

Table Layout for Bio-Pak 240-S Contest

<p>Test Apparatus With Upper Housing And Hose Connector Installed</p>	<p>Mask Pencil & Paper</p> <hr/> <p>Test Kit</p>	<p>Upper Housing With Parts</p>	<p>Visual Apparatus</p>
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VISUAL APPARATUS CHECKS		TEST APPARATUS		
✓	<i>Check if ok</i>		CONNECTIONS	
	UPPER HOUSING		· Vent Valve Secondary Body - Hand Tight	
	LOWER HOUSING		· Vent Valve Primary - Hand Tight	
	· Harness Assembly		· Diaphragm Worm Gear - Wrench Tight	
	· External Gage		· Constant Add Restrictor - Wrench Tight	
	· O2 Regulator		· Breathing Hose Worm Gear - Wrench Tight	
	· Warning Whistle		· Tube Quick Disconnect Fittings - Hand Tight	
	BREATHING CHAMBER		· End Cap to Coolant Canister - Hand Tight	
	· Diaphragm		· Cylinder Connection - Hand Tight	
	· O-Ring and Sealing Edges		· Hose to Hose Adapters - Hand Tight	
	CYLINDER TEST		· Hose Adapter to Facepiece - Hand Tight	
	· Hydrostatic Test Date		· Test Fixture Connections - Hand Tight	
	· Cylinder Pressure on Gauge	✓	<i>Check if ok</i>	
	· Pressure Rating on Cylinder		HIGH PRESSURE LEAK TEST	
	CARBON DIOXIDE SCRUBBER		· Leak-Tec for One Minute	
	· Dents / Defects		CONSTANT FLOW TEST	
	· Lubrication of O-Ring		· Flow Between 1.64 and 2.4 Lpm	
	· Foam Pad Thickness / Coverage		State Final Reading	
	COOLANT CANISTER ASSEMBLY		LOW PRESSURE LEAK TEST	
	· Examine for defects		· 45 Degree for 2 Minutes	
	· Check O-Ring for damage		· Remove Key	
	FACE PIECE TEST			
	· Head Strap Assembly			
	· Mask Body	VI	C	VISUALS
	· Sealing Edges			
	· Speaking Diaphragm			
	· Lens			
	· Wiper or Anti-Fog Insert			
	· Defog Mask (Simulate)			
	HOSES			TEST APPARATUS
	· Sealing Edges			
	· Stretching of Hose for Pliability			
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BIOPAK 240-S

VISUAL APPARATUS (BREAK DOWN)

Upper Housing Assembly-Removed

Hoses-Removed

Breathing Chamber and Breathing Chamber Cover-Removed

Diaphragm and worm gear-Removed

Scrubber Assembly-Removed

Vent Valve Assembly (Primary & Secondary) Removed as a unit

Oxygen Cylinder-Removed

Loosen (But do not remove) Constant Add Restrictor

Coolant Canister Assembly-Removed with end cap off

STATEMENT TO BENCH CONTESTANT

The bench participant will be provided with two Bio-Pak 240-S apparatus (one disassembled, one assembled), a stopwatch, defogging solution, leak detector fluid, test kit, and tool kit. Only the tools and fluid provided will be used for testing and assembly of the apparatus. The work at the bench will consist of:

1. A visual examination of a disassembled Bio-Pak 240-S and the proper assembly and preparation for use in rescue work. This will include correcting any predetermined problem(s) so that the apparatus is in proper working order. Simulating defogging of the facepiece lens will be done as a part of the visual examination. This visual examination, correcting predetermined problem(s), and proper assembly can be done at any time allowed for the working of the problem.
2. Test the assembled Bio-Pak 240-S apparatus with a tester, and correct the predetermined problem(s) so that the apparatus is in proper working condition. Except for removing the coupler on the breathing hoses, the assembled Bio-Pak 240-S apparatus cannot be disassembled to look for problems, until the High pressure leak test is started. When testing is completed on the assembled Bio-Pak 240-S apparatus, the hoses shall be removed from the tester, connected to the facepiece, and the upper housing installed. This shall be done before the clock is stopped.

When an unplanned deficiency is encountered in the apparatus, the participant will be notified by the judge(s) that the deficiency is not part of the problem. The judge will stop the clock and any time used to correct the deficiency will not be charged to the working time.

A maximum of 30 minutes will be allowed to complete the problem. The judge will tell you when 29 minutes has passed. At the completion of the problem, the judge(s) and the participant will note the working time of the problem with the official timekeeper. Work done after the clock is stopped will not be recognized.