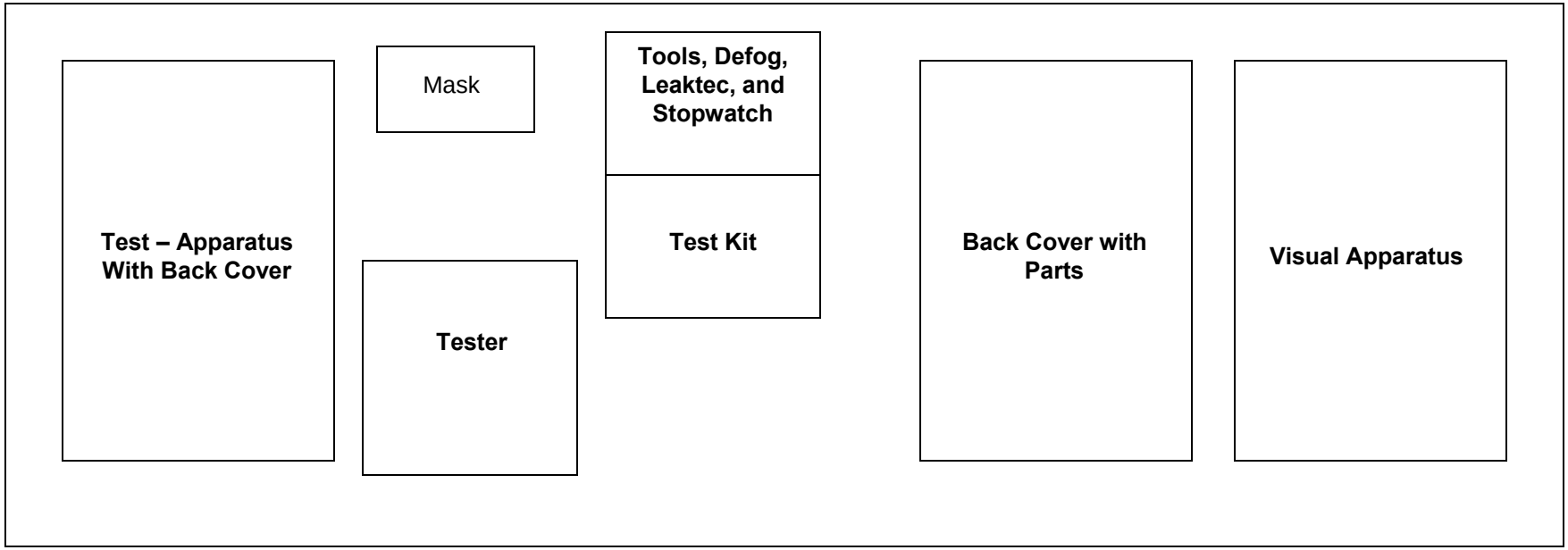
Table Layout for BG-4 Contest
2017 Contest Year



BG-4 BENCH CONTESTANT_____WORKING TIME_____MIN._____SEC.

VISUAL APPARATUS CHECKS		HAND TIGHT CONNECTIONS	
✓	*Check if ok*		· Cap on Drain Valve
	FRAME/HARNESS ASSEMBLY		· Drain Valve to Breathing Bag
	· Switchbox/Sentinel/Sealing Rings/O2 Reg/Anti-vibe		· Minimum Valve to Breathing Bag
	· Backcover		· Minimum Valve to O2 Supply Line
	BREATHING BAG		· Cylinder Connection
	· Sealing Surfaces		· Regenerative Canister Connections
	· Manipulate or Massage (pliability)		· Relief Valve to Regenerative Canister
	· Minimum Valve & Drain Valve		Crossover Hose Switchbox to Relief Valve
	· Lever		· Cooler to Breathing Bag
	· Springs		· Distribution Hose
	CYLINDER TEST		· Breathing Hoses
	· Hydrostatic Test Date		· Hose Adapter on RZ-25 or Test-It 6100
	· Cylinder Pressure on Gauge	TEST APPARATUS	
	· Pressure Rating on Cylinder	✓	*Check if ok*
	REGENERATIVE CANISTER		ZERO ADJUSTMENT ON TESTER
	· Check for Defects		LOW PRESSURE WARNING TEST
	· Sealing Surfaces		INHALATION VALVE TEST
	· Expiration Date or Screens/Filler Mats/Seal		EXHALATION VALVE TEST
	· Seal Strap with Tension Spring Hook		DRAIN VALVE TEST
	RELIEF VALVE		LEAK TEST with POSITIVE PRESSURE
	· Check for Defects		RELIEF VALVE TEST
	· Valve/O-Ring		· State Opening Pressure
	COOLER		HIGH PRESSURE LEAK TEST
	· Check for Defects		CONSTANT METERING VALVE TEST
	· Sealing Surfaces		· State Final Reading
	HOSES		MINIMUM VALVE TEST
	· Sealing Edges		· State Opening Pressure
	· Stretching of Hose for Pliability		BYPASS VALVE TEST
	COUPLING		LOW PRESSURE WARNING TEST
	· Sealing Surfaces		· State Warning Reading
	· Valve Discs		BATTERY TEST
	FACE PIECE TEST	VI	C VISUAL APPARATUS
	· Head Strap Assembly		
	· Mask Body		
	· Sealing Edges		
	· Speaking Diaphragm		
	· Lens		
	· Wiper		TEST APPARATUS
	· Defog Mask (Simulate)		

BG-4
VISUAL APPARATUS (BREAKDOWN)

Back Cover Removed
Hoses – Disassembled
Connector Removed
Inhalation – Exhalation Valves Removed
Cooler and Cooler Cap Removed
Relief Valve (Intact)
Lever Arm
Canister
Springs
Breathing Bag
O2 Bottle
Retainer Clip for Minimum Valve
Minimum Valve
Drain Valve (Intact)
Switchbox (Unlatched but still attached to lines)

BG-4 TOOL KIT

7mm – Open End/Box End
8mm – 10mm Combination
10mm – Open End
12mm – 14mm Combination
17mm – 19mm Combination
10mm – 11mm Offset Box
Flat Screwdriver
Phillips Screwdriver
Spanner Wrench
2mm – Allen Wrench
15mm – Open End
Dow-Corning 111
TORX – T-20
Reaction Ring Tool

STATEMENT TO BENCH CONTESTANT

The bench participant will be provided with two BG-4 apparatus (one disassembled, one assembled), an RZ-25 or Test-It 6100 tester, 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 BG-4 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 BG-4 apparatus with a tester, and correct the predetermined problem(s) so that the apparatus is in proper working condition. Except for removing the sealing cap from the coupling on the breathing hoses, and removing the cover shell, the assembled BG-4 apparatus cannot be disassembled to look for problems, until the hoses are attached to the tester, and the apparatus fails a test. When testing is completed on the assembled BG-4 apparatus, the hoses shall be removed from the tester, connected to the facepiece, and the back cover 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 25 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.