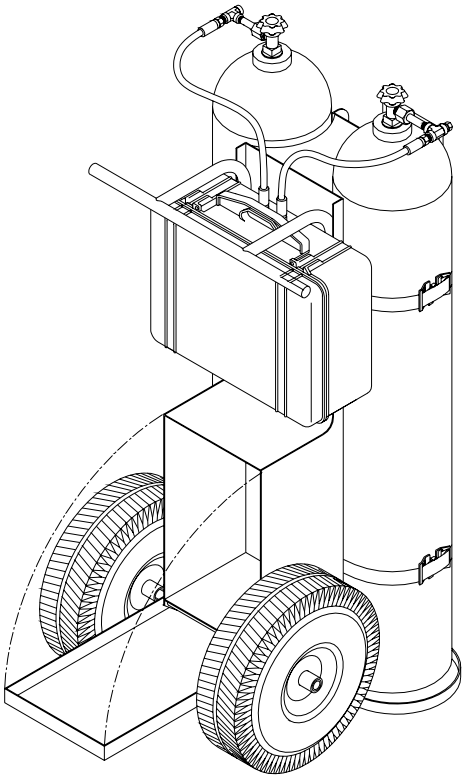
Models

MP-23ENBC, MP-23LPANB,
MP-23EHNBC, MP-2300HNB

Manual No. AIRCRT22
(Rev 1 July 2007)

Operating Manual



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OVERVIEW

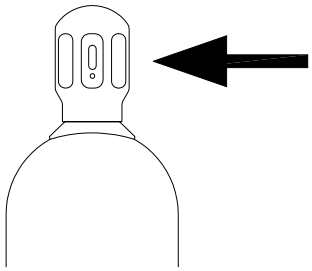
The MULTI-PAK™ series of bottled air carts is Air Systems' latest design for multiple industrial applications. The entire line of carts is designed for easier mobility due to the balancing point during transportation. These cylinder carts incorporate protected controls, storage box, narrow profile, and quick release hose hangers.

SPECIFICATIONS

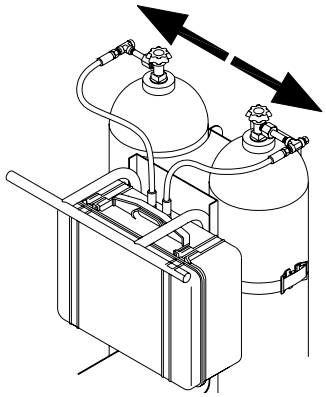
Dimensions	26"W x 49"H x 26"D
Weight	130 lbs
Storage Dimensions	10.75"W x 17.75"H x 9.5"D
Wheels	Pneumatic 16"
Outlets	4 Outlet Aluminum Manifold Block
Check Valves	Stainless Steel 6000psi Rated
Relief Valve	125psi ASME Preset
Regulator	3000psi/5000psi Max Inlet Pressure (Models Vary)
CGA Fittings	346/347 Wrench Tight or 346/347 Hand Tight (Models Vary)
Whip Assemblies	5000psi 4:1 Safety Factor 20,000 Burst
Alarms	Low Pressure 500-550psi Set Pressure Pneumatic Versions: Whistle Electronic Versions: Red Indicator, Audible Alarm, Remote Alarm Jack

MP-2300 Series
Pneumatic Whistle or Bell Alarm

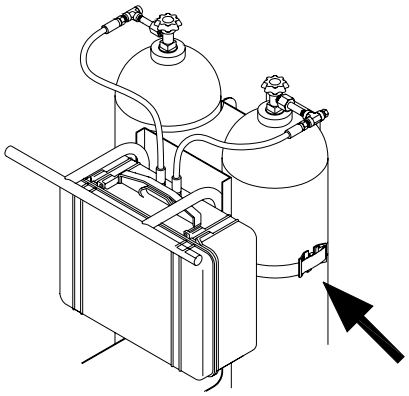
Step 1)
Remove cylinder valve covers.



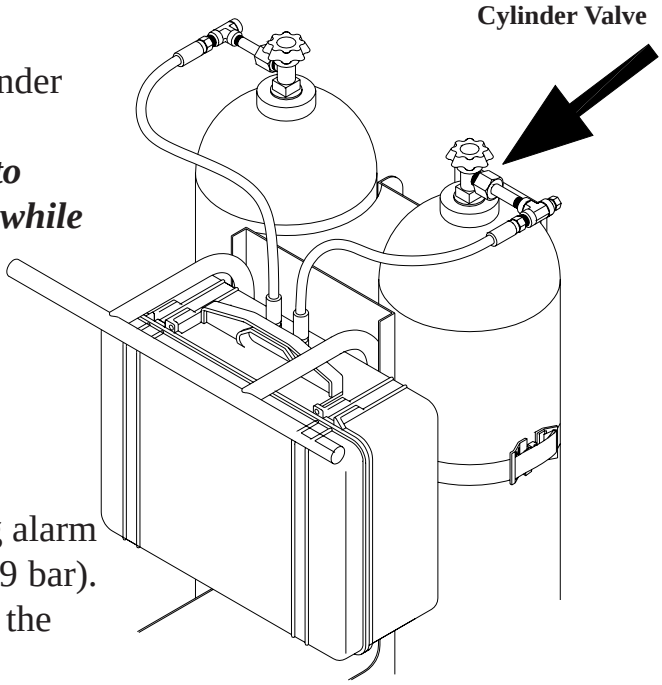
Step 2)
Arrange cylinders so that the valve outlets are facing as shown.



Step 3)
Secure bottles by cinching the nylon bottle straps around the bottles.

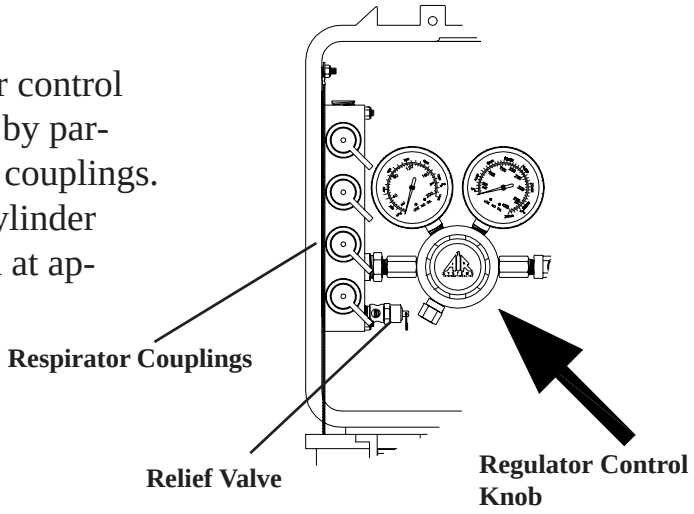


Step 4)
Install the CGA-346/347 wrench-tight nuts onto the cylinder valves. Tighten with a wrench.
Note: Whip assemblies are equipped with check valves to make it possible for the removal of one of the cylinders while the system is still in operation.

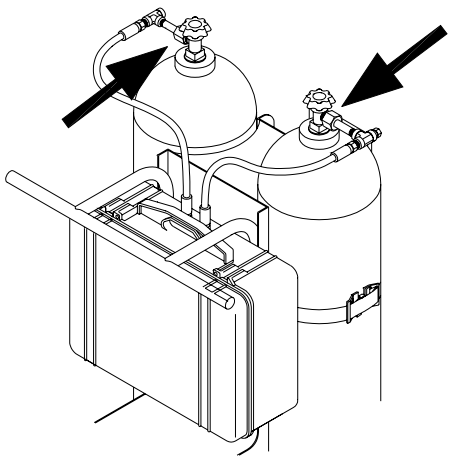


Step 5)
Open one cylinder. At this time the low pressure warning alarm will sound until it sets itself at approximately 1000psi (69 bar). Check the reading on gauge to verify that it is full. Close the cylinder.

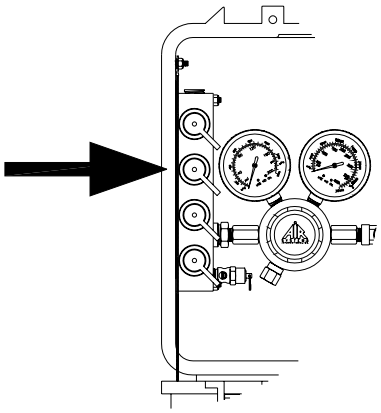
Step 6)
Set the required respirator pressure with the regulator control knob. Bleed the pressure at either the relief valve, or by partially engaging a male plug into one of the respirator couplings. This depressurizes the manifold and simulates low cylinder pressure. The low pressure warning alarm will sound at approximately 500psi (35 bar).



Step 7)
Open the other cylinder valve. At this time the low pressure warning alarm will resound until it resets itself at approximately 1000psi (69 bar). Check the reading on the gauge to verify the cylinder is full.



Step 8)
Couple respirators and lengths of hoses to the manifold couplings, and readjust the pressure regulator if necessary. The system is now operational.



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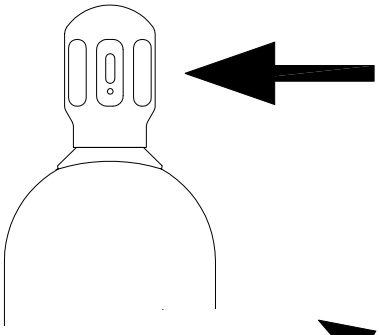
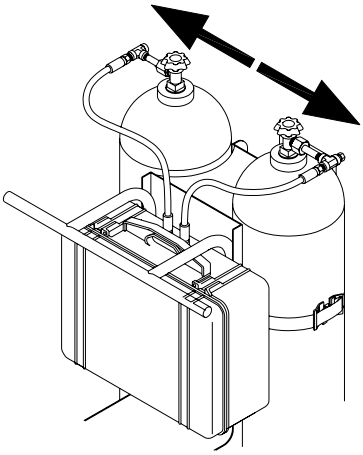


Step 2)
Arrange cylinders so that the valve outlets are facing as shown.



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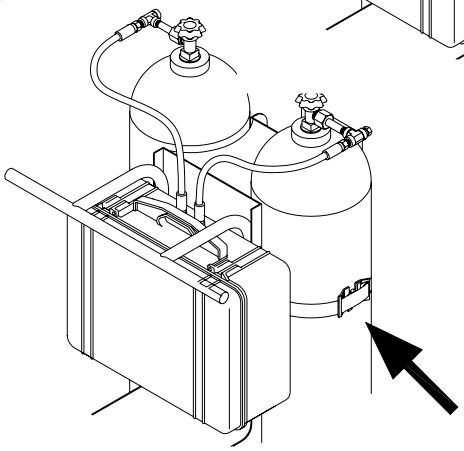
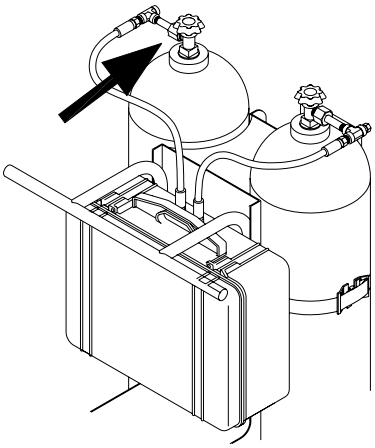
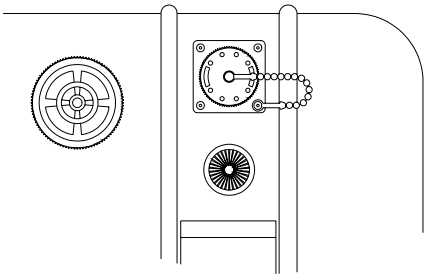
Secure bottles by cinching the nylon bottle straps around the bottles.



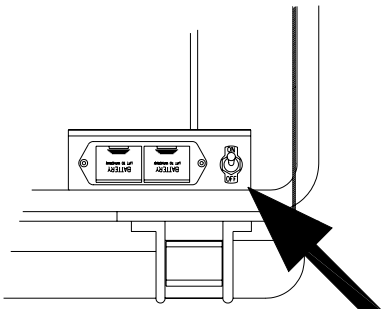
Step 4)
Install the CGA-346/347 wrench-tight nuts onto the cylinder valves. Tighten with a wrench.
Note: Whip assemblies are equipped with check valves to make it possible to remove one of the cylinders while the system is still in operation.



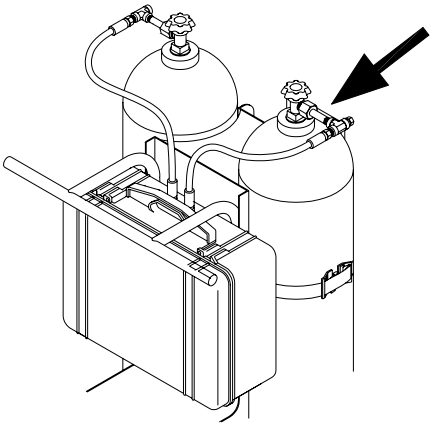
Step 5)
Connect the optional remote alarm.



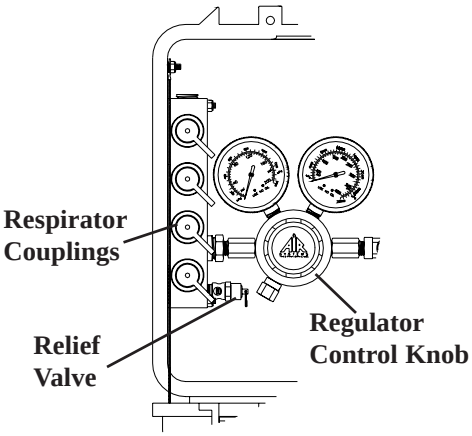
Step 6)
Position the ON/OFF toggle switch to the “ON” position. At this time the audible alarm will sound and the red indicator will illuminate.

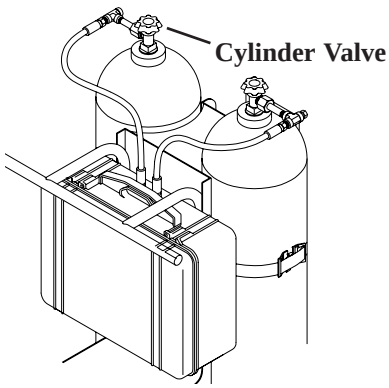


Step 7)
Open one cylinder valve. When the pressure reaches approximately 500-550psi (35-38 bar), the light and alarm will shut off. Check the reading on the gauge to verify the cylinder is full. Close the cylinder.



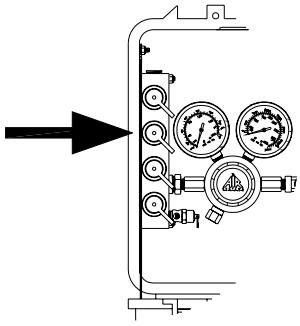
Step 8)
Set the required respirator pressure with the regulator control knob. Bleed the pressure at either the relief valve, or by partially engaging a male plug into one of the respirator couplings. This depressurizes the manifold, and simulates low cylinder pressure. The low pressure warning alarm will sound and the red indicator will illuminate at approximately 500-550psi (35-38 bar).





Step 9)
Open the other cylinder valve. When the pressure reaches approximately 500-550psi (35-38 bar), the light and alarm will shut off. Check the reading on the gauge to verify the cylinder is full.

Step 10)
Couple the respirators and lengths of hoses to the manifold couplings. Readjust the pressure regulator if necessary. The system is now operational.



Cylinder Replacement

When the cylinder in use has been depleted to approximately 500psi (35 bar), the low pressure warning alarm will sound, indicating that the cylinder needs to be replaced.
To change a cylinder while the MULTI-PAK™ is still in use:

1. Open the second cylinder and note the gauge pressure to assure that it is full.
2. Close the drained cylinder.
3. Open the bleeder valve (MP-2H) to relieve the pressure. Remove the CGA-346/347 hand tight or wrench tight nut.
4. Remove the drained cylinder and install a full cylinder in its place. Reinstall the CGA connections. Close bleeder valves. The cylinder is now ready for use when the other cylinder's pressure descends to 500psi.

Note: The system is equipped with check valves that will prevent back flow from the other cylinder in use.

Shutdown

1. Remove workers from hazardous work location.
2. Cylinder valves must be closed, and line pressure relieved through the relief valve before the connecting nuts and nipples can be removed.
3. Turn the electric alarm switch to the "off" position when not in use. (Electronic versions only)
4. Reinstall protective cylinder valve caps when not in use, or during transportation.

Maintenance

1. Keep control box closed to prevent internal contamination (if applicable).
2. Remove batteries when not in use for extended periods of time. (Electronic versions only)
3. Replace twin 9-volt batteries periodically to assure proper operation of low pressure alarm. (Electronic versions only)
4. Check and inspect all high and low pressure fittings for wear and damage.

High Pressure Airline General Maintenance & Inspection

Monthly

1. Check regulators, gauges, and valves for external leakage.
2. Inspect valves for proper closure.
3. Check cylinder pigtails for cleanliness, flexibility, wear, leakage, blisters on hose, and thread damage. Replace damaged pigtails immediately.
4. Inspect check valves for closure ability.

Annually

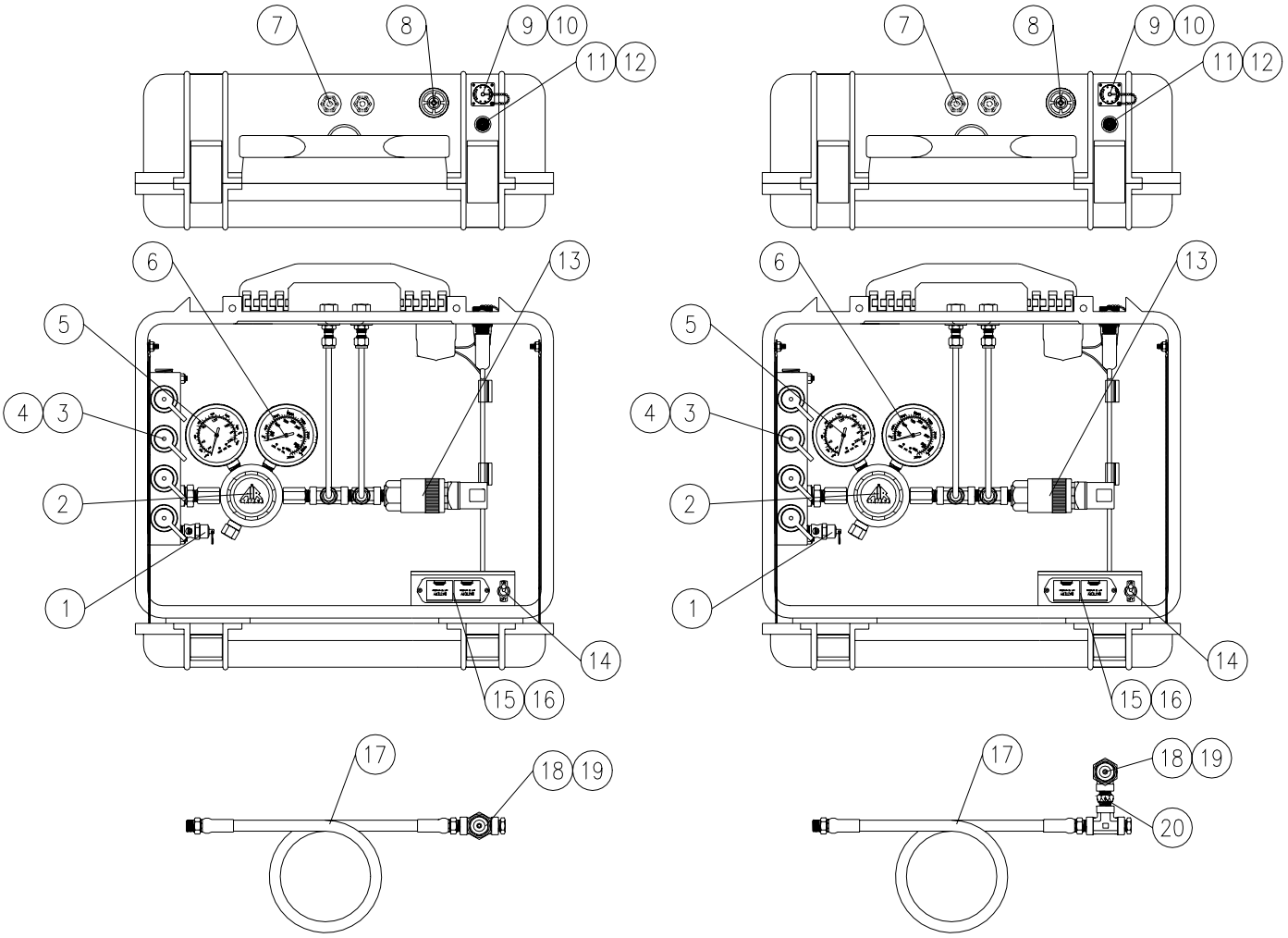
1. Check relief valve's pressure.
2. Check regulator function by opening and closing regulator valve knob fully.

Every 4 years

1. Replace all flexible pigtails--contact ASI customer service department.

REPLACEMENT PARTS

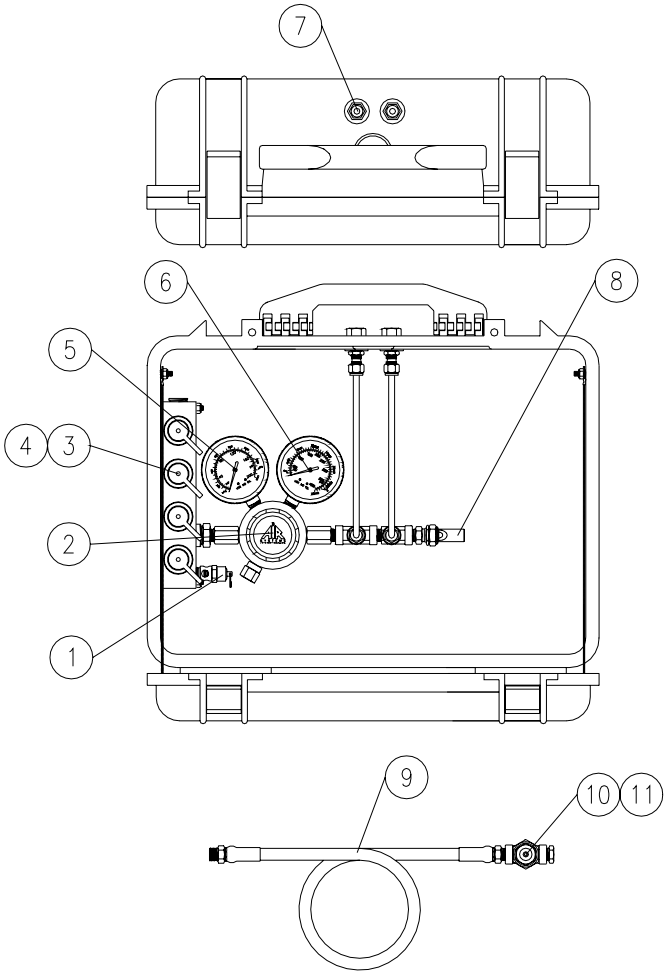
MP-23ENBC **MP-23LPANB**



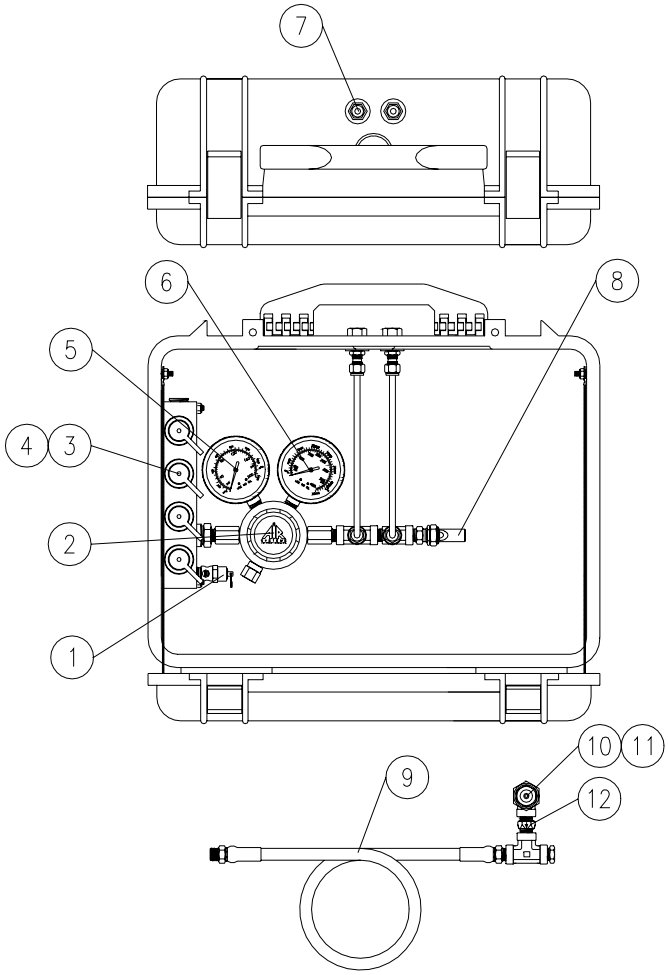
ITEM #	DESCRIPTION	MP-23ENBC	MP-23LPANB
1	125 PSI RELIEF VALVE	VR4125BR	VR4125BR
2	PRESSURE REGULATOR WITHOUT GAUGES	REG-3000NG	REG-5000NG
3	HANSEN COUPLING	QDH3SL6M	QDH3SL6M
3A	SCHRADER COUPLING	QDSSL6M	QDSSL6M
4	HANSEN DUST CAP	QDH3DCAP	QDH3DCAP
4A	SCHRADER DUST CAP	QDSDCAP	QDSDCAP
5	OUTLET PRESSURE GAUGE, 0-200 PSI	GA25200SRG	GA25200SRG
6	INLET PRESSURE GAUGE	GA254KSREG	GA256KSREG
7	INLET CONNECTION, 1/4" FPT	TB44FK	TB44FK
8	AUDIBLE ALARM	ELLS004	ELLS004
9	REMOTE ALARM JACK	ELJP004	ELJP004
10	REMOTE ALARM JACK COVER	ELJP005	ELJP005
11	12 VDC BULB	ELDS001	ELDS001
12	RED LENS	ELDS005	ELDS005
13	PRESSURE SWITCH	PSVLV005A	PSVLV005A
14	LOW PRESSURE ALARM ON/OFF SWITCH	ELSW005	ELSW005
15	BATTERY HOLDER	MONC006	MONC006
16	9 VOLT BATTERY - 2 REQ'D	ELB9V	ELB9V
17	30" CONNECT WHIP WITH CGA FITTINGS	CW-30	CW-30HP
18	WRENCH TIGHT NUT	HPBR025	HPBR049
19	STEM	HPBR027*	HPBR050
20	CHECK VALVE	N/A	VC4SMMSS
	* HPBR027 - STEM HAS BUILT IN CHECK VALVE		

REPLACEMENT PARTS

MP-23EHNBC



MP-2300HNB



ITEM #	DESCRIPTION	MP-23EHNBC	MP-2300HNB
1	125 PSI RELIEF VALVE	VR4125BR	VR4125BR
2	PRESSURE REGULATOR WITHOUT GAUGES	REG-3000NG	REG-5000NG
3	HANSEN COUPLING	QDH3SL6M	QDH3SL6M
3A	SCHRADER COUPLING	QDSSL6M	QDSSL6M
4	HANSEN DUST CAP	QDH3DCAP	QDH3DCAP
4A	SCHRADER DUST CAP	QDSDCAP	QDSDCAP
5	OUTLET PRESSURE GAUGE, 0-200 PSI	GA25200SRG	GA25200SRG
6	INLET PRESSURE GAUGE	GA254KSREG	GA256KSREG
7	INLET CONNECTION, 1/4" FPT	TB44FK	TB44FK
8	LOW PRESSURE WHISTLE	AC-PA25	AC-PA25
9	30" CONNECT WHIP WITH CGA FITTINGS	CW-30	CW-30HP
10	WRENCH TIGHT NUT	HPBR025	HPBR049
11	STEM	HPBR027*	HPBR050
12	CHECK VALVE	N/A	VC4SMMSS
	* HPBR027 - STEM HAS BUILT IN CHECK VALVE		

Warranty Disclaimer

Air Systems' manufactured equipment is warranted to the original user against defects in workmanship or materials under normal use for one year after 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, FITNESS 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.