



Spacecraft/Project	HERSCHEL	Document No	SPIRE-RAL REP-001754		
Instrument/Model	SPIRE / CQM (SMEC & CM3)	Issue No	1	REV	0
Subsystem	LAM	Date	30 Jul 03		

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

<b>Inspection Report</b>	<b>Incoming / outgoing</b>	<b>SMEC &amp; CM3</b>
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<b>FROM</b>	<b>TO</b>
<b>LAM</b>	<b>RAL</b>

<b><i>Inspection conducted by</i></b>		<b><i>Witnessed by (Product Assurance)</i></b>	
<b>Name</b>	<b>Signature / Date</b>	<b>Name</b>	<b>Signature / Date</b>
<b>Eric Sawyer</b>		<b>Eric Clark</b>	



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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:

Documentation	SECTION	1
Containers		2
Visual Inspection of Hardware		3
Interface Verification		4

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.

No.	Procedure	Comments (Include NCR Number if applicable)	Check N/A or ✓
1.1	Is the documentation complete	<b>No Documentation with delivery, will be supplied at a later date</b>	N/A or ✓
1.2	Is the accompanying documentation compliant with project requirements		
1.3	Note DRB/MoM Document Number, minutes and note any discrepancies with respect to agreements recorded. OR attach copy of minutes.		N/A
1.4	Additional Remarks	<b>CM3 is the STM replacement</b>	



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## SECTION 2: INSPECTION OF CONTAINERS

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	None	
2.4	Warning labels relating to handling, lifting, stacking limits		✓
2.5	Additional Remarks Check security of container		N/A
<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	None	
2.7	Check mounting fixtures or brackets and screws, padding and packing.	<b>CM3 Mount Re HR-SP-RAL-NCR-042 Photographs Attached</b>	
2.8	Additional Remarks Check security of container		✓



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### SECTION 3: VISUAL INSPECTION OF HARDWARE

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.

CI NUMBER	SERIAL NUMBER
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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>No shipping List available.</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	<b>Se Section 2.7 (Re HR-SP-RAL-NCR-042)</b>	
3.6	Fasteners correctly locked		✓
3.7	Check for protective covers on all electrical and fluid connectors and on optical and sensor apertures		N/A



**INCOMING / OUTGOING INSPECTION REPORT**

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**Check All Connectors**

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
3.8.1	Bent pins		✓
3.8.2.	Internal / external damage		✓
3.8.3	Internal debris		✓
3.8.4	Connector covers fitted		✓
3.8.5	Connector savers in position		N/A
3.8.6	EMC Covers Fitted		N/A
3.8.7	RED tag items/covers fitted		N/A
3.8.8	Any other damage		✓



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Check any harness and associated connectors associated with the Hardware

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
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**

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
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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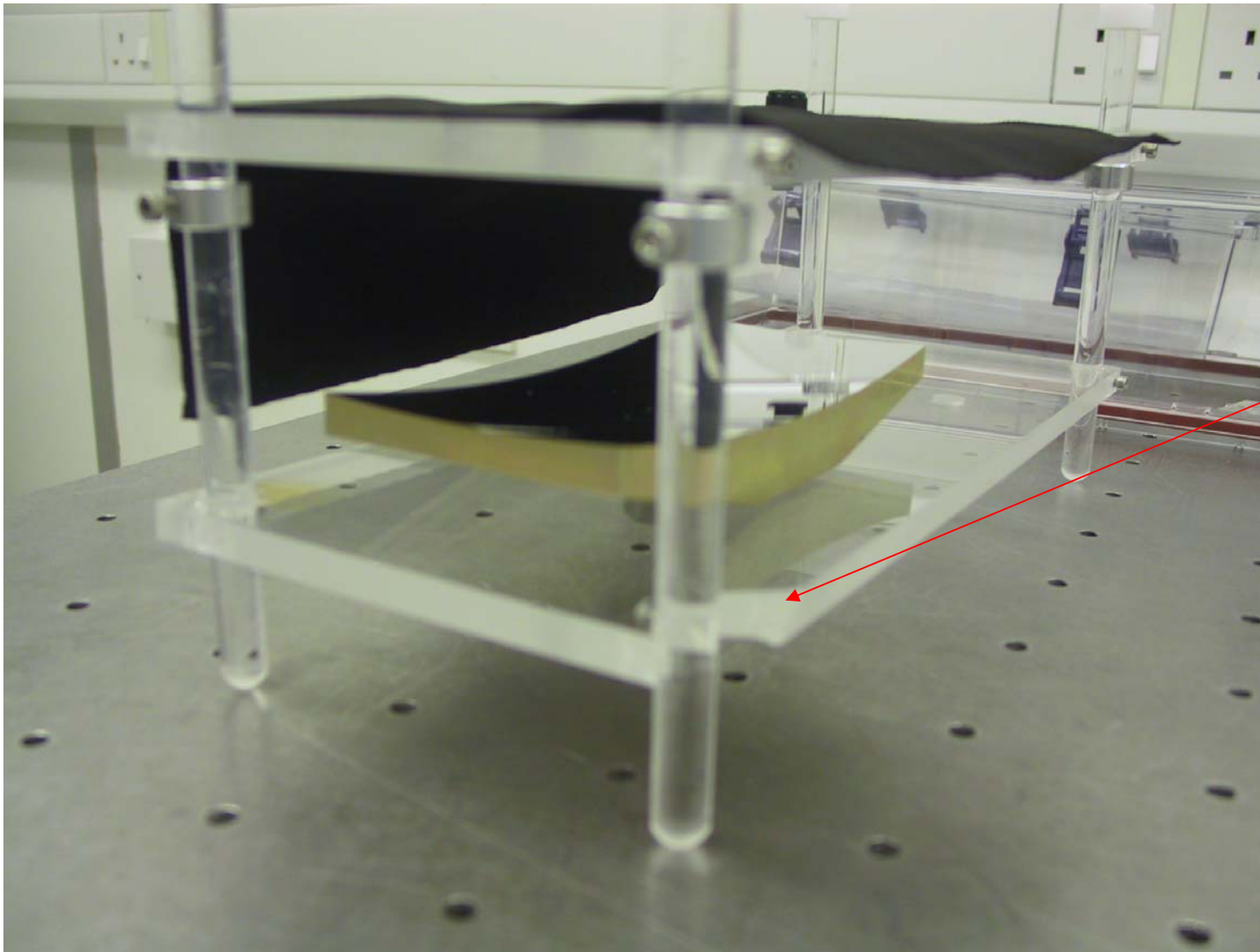
## SECTION 4: VERIFICATION OF INTERFACES

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.

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

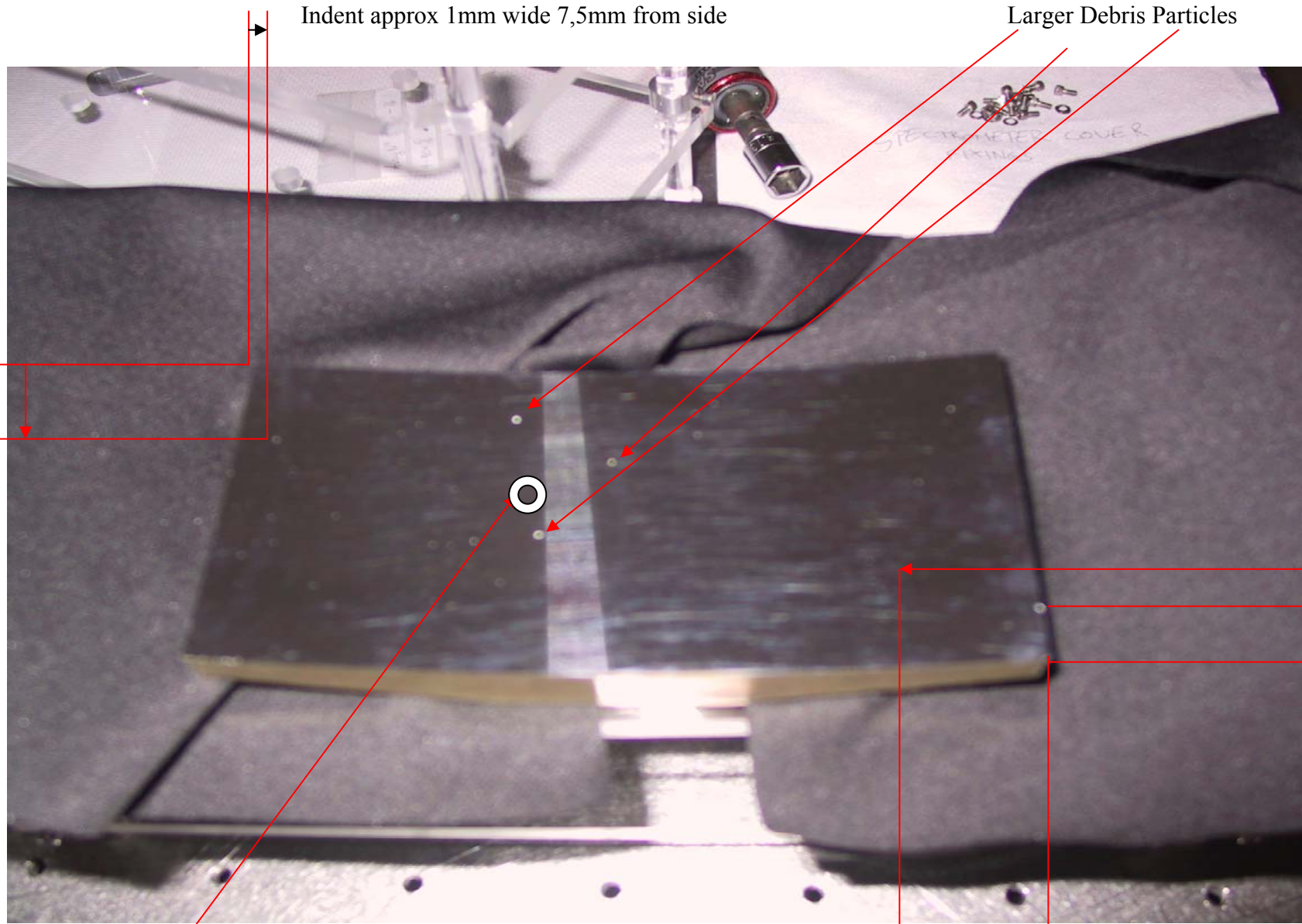
Photograph 1. CM3 Transit plate Damage ref HR-SP-RAL-NCR-042



Corner of Transit plate broken  
off loose in container.  
All other corners Cracked

Photograph 2

CM3 damage & Particle contamination ref HR-SP-RAL-NCR-042



Indent approx 1mm wide 7,5mm from side

Larger Debris Particles

19mm

Indent < 0.5mm wide  
16 mm  
10 mm

Dowel pin Position Left of centre

25mm