

Description of component, subsystem, or function	Symptom (what?)	Effect (so what)	Failure mode (why?)	Probability of failure	Severity of effect	Risk priority	Remedial action
Hammer	Comes of rod pneumatics	Hits ground	Vibration causes it to slip of the rod	2	2	4	Extending the shaft and inclosing the frame
		Flys off	The impact moves it	1	2	2	Extending the shaft and inclosing the frame
	End falls off	Hits ground	Vibration causes it to slip of the rod	2	2	4	Lock-tight and inclosing the frame
		Flys off	The impact moves it	1	2	2	Lock-Tight and inclosing the frame
T_slot	Bends	disforms the frame	Impact moves the frame	3	1	3	
			Pendulum hits the frame	2	1	2	
	Fractures	Effects the structal integrity	Pendulum hits the frame	1	2	2	
Pneumatics	Overspins	Hammer hits the Frame	Coding error	1	2	2	Hard stops
	Doesn't work	Pendulum stays stationary	Coding error	1	1	1	
			Air not hooked up right	2	1	2	
Scope Mounting	Bends	Impact is not straight on	Impact moves the frame	2	2	4	Reinforce the mounting
	Releases	Scope gets damaged	Impact makes the bracket fail	1	2	2	
	Loosens	Impact gforce is decreased	Impact loosens the brackets	1	2	2	Lock-tight and vibration damping

		Very				
		Probable	Probable	Occasional	Remote	Improbable
		5	4	3	2	1
Catastrophic	4	20	16	12	8	4
Critical	3	15	12	9	6	3
Marginal	2	10	8	6	4	2
Negligible	1	5	4	3	2	1

Severity of Effect

Catastrophic The failure causes substantial damage to the product itself or related items (including people), requiring repair.

Critical The failure causes significant damage to the product itself or related items, requiring repair.

Marginal The failure causes some damage to the product itself or related items, potentially requiring repair.

Negligible The failure causes no significant damage.

Probability of Failure

Very

Probable	Every time	5
Probable	Most times	4
Occasional	Observed multiple times during the project.	3
Remote	Might be possible during the project.	2
Improbable	Maybe observed once during the project or predicted to happen after hand off.	1