

CARLETON

TWIN-50 JUMP BOTTLE SYSTEM



- **Lightweight**
- **Thousands of systems in service**
- **Diluted oxygen**
- **35,000 ft. operational ceiling**

Application:

The Twin-50 Jump Bottle System is designed for military personnel parachutists for High Altitude Low Opening (HALO) or High Altitude High Opening (HAHO) jumps. The system is worn on the jumper. It supplies oxygen while preparing for exit, in freefall and under canopy.

Features:

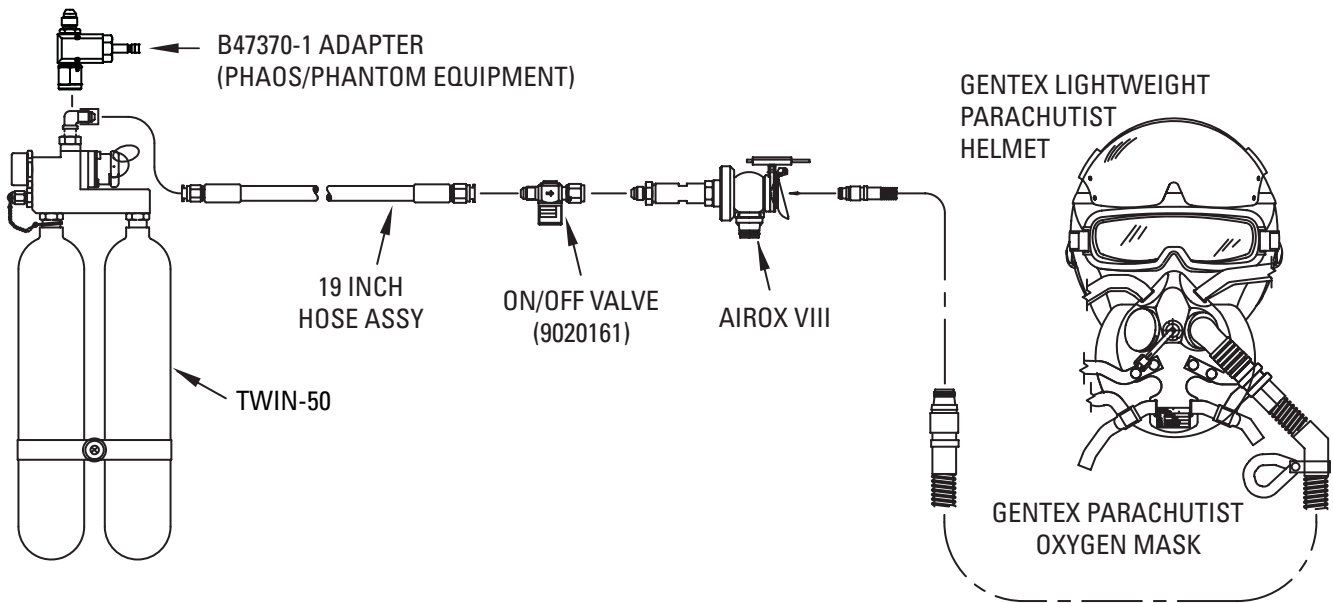
The Twin-50 Jump Bottle System is the HALO/HAHO industry standard having been in service for over 20 years. It consists of four lightweight component assemblies which are designed to deliver diluted oxygen to the parachutist. The oxygen cylinders (Twin-50 cubic inch) are attached to a pressure reducer assembly. This assembly is equipped with a relief valve, fill valve, pressure gauge and an oxygen flow On/Off toggle.

The hose assembly is typically 19 inches long and connects the Twin-50 oxygen system to the Airox VIII metering valve. There is an optional On/Off valve, which connects to the end of the hose assembly and is easily reached by the parachutist. This allows for convenient control of oxygen flow to the Airox VIII. Lastly, the Airox VIII oxygen metering valve supplies oxygen and ambient air, when required, to airborne personnel at flows of 8.2 to 9.3 slpm oxygen from a nominal inlet pressure of 50 psig.

The Twin-50 Jump Bottle System can also be modified for use with PHAOS and PHANTOM equipment by the addition of an outlet adapter (part number B47370-1).

SPECIFICATIONS

Twin-50 Jump Bottle System



All dimensions in inch (mm)

Specifications:

Medium	Oxygen
Cylinder Fill Pressure	2,100 psig (144.8 barg)
Peak inspiratory and expiratory flow	3.3 L (ATPD)/sec
Rate of change of Flow	20 L (ATPD)/sec ² at 3.3 L/sec
Alveolar Partial Pressure of Oxygen	> 60 mmHG at all times
Ergonomic design	Easily operated in darkened aircraft and when wearing bulky equipment, and cold weather clothing
Location on parachutist	Adjustable to procedural and physical characteristics of the parachutist

Operating Environment:

Temperature	-65 to 120 deg F (-54 to 49 deg C)
Humidity	0 to 100%, Non-condensing
Altitude	35,000 ft ceiling (10,668 m)

Non-Operating Environment:

Temperature	-65 to 160 deg F (-54 to 71 deg C)
Humidity	0 to 100%

Component Reference Numbers:

Twin-50	NSN 1660-01-384-6589
19 inch Hose Assy	NSN 4720-01-380-0640
On/Off Valve	NSN 4820-01-369-2915 (optional)
Airox VIII	NSN 1660-01-504-0977
Outlet Adapter for use with PHAOS/PHANTOM	P/N B47370-1