SUBSYSTEM NAME: EPD&C - LANDING GEAR CONTROL
REVISION: 6 03/30/92

PART DATA

	PART NAME / VENDOR NAME	PART NUMBER / VENDOR NUMBER
LRU	: PANEL R4	V070-730278
SRU	: RESISTOR	RWR80S1211FR

EXTENDED DESCRIPTION OF PART UNDER ANALYSIS:
RESISTOR, LG/NWS HYDRAULIC SYSTEM AUTO 1/2 MDM STATUS (1.2K, 2W)

REFERENCE DESIGNATORS: 32V73A4A1R1

QUANTITY OF LIKE ITEMS: 1
ONE

FUNCTION:
PROVIDES CURRENT LIMITING BETWEEN CONTROL BUS BC1 AND MDM, AND ISOLATION ABOVE GROUND BY 1.2K OHMS.

FAILURE MODES EFFECTS ANALYSIS FMEA -- CIL FAILURE MODE

NUMBER: 05-6BA-2365-IM- 02

REVISION#: 7 07/01/99

SUBSYSTEM NAME: EPD&C - LANDING GEAR CONTROL
LRU: PANEL R4
ITEM NAME: RESISTOR

CRITICALITY OF THIS FAILURE MODE: 1R3

FAILURE MODE:
SHORT (END TO END)

MISSION PHASE:
LO LIFT-OFF
OO ON-ORBIT
DO DE-ORBIT

VEHICLE/PAYLOAD/KIT EFFECTIVITY:
102 COLUMBIA
103 DISCOVERY
104 ATLANTIS
105 ENDEAVOUR

CAUSE:
STRUCTURAL FAILURE (MECHANICAL STRESS, VIBRATION), CONTAMINATION, ELECTRICAL STRESS, THERMAL STRESS, PROCESSING ANOMALY

CRITICALITY 1/1 DURING INTACT ABORT ONLY? NO

REDUNDANCY SCREEN
A) FAIL
B) N/A
C) PASS

PASS/FAIL RATIONALE:
A)
FAILS SCREEN "A" BECAUSE RESISTOR SHORT (END TO END) IS NOT CAPABLE OF BEING TESTED DURING GROUND TURNAROUND.

B)
SCREEN "B" IS "N/A" SINCE THIS RESISTOR IS CONTAINED WITHIN A STANDBY SYSTEM.

C)

- FAILURE EFFECTS -

(A) SUBSYSTEM:
LOSS OF ISOLATION BETWEEN CONTROL BUS BC1 AND MDM

(B) INTERFACING SUBSYSTEM(S):
FIRST FAILURE - NO EFFECT

(C) MISSION:
FIRST FAILURE - NO EFFECT

(D) CREW, VEHICLE, AND ELEMENT(S):
FIRST FAILURE - NO EFFECT

(E) FUNCTIONAL CRITICALITY EFFECTS:
SUBSEQUENT FAILURE (LG/NWS SWITCH SHORTS TO GROUND) CAUSES LOSS OF CONTROL BUS BC1. LOSS OF EITHER CONTROL BUS BC3 OR CA2 CAUSES LOSS OF THE NLG EXTENSION PYRO ASSIST CAPABILITY RESULTING IN POSSIBLE LOSS OF CREW/VEHICLE.

-DISPOSITION RATIONALE-

(A) DESIGN:
REFER TO APPENDIX E, ITEM NO. 3 - RESISTOR, WIRE WOUND

(B) TEST:
REFER TO APPENDIX E, ITEM NO. 3 - RESISTOR, WIRE WOUND

GROUND TURNAROUND TEST
NONE

(C) INSPECTION:
REFER TO APPENDIX E, ITEM NO. 3 - RESISTOR, WIRE WOUND

(D) FAILURE HISTORY:
CURRENT DATA ON TEST FAILURES, FLIGHT FAILURES, UNEXPLAINED ANOMALIES, AND OTHER FAILURES EXPERIENCED DURING GROUND PROCESSING ACTIVITY CAN BE FOUND IN THE PRACA DATA BASE.

(E) OPERATIONAL USE:

CORRECTIVE ACTION IN THE EVENT OF A FAILURE IS NONE

- APPROVALS -

EDITORIALLY APPROVED	: BNA	: J. Kimura 7/6/99
TECHNICAL APPROVAL	: VIA APPROVAL FORM	: 96-CIL-011_05-6BA(2)