

FAILURE MODES AND EFFECTS ANALYSIS

NAME AND DRAWING	FUNCTION	FAILURE MODE AND CAUSE	MISSION PHASE	FAILURE EFFECT ON			FAILURE DETECTION	CORRECTIVE ACTION (IF APPROPRIATE)	CRIT. RISK	HAZARD SUMMARY
				END ITEM	MISSION	CREW/VEHICLE				
111 CO ₂ Cylinder 500-66100190	CO ₂ filled cylinder at 1800 psi for inflation of 180 LRU	1.1.1 Mode: External leakage Cause: • Stress Corrosion • Weld cracks	Initial Descent	Loss of one CO ₂ inflation system	N/A*	Possible loss of crewmember if second CO ₂ bottle and seal inflation assembly fails	None	Manually inflate cylinder Priority Priority	0.00	Noe ground rules Provide oxygen breathing and survival inflation system to around CO ₂ cylinder system as a safety redundancy
		1.1.2 Mode: Rupture Cause: • Material failure	Initial Descent	Loss of one CO ₂ inflation system	N/A*	Possible loss of crewmember if second inflation system or seal inflation system fails	Visual	Manually inflate cylinder Priority Priority	0.00	The location is described in the functional block
1.2	Manual Activation Assembly (6-011-1)	Manually activated to position CO ₂ bottle to inflate lower chamber of lirault	Recovery	Unable to inflate lower chamber	N/A*	Possible loss of crewmember if automated inflation of seal inflation assembly fails	Visual	Manually inflate lower chamber Priority Priority	0.00	The CO ₂ bottle automatically inflates if secondary cylinder is activated