

FAILURE MODES AND EFFECTS ANALYSIS

ASSY NOMENCLATURE SIDE HATCH SAFETY LOCK
ASSY P/N 31127R02302

SYSTEM
SUBSYSTEM

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NAME AND DRAWING	FUNCTION	FAILURE MODE AND CAUSE	MISSION PHASE	FAILURE EFFECT ON			FAILURE DETECTION FLIGHT GROUND	CORRECTIVE ACTION TIME AVAILABLE TIME REQUIRED	CRIT. H/F	HAZARDS/REMARKS
				END ITEM	MISSION	CREW/VEHICLE				
REFERENCE #0 PIP P/N (1) NR51331C2006	Holds cap on clamps	Mode: A) Cannot insert pip pin Cause: • Contamination • Material failure	Orbit	Cannot secure cap on clamps, safety lock cannot be installed	N/A*	Possible loss of crew if lock tab is inadvertently moved to unlock, and side hatch is accidentally opened	Visual by crew	Use suitable root or tape to secure safety lock	MIR	The lock tabs would still prevent the side hatch from opening if the safety lock could not be installed
		Mode: B) Cannot remove pip pin Cause: • Contamination • Material failure	Orbit & Ground	Cannot remove side hatch safety lock to open side hatch	N/A*	Possible loss of crew if side hatch or flight deck overhead window cannot be opened for emergency egress	Visual by crew	Use flush saw or bone saw to cut pip pin and use pliers to remove safety lock. Egress via flight deck mainlined port window using egress devices	MIR	The side hatch can be ejected by the crew escape system as a last resort during severe emergencies