

SSTD Incoming Inspection Report

Spacecraft/Project **HERSCHEL / SPIRE**

Document Number **SPIRE-RAL-REP-003017**

Issue **1**

Sub System **DPU**

Date **05-Dec-07**

Model **EM**

INCOMING INSPECTION REPORT

FROM
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TO
Project Rutherford Appleton Laboratory Space Science and Technology Department Chilton DIDCOT OXON OX11 0QX

Applicable sections	
Containers	Yes
External Visual Inspection	Yes
External Connector	Yes
Documentation	No
Verification of Interfaces	No
Extra Comments Sheets	Yes

Drawings / Documents Attached

INSPECTION CONDUCTED BY

WITNESS BY

NAME
Dion Dawson (PA)

DATE
05/12/2007

NAME

DATE
05/12/2007

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CONTAINER INSPECTION

TRANSPORT CONTAINERS EXTERNAL CONDITION	REMARKS	Status
Mechanical damage to container fasteners, locks, clips or handling provisions		None
Security / Locking Fitted		None
Markings for destination and description		Checked
Warning labels relating to handling lifting and stacking limits		Checked
Any additional Comments		

TRANSPORT CONTAINERS INTERNAL CONDITION	REMARKS	Status
Check Mounting fixtures fitted internal packaging		N/A
Internal padding / packaging required	Packed with grey foam inside tough plastic case.	Checked
Mounting provisions secure		N/A
Any additional Comments	The grey foam tended to shed particles. No shock sensors fitted.	See Remarks

ENVIROMENTAL MONITORS						
<u>Temp Monitors</u>		<u>Humidity Monitors</u>		<u>Shock Sensors Triggerd Information</u>		
Fitted:	<input type="text" value="No"/>	Fitted:	<input type="text" value="No"/>	5g	10g	15g
Condition:	<input type="text"/>	Condition:	<input type="text"/>	25g	50g	
				X Axis		
				Y Axis		
				Z Axis		

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INSTRUMENT VISUAL INSPECTION

CHECK LIST	REMARKS	RESULTS
Contents against shipping list		N/A
Instrument label		Acceptable
Note status of external contamination	Dusty	See Remarks
Degradation of paintwork or Coating?		None
Fasteners correctly locked?		N/A
Check protective covers are correctly labelled and fitted?		None
Additional Comments		

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INSPECTION OF ALL CONNECTORS

CHECK LIST	REMARKS (LIST CONNECTOR NUMBERS)	RESULTS
Pin Alignment	Flight quality parts not fitted	See remark
Damaged Sockets		None
Internal Debris	Dust seen inside connectors	See remark
Connector Covers fitted	Connectors were unprotected	See remark
Connector Savers Fitted		None
EMC Covers Fitted		None
RED Tag Item / Green Tag Items fitted		N/A
Additional Comments		None

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DOCUMENTATION CHECK LIST

Check	REMARKS	RESULTS
End Item Data Pack		N/A for this inspection
Transportaion Documents		N/A for this inspection
Packing un- Packing instructions		N/A for this inspection
Additional Comments		

Verification of Interfaces

Mechanical interface: dimensions specified in the interface control documents such as mass, flatness of surfaces, location of fixing holes and overall dimensions should be measured accurately and recorded. Record Test Report Number, or confirm that measurement result is included in delivery documentation, (EIDP).

INSPECTION / TEST REPORT NUMBER	CHECKED N/A for this inspection
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Electrical interfaces: verifying the location and types of connectors against interface control document is normally carried as part of mechanical verification, confirm this has been done. Functional testing: final functional test report number should be noted.

INSPECTION / TEST REPORT NUMBER	CHECKED N/A for this inspection
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SSTD Incoming Inspection Report

Spacecraft/Project	HERSCHEL / SPIRE
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Document Number	SPIRE-RAL-REP-10
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Issue	1
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Sub System	DPU
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Date	05-Dec-07
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Model	EM
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EXTRA COMMENT SHEET

The DPU CFM 2 was supplied packaged inside the transportation box with gray foam that left particles on the outer wrapping on the unit. There were no shock indicators, temperature or humidity detectors inside the package.

The DPU was supplied with a single layer of ESD wrap, which contained two tears and one end was left open. The unenclosed state had led to particulate contamination of the DPU. There were no ESD covers on any of the connectors, so particles were also present inside the connectors.

ESD protective covers were placed on the connectors in the RAL clean room prep-area with ESD precautions in place.

The DPU will need vacuum cleaning and black light inspection before use in RAL clean rooms.

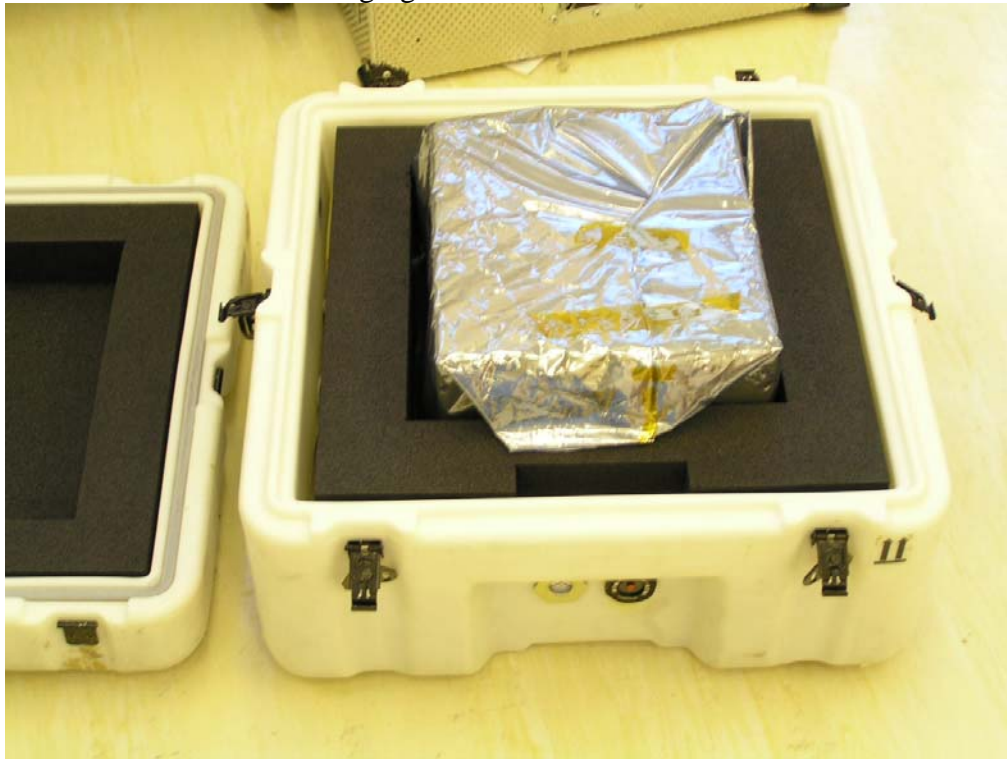
SPIRE DPU Incoming Inspection 5 Dec 07
Top of transportation container as delivered



Transportation container as delivered – no shock indicators.



Packaging of DPU inside container



Single layer of wrapping – open end allows dust contamination to enter



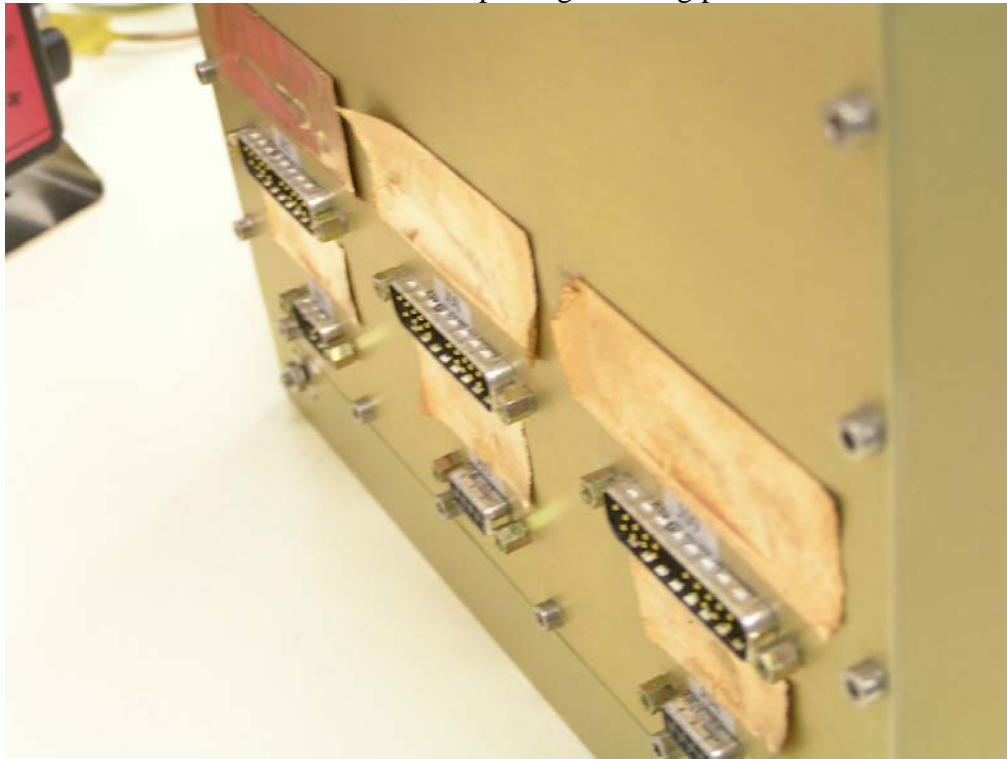
Tare in the wrapping at the base



Label on the DPU



Uncovered connectors and peeling blanking plates on DPU



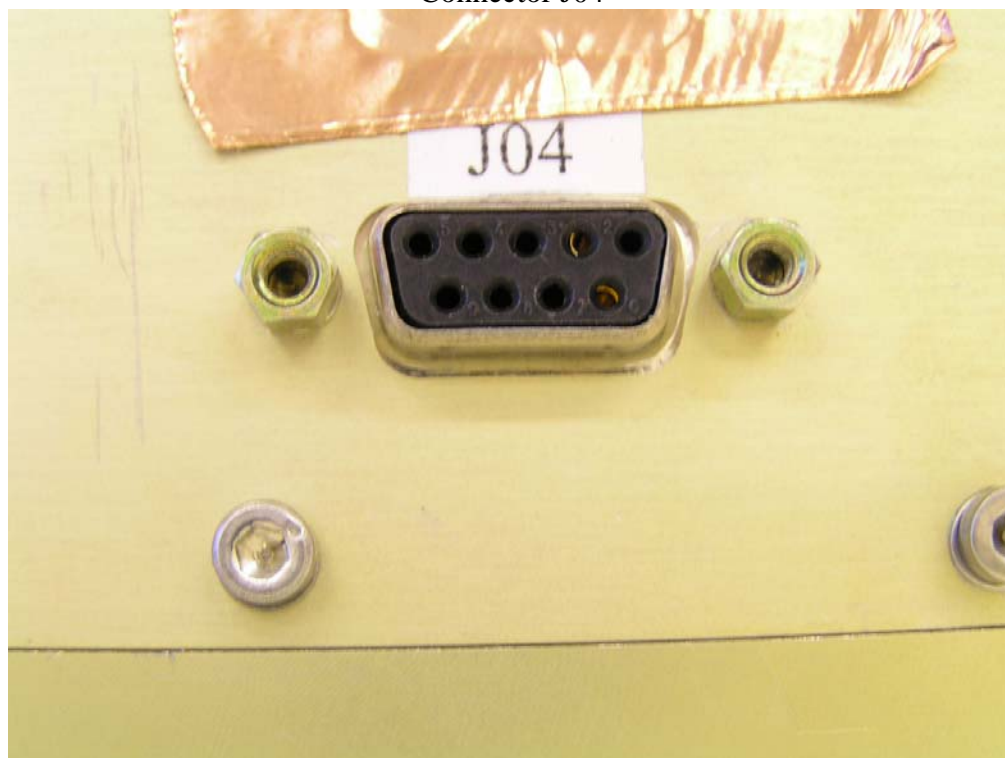
ESD covers put on at RAL



Connector J09 – Note: all connectors showed dust contamination



Connector J04



Connector J03



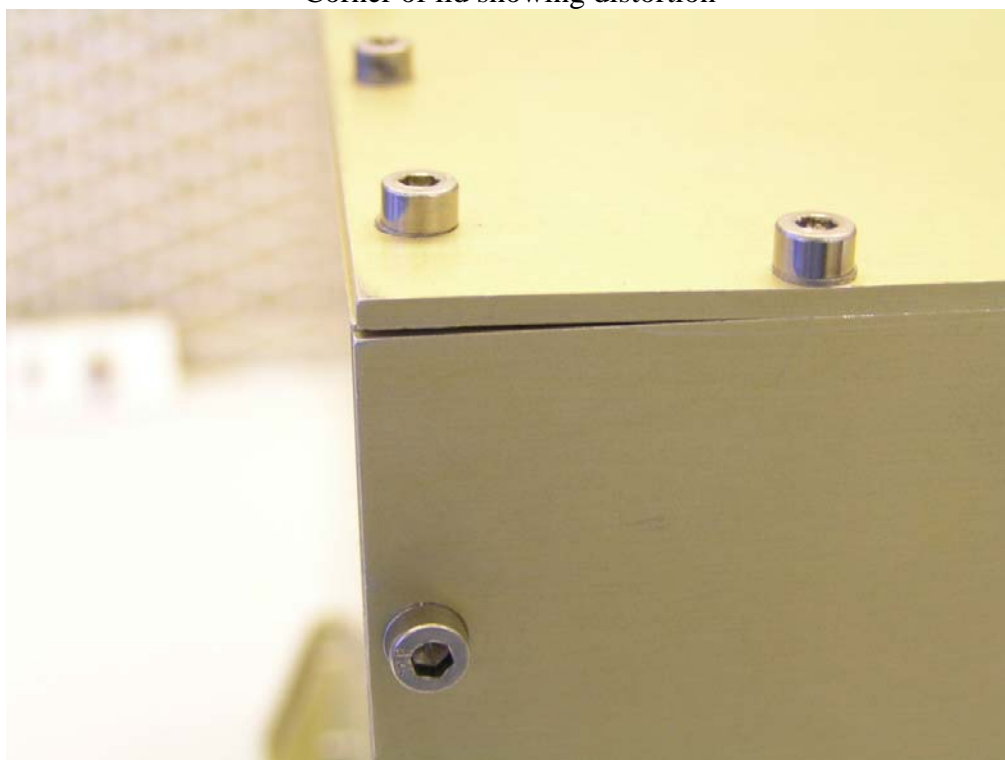
Connector J08



Connector J07



Corner of lid showing distortion



Misalignment of the side of the box at the lid

