranty period, electrical components will be repaired or replaced at Air Systems' option.

NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FIT-NESS FOR A PARTICULAR PURPOSE, OR ANY OTHER MATTER IS GIVEN BY AIR SYSTEMS IN CONNECTION HEREWITH. UNDER NO CIRCUMSTANCES SHALL THE SELLER BE LIABLE FOR LOSS OF PROFITS, ANY OTHER DIRECT OR INDIRECT COSTS, EXPENSES, LOSSES, OR DAMAGES ARISING OUT OF DEFECTS IN, OR FAILURE OF THE PRODUCT OR ANY PART THEREOF.

The purchaser shall be solely responsible for compliance with all applicable Federal, State and Local OSHA and/or MSHA requirements. Although Air Systems International believes that its products, if operated and maintained as shipped from the factory and in accordance with our "operations manual", conform to OSHA and/or MSHA requirements, there are no implied or expressed warranties of such compliance extending beyond the limited warranty described herein. Product designs and specifications are subject to change without notice. Rev. 2, 12/98

Air leaks are not covered under warranty except when they result from a defective system component, i.e. an on/off valve or regulator or upon initial delivery due to poor workmanship. Air leaks due to poor delivery or damage will be covered under delivery claims. Minor air leaks are part of routine service and maintenance and are the responsibility of the customer just as are filters and oil changes.

AIR SYSTEMS INTERNATIONAL, INC.

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