

Potential Failure Modes	Potential Effects of Failure	Potential Causes of Failure	Severity	Probability	Rank	Recommended Action
Pipes/Connections Fail/Leak Excessively	Inaccurate Test	Materials not robust enough	3	1	3	Choose correct materials/ Do stress/fatigue calculations
	Loss of Test Control	Premature wear from vibrations	2	1	2	Add vibration dampeners if necessary
	Failure to Meet Operating Standards	Sudden, large increases in pressure	3	2	6	Pressure control system/ Robust enough to withstand max pressure
Not able to connect to all enclosures	Unable to complete test	End connection not able to reach enclosure	1	1	1	Use flexible hose that is long enough to reach all enclosure connection points
	Failure to Meet Operating Standards	Incompatible end connection	1	1	1	Use adapter that has compatible connector
Connections Do Not Line Up	Unable to complete build	Over or under tightening of pipes	3	1	3	Use thread sealant to allow pipes to be turned to correct angles
	Valve Stem Unable to connect to motor	Incorrect lengths of pipes	3	1	3	Use coupling that allows for misaligned shafts
Incompatible Pipe/Component Connections	Unable to complete build	Components do not have standard connections	3	1	3	Select Compatible Components
	Failure to Meet Operating Standards		3	1	3	Use adapter that has compatible connector