

CRITICAL ITEMS LIST

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REFERENCE DESIGNATOR: _____
 NAME/QUANTITY: Knob/1
 DRAWING REFERENCE: 10149-20666

PROJECT: UARS
 LRU NAME/QUANTITY: PIR Payload Bay Attachment
 LRU PART NUMBER: 10149-10037-02

SUBSYSTEM: _____
 EFFECTIVITY: ALL ORBITERS

FAILURE MODE NO. UARS-FM-002	CRITICALITY Z/IR	FAILURE EFFECT	RETENTION RATIONALE
FUNCTION		END ITEM	<p>A. Design</p> <p>Sufficient interface tolerances are used to ensure proper operation.</p> <p>The knob is fabricated from aluminum and the shaft is stainless steel. This shaft interfaces with a titanium housing and bronze brushing.</p> <p>B. Test/Analysis</p> <p>Assembly will be functionally cycled to ensure proper operation. Knob has been thermally tested during certification testing per (TPS # 11590054).</p> <p>C. Inspection</p> <p>All piece parts will be inspected for conformance to the applicable drawings before and after any spec' process.</p> <p>PDA (Predelivery Acceptance) will be performed on all end items. Knob is checked for proper function and checked for whether it locks and unlocks without binding.</p> <p>All piece parts are cleaned and processed in ILC Cleaning, Packaging, Handling, Shipping, and Storage</p>
<p>Activates attachment jaws of clamp to secure PIR clamp to rail in order to deploy PIR at desired location.</p>		<p>Cannot remove clamp or release pin for PIR extension tube storage.</p>	
FAILURE MODE AND CAUSE		MISSION	
<p>Knob jaws closed in deployed position.</p> <p>Cause:</p> <ol style="list-style-type: none"> 1. Galling 2. Contamination 		<p>None</p>	
REUNDANCY SCREENS		CREW/VEHICLE	
<p>A - Pass B - N/A C - Pass</p>		<p>Unable to close PLB doors with double failure.</p>	
REMAINING PATHS		INTERFACE	
<p>Leave clamp attached to rail, remove PIR with Quick Release Pin.</p>		<p>None</p>	
MISSION PHASE	TIME TO EFFECT		
(VA)	Hours	Minutes	

PREPARED BY: Tom Frame

REVISION: _____

DATE: _____

DATE: _____

CRITICAL ITEMS LIST

REFERENCE DESIGNATOR: _____
 NAME/QUANTITY: Knob/1
 DRAWING REFERENCE: 10116-20666

PROJECT: UARS
 LRU NAME/QUANTITY: PCR Payload Bay Attachment
 LRU PART NUMBER: 10119-10037-02

SUBSYSTEM: _____
 EFFECTIVITY: ALL ORBITERS

FAILURE MODE NO. UARS-FM-002	CRITICALITY 2/IR	FAILURE EFFECT	RETENTION RATIONALE
FUNCTION		END ITEM	C. Inspection (cont.) Procedures for Space Shuttle Crew Equipment; Document #10107-70009. D. Failure History None. E. Ground Turnaround PDA/PIA will be performed on all end items. F. Operational Use 1. Operational Effect of failure None 2. Crew Action a. Remove PFR extension and slow. b. Try to remove clamp with 7/16" socket ratchet by driving the 7/16" interface on the knob to the point where the clamp can be removed. 3. Crew Training Crew is aware of failure and contingencies to overcome failure.
Activates attachment jaws of clamp to secure PFR clamp to rail in order to deploy PFR at desired location.		Cannot remove clamp or release pin for PFR extension tube storage.	
FAILURE MODE AND CAUSE		MISSION	
Knob jams closed in deployed position. Cause: 1. Galling 2. Contamination		None	
REDAUNDANCY SCREENS		CREW/VEHICLE	
A-Pass B-N/A C-Pass		Unable to close P/B doors with double failure.	
REMAINING PARTS		INTERFACE	
Leave clamp attached to rail, remove P/B with Quick Release Pin.		None	
MISSION PHASE	TIME TO EFFECT	TIME TO CORRECT	
I/A	Hours	Minutes	

PREPARED BY: Ron Brune REVISION: _____

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REVISION DATE: _____ DATE: _____

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 ATTACHMENT -
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CRITICAL ITEMS LIST

REFERENCE DESIGNATOR: _____ PROJECT: UARS
 NAME/QUANTITY: Knob/1 LRU NAME/QUANTITY: PPR Payload Bay Attachment Clamp Assembly SUBSYSTEM: _____
 DRAWING REFERENCE: 10176-21166b LRU PART NUMBER: 10159-10017-02 EFFECTIVITY: ALL ORDITEHS

FAILURE MODE NO. UARS-FM-002	CRITICALITY 2/IR	FAILURE EFFECT	RETENTION RATIONALE
FUNCTION		END ITEM	7. Operational Use (cont.) 4. Mission Constraints None, clamp is mounted on the rail which has been designed with half holes allowing interface with the sheer pin of the clamp. This prevents any sliding motion. The clamp has also been designed to withstand landing loads should it remain on the rail during landing. 5. In-Flight Checkout None
Activates attachment jaws of clamp to secure PFR clamp to rail in order to deploy PFR at desired location.		Cannot remove clamp or release pin for PFR extension tube stowage.	
FAILURE MODE AND CAUSE		MISSION	
Knob jaws closed in deployed position. Cause: 1. Galling 2. Contamination		None	
REUNDANCY SCREENS		CREW/VEHICLE	
A-Pass B-N/A C-Pass		Unable to close PLB doors with double failure.	
REMAINING PATHS		INTERFACE	
Leave clamp attached to rail, remove PFR with Quick Release Pin.		None	
MISSION PHASE	TIME TO EFFECT	TIME TO CORRECT	
I/A	Hours	Minutes	

PREPARED BY: Don Bruno REVISION: _____ DEDING DATE: _____ DATE: _____

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 ATTACHMENT
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