

CRITICAL ITEMS LIST (CIL)

SYSTEM: ASI  
 SUBSYSTEM: Intertank  
 REV & DATE: J, 12-19-97  
 DCN & DATE:  
 ANALYSTS: H. Keefe/E. Howell

FUNCTIONAL CRIT: 1  
 PHASE(S): b  
 HAZARD REF: S.11

FAILURE MODE: Structural Failure  
 FAILURE EFFECT: b) Loss of mission and vehicle/crew due to ET structural failure or debris source to orbiter.  
 TIME TO EFFECT: Immediate  
 FAILURE CAUSE(S): Improper Manufacture  
 REDUNDANCY SCREENS: Not Applicable  
 FUNCTIONAL DESCRIPTION: Provides environmental protection to lines and cables from intertank to LH2 cable tray.

<u>FMEA ITEM CODE(S)</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY</u>	<u>EFFECTIVITY</u>
4.2.8.1	80911001371-009	LH2 Cable Tray Fairing Assy	1	LWT-54 & Up

REMARKS:

CRITICAL ITEMS LIST (CIL)  
CONTINUATION SHEET

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RATIONALE FOR RETENTION

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DESIGN:

The LH2 cable tray fairing is constructed from aluminum sheet. Materials selected for this part number are in accordance with MMC-ET-SE16 which assures repetitive conformance of composition and properties. The LH2 cable tray fairing and attachment hardware are designed to the required ultimate safety factor of 1.4 (ET Stress Report 826-2188).

TEST:

The LH2 Cable Tray Fairing Assy is certified. Reference HCS MMC-ET-TM08-L-S010 (LWT-54 thru 88) and HCS MMC-ET-TM08-L-S514 (LWT-89 & Up).

INSPECTION:

Vendor Inspection - Lockheed Martin Surveillance:

Verify materials selection and verification controls (MMC-ET-SE16 and drawing 80911001371).

Inspect dimensional conformance (drawing 80911001371).

MAF Quality Inspection:

Verify installation and witness torque (drawing 80911041429).

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.