PortAire® Portable Air-Supply System

TransportAire™ Portable Air-Supply System

Portable Air-Supply Systems

[Compressed air in a convenient, mobile package]

Features

- Choice of two systems to enhance workers' mobility by providing an air source that can be transported within a work site any time an air-line device is required.
- Systems are compatible with MSA's complete line of cylinders, providing versatility for users.
- Integral check valve on both systems allows air supply to be switched between air sources, providing uninterrupted air flow as a depleted cylinder is replaced with a fully charged one.
- Both systems are designed for use with pressure-demand supplied-air respirators, including dual-purpose self-contained breathing apparatus (SCBA).
- Both systems feature Quick-Disconnect assembly for ease in connecting air-supply hoses to the air source.

The PortAire® Portable Air-Supply System

The PortAire System holds two standard SCBA air cylinders to provide firefighters, industrial personnel, confined space workers, and other wearers of respiratory protective equipment with a portable, compressed air source any time an air-line device is required.

Designed for use with MSA pressure-demand supplied-air respirators, including dual-purpose SCBA, the PortAire System consists of a compact air-pressure regulating system housed in a lightweight, yet durable, anodized aluminum frame. The rugged frame protects cylinders, holds up to 100 feet of air-supply hose and serves as a carrying device for user convenience. It can be easily attached to a two-wheel dolly for even more maneuverability. The Transporter Kit (PN 10017089) is designed to allow the user to pull the Portaire instead of carrying it.

When connected to two air cylinders, the system provides a continuous supply of respirable air. During use of the PortAire System, cylinders can be refilled or

changed as required to provide a long-duration air supply. When one cylinder's air supply is exhausted, the device's integral check valve allows users to switch over to the second cylinder without interrupting air flow. The PortAire System also can supply two users simultaneously.

The PortAire System is designed for use with either two low-pressure (2216 psig or 3000 psig) or two high-pressure (4500 psig) cylinders. For added convenience, cylinders can be refilled without removal from the carrying frame using the optional Quick-Fill® System accessory, which eliminates the need for cylinder changeover. The Quick-Fill System also allows users to connect to a cascade system or high-pressure compressor, providing an even longer-duration air supply.

Cylinder Options for PortAire System
The PortAire System is compatible with all MSA cylinders used with SCBA. This includes:
- high-performance carbon-wrapped Stealth™ Cylinders (30-, 45-, and 60-minute-rated units)
- fully-wound Composite Cylinders
- 30-minute, low-pressure 3AL (aluminum) Cylinder
- 30-minute, low-pressure Hoop-Wrapped Cylinder

To alert users of low cylinder pressure, the System is equipped with the Audi-Larm™ low-pressure warning device. Whenever cylinder pressure drops below 1000 psig for high-pressure cylinders (540 psig for low-pressure cylinders), a loud, clear bell signals the need to switch to the second cylinder or change cylinders completely. Other key components include a high-pressure regulator and carrying frame with air-supply hose retainer.

The frame has a handle in the center of each end for two people to carry the unit. If one person is to carry the PortAire System, there are handles on each side, as well as on the top of the unit.

A rubber strap (included) secures the top of the unit firmly to the two-wheel dolly. This method can be used to carry the unit over rough terrain or up and down stairs.

The hose deck has convenient storage for two 50-foot lengths of air-supply hose (purchased separately). The hose is held tightly to the deck by four rubber straps, one at each corner of the deck and hooked at the center post.

The frame is rugged enough for dragging the unit as a sled. During use, MSA recommends the unit be positioned with the frame horizontal. However, if required, the unit can be used in a vertical position, and secured with the rubber straps provided.

The PortAire System is especially suited for confined space rescue applications and HazMat spill operations.

The TransportAire™ Portable Air-Supply System

The TransportAire System consists of an impact-resistant handle with nylon straps that fit around an MSA 30-, 45-, or 60-minute low-pressure (2216 psig or 3000 psig) or high-pressure (4500 psig) cylinder (purchased separately). The system is designed for exclusive use with MSA supplied-air respirators equipped with a dual-supply option.

A major advantage of the dual-supply option is improved mobility; workers need not remain tethered to a single air-supply hose throughout a work period. To accommodate this option, the dual-supply manifold on MSA respirators features two air-inlet ports: a MAIN inlet and a DUAL-SUPPLY inlet. Both are used to deliver respirable air to the user whenever connected to a pressurized air source.

With the dual-supply capability, users can connect from one pressurized continuous air source to another without losing continuity of air flow. After the first length of air-supply hose has reached its limit, the wearer simply plugs into a second approved air source and disconnects from the first. This technique is known as "leap-frogging," because it gives workers the ability to move from station to station without disrupting the supply of air.

Whether a worker is using the "MAIN" inlet of the manifold, the "DUAL-SUPPLY" inlet, or both inlets simultaneously, the respirator will provide supplied-air respiratory protection as long as the user remains connected to one of the two air sources.

With the TransportAire System connected to the DUAL-SUPPLY or MAIN inlet of the manifold, a worker can carry the portable air supply to a location where the second air source is available for longer-term use. After connecting the second air source into the open inlet of the manifold, the user can disconnect the TransportAire System and keep it available until it is time to exit the area.

Cylinder Options for TransportAire System
The TransportAire System is available in two versions, one for high-pressure cylinders and one for low-pressure cylinders. These include:

- high-performance carbon-wrapped Stealth Cylinders (30-, 45-, and 60-minute rated)
- 30-minute, fully-wound Composite II Cylinder
- 30-minute, low-pressure AL (aluminum) Cylinder
- 30-minute, low-pressure Hoop-Wrapped Cylinder

Recommended applications for the TransportAire System include hazardous material disposal sites, remediation sites and other areas where heavy equipment operators work.

Quick-Disconnects for Use With the Portable Air-Supply Systems

Shown below are various quick-disconnect assemblies that can be used with the MSA Portable Air-Supply Systems. Quick-disconnects are required to connect air-supply hoses to the air source. Additionally, locking-type quick-disconnects can be used to interconnect lengths of MSA Air-Supply Hose. Air-supply hoses can be interconnected up to a maximum length of 300 feet. Up to 12 sections of hose can be used to make up the maximum working length of hose.

Quick-Disconnects and Adapters

AL=Aluminum	SST=Stainless Steel	S=Steel	BR=Brass

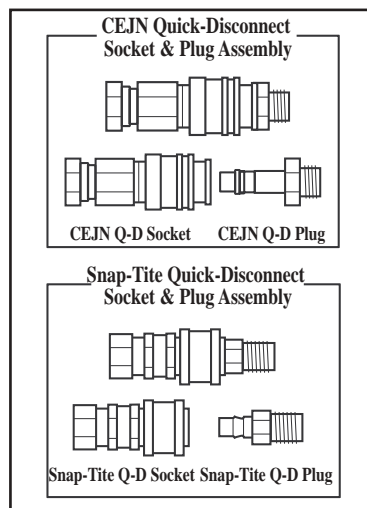| QUICK-DISCONNECT TYPE	Interchangeability	1 Female Socket ¼" NPT	2 Male Plug w/Female ¼" NPT	3 Union Adapter ¼" NPT x ¾" UNF	4 Male Plug w/Male ¼" NPT (used when connecting Inlet Pressure Gauge	5* Female Socket Ass. (used to connect Air-Supply Hose to Male Plug on Respirator)+
Snap-Tite (AL)	C	66272	66274	69542	66273	455019
Snap-Tite (SST)	C	629673	629672	808358	629671	471778
Snap-Tite (BR)	C	630305	630307	69542	630306	471777
Duff-Norton (BR)	—	630308	630310	——	630309	471780
Hansen (SST)	A	628768	628208	808358	473502	471779
Hansen (BR)	D	630311	630313	69542	630312	471501
Foster (S)	B	628770	55716	69542	56549	467044
Foster (SST)	B	636459	636460	808358	——	801016
Foster (BR)	A	629980	629981	69542	473501	470194
Schrader (S)	B	See Foster	See Foster(S)	See Foster(S)	See Foster(S)	See Foster(S)
CEJN Locking (Chrome-Plated—BR)	E	631870	479026	69542	479020	479001
CEJN Locking (Chrome)	E	——	479026	69542	479020	476956
Snap-Tite Locking (AL)	F	——	479027	69542	——	479032
Snap-Tite Locking (SST)	F	——	479028	808358	479022	479033
Snap-Tite Locking (BR)	F	——	479029	69542	479023	479034
Foster Locking (SST)	D	636473	637851	808358	——	800805

* All SST fittings have SST Union P/N 808360
* Consists of socket from Column 1 and Union Adapter (P/N 69541)
* Socket assy consists of socket from column 1 and brass union adapter P/N 69541 (¾" female x ¼" npt male). Exception: All SST fittings have SST Union P/N 808360.

Locking Quick-Disconnects

Locking quick-disconnects must be used to interconnect lengths of MSA Air-Supply Hose. For most systems, you can use up to 12 sections of hose to make up the maximum length.

Part No.	Description
479009	CEJN Locking Quick-Disconnect Assembly, Socket and Plug (Chrome)
476956	CEJN Locking Female Quick-Disconnect Socket (Chrome)
476955	CEJN Locking Male (w/ Male ¾" NPT) Quick-Disconnect Plug (Chrome)
479010	Snap-Tite Locking Quick-Disconnect Assembly, Socket and Plug (AL)
479032	Snap-Tite Locking Female Quick-Disconnect Socket (AL)
479015	Snap-Tite Locking Male (w/ Male ¾" NPT) Quick-Disconnect Plug (AL)

CEJN Quick-Disconnect Socket & Plug Assembly

CEJN Q-D Socket   CEJN Q-D Plug

Snap-Tite Quick-Disconnect Socket & Plug Assembly

Snap-Tite Q-D Socket   Snap-Tite Q-D Plug

Locking quick-disconnects easily connect by pushing the plug and socket together. To separate, the plug and socket must first be pushed together, and then the sleeve retracted from the plug.

Ordering Information

PortAire Portable Air-Supply System

Part No.	Description
807052	PortAire Portable Air-Supply System* with Audi-Larm™ low-pressure warning device, high-pressure regulator, and carrying frame with air-supply hose retainer
807053	Quick-Fill Kit*

Cylinders, air-supply hose, and quick-disconnect fittings must be ordered separately.

Low-Pressure TransportAire Portable Air-Supply System

Part No.	Description
816693	TransportAire Assembly complete with cylinder carrier, regulator, and regulator-to-hose adapter
85078	Optional low-pressure Audi-Larm Assembly

High-Pressure TransportAire Portable Air-Supply System

Part No.	Description
812217	TransportAire Assembly complete with cylinder carrier, regulator, regulator-to-hose adapter, and high pressure Audi-Larm Assembly

Cylinders for PortAire and TransportAire Systems

High-Pressure Cylinders (4500 psig)

Part No.	Description
807588	60-min. Stealth H-60
807570	45-min. Stealth H-45
807587	30-min. Stealth H-30

Low-Pressure Cylinders (2216 psig)

Part No.	Description
469619	30-min. Hoop-Wrapped
809872	30-min. 3AL (Aluminum)
807586	30-min. Stealth L-30

Low-Pressure Cylinder (3000 psig)

Part No.	Description
816115	30-min. Stealth L-30+

Accessories

MSA Air-Supply Hoses

MSA Air-Supply Hoses must be used to maintain NIOSH/MSHA approvals of the MSA Respirators. Air-Supply Hoses are available in smooth, reinforced black lightweight polyvinylchloride (PVC); chemical resistant black neoprene; and smooth, coiled yellow nylon.

PVC

Part No.	Length	Fitting
484225	100 ft.	Brass
471513	50 ft.	Brass
481060	50 ft.	Stainless Steel
471512	25 ft.	Brass
481059	25 ft.	Stainless Steel
471511	15 ft.	Brass
481058	15 ft.	Stainless Steel
481051	8 ft.	Brass
481057	8 ft.	Stainless Steel

Neoprene

Part No.	Length	Fitting
455022	50 ft.	Brass
481080	50 ft.	Stainless Steel
455021	25 ft.	Brass
481079	25 ft.	Stainless Steel
455020	15 ft.	Brass
481078	15 ft.	Stainless Steel
455021	8 ft.	Brass
481071	8 ft.	Brass
481077	8 ft.	Stainless Steel

Coiled Nylon

Part No.	Length	Fitting
474043	50 ft.	Brass
491515	25 ft.	Brass
491514	15 ft.	Brass
491513	8 ft.	Brass

Transporter Kit

Part No.	Description
10017089	Wheeled Cart for Portaire Portable Air-Supply System

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