



**INCOMING / OUTGOING INSPECTION REPORT**

**PRODUCT ASSURANCE**  
Space Science and Technology Department

<b>Spacecraft/Project</b>	HERSCHEL	<b>Document No</b>	SPIRE-RAL REP-001773		
<b>Instrument/Model</b>	SPIRE / CQM	<b>Issue No</b>	1	<b>REV</b>	0
<b>Subsystem</b>	BDA	<b>Date</b>	12 Sep 03 Completed 16 Sep 03		

***Report at receipt/delivery or other major movement of instrument/hardware and associated GSE.***

<b>Inspection Report</b>	<b>Incoming</b>
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FROM	TO
<p>JPL USA</p>	<p>SPIRE SSTD RAL</p>

<i>Inspection conducted by</i>		<i>Witnessed by (Product Assurance)</i>	
Name	Signature / Date	Name	Signature / Date
<p>1<sup>st</sup> Part Eric Sawyer</p> <p>2<sup>nd</sup> Part MARK from JPL</p>		<p>Eric Clark</p>	

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## INTRODUCTION

This inspection report shall be completed for formal transfers of hardware between RAL and customers, agencies or collaborating organisations

The following must be inspected:

<b>Documentation</b>	<b>SECTION</b>	<b>1</b>
<b>Containers</b>		<b>2</b>
<b>Visual Inspection of Hardware</b>		<b>3</b>
<b>Interface Verification</b>		<b>4</b>

Each section contains a checklist that shall be completed.

Unused boxes should have N/A entered.

Deviations e.g. items not delivered or incomplete documentation must be noted in the comments column.

For previously agreed deviations refer to the Delivery Review Board (DRB) minutes of meeting (MOM) or similar.

**NCR's must be raised for other deviations, damage or defects noted.**

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## SECTION 1: DOCUMENTATION

Documentation shall be checked for completeness, any items not received or to be delivered later should be noted.

**Note 1:** The delivery review board minutes should list outstanding items, e.g. open work, open NCRs and Waivers etc. A copy should accompany or form part of the EIDP. If there is no EIDP then it should be referenced on this report.

**Note 2:** All items dispatched from the Laboratory must have a Dispatch Note completed and signed, with a copy filed in the appropriate section of the EIDP.

<b>No.</b>	<b>Procedure</b>	<b>Comments (Include NCR Number if applicable)</b>	<b>Check N/A or ✓</b>
1.1	Is the documentation complete	<b>EIDP delivered with BDA is still under review</b>	
1.2	Is the accompanying documentation compliant with project requirements	<b>No unpacking instructions were attached to the outside of the shipping container</b>	
1.3	Note DRB/MoM Document Number, minutes and note any discrepancies with respect to agreements recorded. OR attach copy of minutes.	<b>The Delivery review board will take place soon and is likely to cover delivery's to date not just this one</b>	
1.4	Additional Remarks	<b>The item is bagged &amp; packed in a foam lined container in a clean room, this container is also bagged then placed in another foam lined metal container with the EIDP. This container is then placed in the cardboard shipping container, also filled with Foam moulded to fit the metal box, and placed on a pallet and shipped. Unpacking is the reverse of this.</b>	

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## SECTION 2: INSPECTION OF CONTAINERS

### Outer Container (Cardboard Box)

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
<b>Transport Containers – External condition.</b>			
2.1	Inspect the outside of the containers for obvious mechanical damage: Cracks, fasteners/locks clips, physical damage, dents or scratches etc. Handling provisions, Other damage		✓
2.2	Markings for description and destination		✓
2.3	Packing / unpacking instructions	<b>None supplied</b>	
2.4	Warning labels relating to handling, lifting, stacking limits		
2.5	Additional Remarks Check security of container		✓
<b>Transport Containers – Internal condition</b>			
2.6	Check environmental monitors such as humidity indicators, shock recorders and record the location and readings on the inspection		<b>N/A</b>
2.7	Check mounting fixtures or brackets and screws, padding and packing.		✓
2.8	Additional Remarks Check security of container		✓

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**SECTION 2: INSPECTION OF CONTAINERS**  
**1<sup>st</sup> inner case (White Metal Box)**

<b>No.</b>	<b>Procedure</b>	<b>Remarks (Include NCR Number if applicable)</b>	<b>Check N/A or ✓</b>
<b>Transport Containers – External condition.</b>			
2.1	Inspect the outside of the containers for obvious mechanical damage: Cracks, fasteners/locks clips, physical damage, dents or scratches etc. Handling provisions, Other damage	<b>Right Hand side (viewed from front) Hinge bent. Both Hinge pins partially out.</b>	
2.2	Markings for description and destination		<b>N/A</b>
2.3	Packing / unpacking instructions	<b>None</b>	
2.4	Warning labels relating to handling, lifting, stacking limits		<b>N/A</b>
2.5	Additional Remarks Check security of container		✓
<b>Transport Containers – Internal condition</b>			
2.6	Check environmental monitors such as humidity indicators, shock recorders and record the location and readings on the inspection	<b>Tilt Monitor OK</b>	✓
2.7	Check mounting fixtures or brackets and screws, padding and packing.		✓
2.8	Additional Remarks Check security of container		✓

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## SECTION 2: INSPECTION OF CONTAINERS

### 2<sup>nd</sup> Inner case (Blue Case)

<b>No.</b>	<b>Procedure</b>	<b>Remarks (Include NCR Number if applicable)</b>	<b>Check N/A or ✓</b>
	<b>Transport Containers – External condition.</b>		
2.1	Inspect the outside of the containers for obvious mechanical damage: Cracks, fasteners/locks clips, physical damage, dents or scratches etc. Handling provisions, Other damage		✓
2.2	Markings for description and destination		N/A
2.3	Packing / unpacking instructions	<b>None</b>	
2.4	Warning labels relating to handling, lifting, stacking limits		N/A
2.5	Additional Remarks Check security of container		✓
	<b>Transport Containers – Internal condition</b>		
2.6	Check environmental monitors such as humidity indicators, shock recorders and record the location and readings on the inspection		N/A
2.7	Check mounting fixtures or brackets and screws, padding and packing.		N/A
2.8	Additional Remarks Check security of container		✓

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**SECTION 2: INSPECTION OF CONTAINERS**  
**3<sup>rd</sup> Inner case (RED Case)**

<b>No.</b>	<b>Procedure</b>	<b>Remarks (Include NCR Number if applicable)</b>	<b>Check N/A or ✓</b>
	<b>Transport Containers – External condition.</b>		
2.1	Inspect the outside of the containers for obvious mechanical damage: Cracks, fasteners/locks clips, physical damage, dents or scratches etc. Handling provisions, Other damage		✓
2.2	Markings for description and destination	<b>Spire BDA 1602980011 CQM PLW SNo 006</b>	✓
2.3	Packing / unpacking instructions	<b>None</b>	
2.4	Warning labels relating to handling, lifting, stacking limits		<b>N/A</b>
2.5	Additional Remarks Check security of container		
	<b>Transport Containers – Internal condition</b>		
2.6	Check environmental monitors such as humidity indicators, shock recorders and record the location and readings on the inspection	<b>10g Shock recorder tripped both Axis</b>	
2.7	Check mounting fixtures or brackets and screws, padding and packing.		
2.8	Additional Remarks Check security of container		

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### SECTION 3: VISUAL INSPECTION OF HARDWARE

Completed on 16<sup>th</sup> Sep with JPL present.

Insert one copy of the following section for each configuration item, OR Individual unit.

**Note:** Section 3 when used with the front sheet may be used as a complete report for small units prior to final closure, if this is done confirm unit interior check carried out before closure Interior check will be limited to visible items.

<b>CI NUMBER</b>	<b>Spire BDA 1602980011 CQM PLW</b>	<b>SERIAL NUMBER</b>	<b>006</b>
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No.	Procedure	Remarks (Include any NCR Numbers if Applicable)	Check N/A or ✓
3.1	Check contents against shipping list	<b>Only one item delivered</b>	✓
3.2	Note external contamination		✓
3.3	Inspect the outside for physical damage, cracks, dents, scratches		✓
3.4	Degradation of painting		N/A
3.5	Mounting provisions		✓
3.6	Fasteners correctly locked		✓
3.7	Check for protective covers on all electrical and fluid connectors and on optical and sensor apertures	<b>None fitted as per business agreement.</b>	✓



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**Check All Connectors**

<b>No.</b>	<b>Procedure</b>	<b>Remarks (Include NCR Number if applicable)</b>	<b>Check N/A or ✓</b>
3.8.1	Bent pins		✓
3.8.2.	Internal / external damage		✓
3.8.3	Internal debris		✓
3.8.4	Connector covers fitted	<b>None fitted as per business agreement</b>	✓
3.8.5	Connector savers in position	<b>None fitted as per business agreement</b>	✓
3.8.6	EMC Covers Fitted	<b>None fitted as per business agreement</b>	✓
3.8.7	<b>RED</b> tag items/covers fitted	<b>None fitted as per business agreement</b>	✓
3.8.8	Any other damage		✓

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**Check any harness and associated connectors associated with the Hardware**

<b>No.</b>	<b>Procedure</b>	<b>Remarks (Include NCR Number if applicable)</b>	<b>Check N/A or ✓</b>
3.9.1	Bent pins		N/A
3.9.2	Internal / external damage		N/A
3.9.3	Internal debris		N/A
3.9.4	Protection caps fitted		N/A
3.9.5	Connector Savers fitted		N/A
3.9.6	EMC Covers Fitted		N/A
3.9.7	<b>RED</b> tag items/covers fitted		N/A
3.9.8	Any other damage		N/A

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**Pre Closure Checks**

<b>No.</b>	<b>Procedure</b>	<b>Remarks (Include NCR Number if applicable)</b>	<b>Check N/A or ✓</b>
3.10.1	All internal units securely fastened locked		N/A
3.10.2	All internal connector fasteners locked		N/A
3.10.3	All cabling secure		N/A
3.10.4	No internal debris		N/A
3.10.5	Check packaging is correct		N/A
3.10.6	Shock recorders reset		N/A
3.9.7	Additional remarks		N/A

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## SECTION 4: VERIFICATION OF INTERFACES

**Confirm all required interface-checking activities have been carried out.**

- 4.1 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).
- 4.2 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.

<b>No.</b>	<b>Procedure</b>	<b>Remarks (Include NCR Number if applicable)</b>	<b>Check N/A or ✓</b>
4.1	Mechanical Interfaces Verification		
4.2	Electrical Interfaces Verification		