

## FAILURE MODES AND EFFECTS ANALYSIS

REFERENCE DESIGNATOR: GH-MFR-02  
 NAME / QUANTITY: Handhold Latches (2)  
 DRAWING REFERENCE: SED38129784-301

PROJECT: Orbiter  
 LRU NAME / QUANTITY: MFR (1)  
 LRU PART NUMBER: SED33107987-381

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 GFE  
 All Orbiters

FAILURE MODE NUMBER MFR-02	CRITICALITY 1R/3	FAILURE EFFECT	FAILURE DETECTION METHOD
<b>FUNCTION</b> The handhold latches are used to secure the handhold onto the MFR. The handhold latches allow the handholds to be installed or removed during EVA.		<b>END ITEM</b> Latches fail to operate properly.	<b>FLIGHT</b> Tactile.
<b>FAILURE MODE AND CAUSE</b> <b>MODE</b> Handhold fails to release after completion of EVA (latches fail closed).  <b>CAUSE(S)</b> 1. Binding or jamming 2. Contamination 3. Thermal distortion			<b>GROUND</b> Tactile.
<b>REUNDANCY SCREENS</b> A - Pass B - Pass C - Pass		<b>MISSION</b> None.	<b>CORRECTIVE ACTION</b> Release handholds via EVA release bolts or jettison MFR if unable to remove bolts.
<b>REMAINING PATHS</b> 1. Handhold can be released by contingency EVA bolts. 2. Jettison MFR can be performed when required for landing stowage.			<b>CREW / VEHICLE</b> Loose Hardware in Payload bay could impact crew or Vehicle. Possible loss of crew or vehicle.
<b>MISSION PHASE</b> EVA			<b>INTERFACE</b> None.
		<b>REMARKS</b> None.	
		<b>CORRECTIVE ACTION TIMES</b>	
		<b>TIME TO EFFECT</b>	<b>TIME TO CORRECT</b>
		Seconds	Minutes

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