

The Air Source C.A.R.T.

by Battalion Chief Raymond M. Downey, SOC

Over the years, the inventory of specialized equipment carried by Rescue Companies has increased. Most importantly, most of the equipment has been designed for specific kinds of responses and incidents. One such piece of equipment, which came on the scene in 1994, is the Air Source C.A.R.T. (continuous air resource transport).

This system is designed similarly to those that many Rescue Companies built in the early 1990s to supply continuous air for their air-operated tools. The list of air-operated tools include air bags, air-operated drills, chisels and hammers, reciprocating saw, air shores and struts, air nailer, impact gun and Whizzer saw (see *WNYF*, 1st/98 and 4th/85). Additionally, surface-supplied air for SCUBA operations and in-line air supply for extension lines of SCBA can be supplied from the Air Source C.A.R.T.

The main frame and wheeled frame of the C.A.R.T. is made of lightweight aluminum and the axle assembly is made of one-half-inch stainless steel. The hardware is also stainless steel, assuring maximum corrosion resistance. The older models have four low-pressure outlet connections that can be used for multiple tool use or supplied air lines for SCBA or SCUBA operations.

The newer model Air Source Combi C.A.R.T. has two sets of manifolds. One set is identified as the tool supply manifold and has one dedicated air bag controller outlet with valve and three adjustable outlets with quick-disconnect sockets that can operate multiple tools simultaneously and independently of each other. Tools of different operating pressures can be operated at the same time.

The other manifold is labeled mask supply and can supply four rescuers simultaneously or be used to feed pneumatic tools. Safety for the system is provided by a relief device that protects against over-pressurization. An electronic warning alarm gives

both audible and visual alarms of a low-pressure condition. FDNY policy dictates that a member will be stationed with the Air C.A.R.T. whenever it is in operation, regardless of whether it is supplying tools or rescuers. This ensures additional safety for all operations.

A large, cast aluminum "D" handle permits easy maneuverability of the C.A.R.T. to any location. The two-piece design permits the main frame to be separated from the dolly section for convenience and easier portability. A stainless steel 3/8" eye bolt is located on the main frame and the unit easily can be lowered or raised in tight spaces or shafts when the main frame is separated from the dolly section.

The manifolds are identified and color-coded clearly for safety and ease of use. There are reflective-style decals for safety and visibility. The unit has a spring-loaded foot stand to operate the C.A.R.T. on inclines or unstable surfaces.

The C.A.R.T. can be used at confined space operations (see *WNYF*, 3rd/98, pages 6-9), hazardous materials incidents, extrication and accident scenes, industrial accidents, fires and rescue operations and SCUBA incidents.

With the many varied and unusual kinds of incidents that

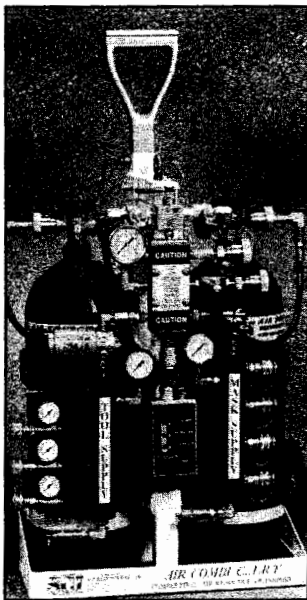
Rescue Companies respond to and operate at, the Air C.A.R.T. is an extremely beneficial addition to their arsenal of specialized equipment. When available, the Special Operations Command hopes to outfit all of its Squad Companies with this tool. *Note: The older C.A.R.T.s are being retrofitted with the additional manifold. Recently, six new Combi C.A.R.T.s were received and all new purchases will be the Air Source Combi C.A.R.T.*

About the Author...

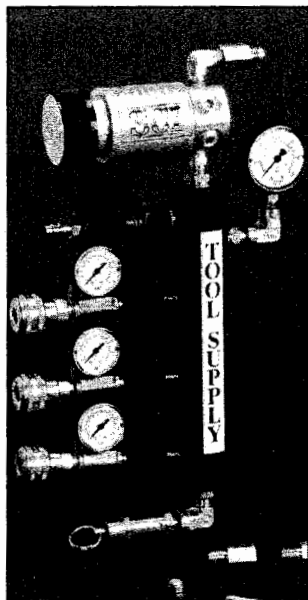
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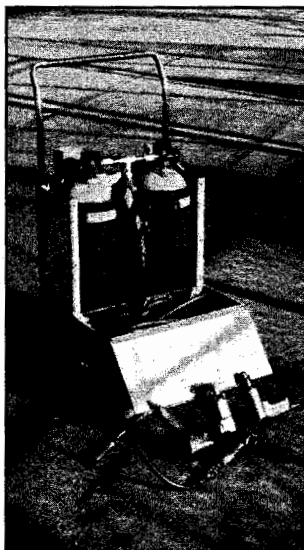
SOC member has his Scott SCBA supplied with air via the Air Source C.A.R.T.



Air Source Combi C.A.R.T. has two sets of manifolds—one for tool supply and one for mask supply for four rescuers.



Tool supply manifold can operate multiple tools simultaneously and independently of each other.



The older model Air Cart, used by the Rescue Companies in the 1990s. Here, it is used to operate a chisel.

all photos by
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