

CRITICAL ITEMS LIST (CIL)

SYSTEM:	Thermal Protection System	FUNCTIONAL CRIT:	1
SUBSYSTEM:	Components	PHASE(S):	b
REV & DATE:	J, 12-19-97	HAZARD REF:	T.02
DCM & DATE:			
ANALYSTS:	B. Burkes/R. Lauts		

FAILURE MODE: Loss of SLA Material

FAILURE EFFECT: b) Loss of mission and vehicle/crew due to structural failure caused by overheating resulting in fire/explosion due to improper separation.  
Loss of mission and vehicle/crew due to debris impacting Orbiter in critical areas.

TIME TO EFFECT: Seconds

FAILURE CAUSE(S): A: Material Deficiency  
B: Process Deficiency

REDUNDANCY SCREENS: Not Applicable

FUNCTIONAL DESCRIPTION: This ablative material protects the ET/SRB cable fairings from ascent thermal environments.

<u>FMEA ITEM CODE(S)</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY</u>	<u>EFFECTIVITY</u>
5.B.37.1	B0971009442	Fairing, ET/SRB Aft, SLA Appl	2	WT-54 & Up

REMARKS:

CRITICAL ITEMS LIST (CIL)  
CONTINUATION SHEET

SYSTEM: Thermal Protection System  
SUBSYSTEM: Components  
FMEA ITEM CODE(S): 5.8.37.1

REV & DATE: J, 12-19-97  
DCN & DATE:

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RATIONALE FOR RETENTION

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STP1506, 3001 and 3003 are applicable to this FMEA Item Code. See Page 1 for Retention Rationale specified by these STP's. The following additional Retention Rationale is also applicable to this FMEA Item Code:

DESIGN:

No additional Rationale for Retention is applicable.

TEST:

The Aft ET/SRB Fairing SLA Application is certified. Reference NCS's MMC-ET-TM08-L-T016 and T305. Refer to the NCS(s) for effectivity data applicable to specific part numbers and material type.

INSPECTION:

No additional Rationale for Retention is applicable.

FAILURE HISTORY:

Current data on test failures, unexplained anomalies and other failures experienced during ground processing activity can be found in the PRACA data base.