EADS ASTRIUM

SPIRE-AST-MOM-002622

Minutes of Meeting

Date:	11./12.01.2006	**Herschel**	
Doc.-No.:	HP-2-ASED-MN-1148		
Meeting place:	CASA, Madrid, E	Chairman:	J. Lang
Date/Time:	Date/Time 9°°	Secretary	W. Hund
Agenda dated:	Agenda dated 15.12.05	Close of Meeting:	12.1.06

Subject: SIH SPIRE SVM MIP PASE "B" CUTTING

Participants:	J .Lang W. Hund	Additional Distribution: see last sheet.
ASED		
CASA:	M. Esteban E. Zamora-Fernandez JJ. Llorente A. Sanchez } P.T.	

Page: 1 of Page(s)

☐ Brief-Minutes (except following sheets) ☐ Summary of Results of Sheets 2 till

Agenda: see Annex 1 standard for MIP's

Remark: All documents are controlled against CASA / ASED SIH Definition documents and listed on sheet 2 of MOM.

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Reference	Document Results	Remarks
§ 1	HP-2-CASA-TN-0003 Iss. 05 and 06 Draft on log sheets.	
	HP-2-ASED-TN-0085 Iss. 3.0	
	HP-2-ASED-IC-0016 Iss. 2.0	
	HP-2-ASED-ID-0083 Rev. A/B	
	Note: Rev. B is based on ASPI (ALS) CATIA 3D Models acc. Fax ref. H-P-ASP-LT-6851 and H-P-2-ASPI-LI-0309 Iss. 05	
	SPIRE SIH-SUM-PFM Asbuilt HP-2-CASA-AB-0020 Iss. 01	
	HP-2-ASED-ID-0091 Rev B	Interconnection diagram
	HP200CB2301 to 2313 P00 Bundle routing drawings	

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Reference	Results	Remarks
§ 1	CASA Documents of SPIRE SIH are based on HP-2-ASED-IC-0016 Iss. 2.0, latest received SPIRE cold + warm unit MICD's ref. SPIRE-RAL-DW00149 Iss. 12 Okt 05 (Annex 2 of SCI-PT-IIDB/SPIRE 02124) are handed in Annex 3 to CASA. This document have been controlled by ASED against the CATIA design and HP-2-ASED-ID-0083 Rev A/B, and no further deviation have been detected wrt. SIH related data. ↳ CASA to check their Mock up accordingly. (double crosscheck)	

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Reference	Results	Remarks
§ 2+5	Asbuilt status + Logsheet/Historical Record The SPIRE EICD iss. 2.0 content have been implement in the logsheets, therefore the CASA definition document HP-2-CASA-TN-0003 Iss. 05 have been updated to issue 06 Draft (=working copy), where Iss. 06 wile form As-built finally. • The crossdesked CASA documents are provided in Annex 3.	

Reference	Clarification Results	Remarks
§ 2+5	• Wire / cable abbreviation and cable type clarification between HP-2-ASED-TN-0085 Iss. 3.0 ; HP-2-ASED-IC-0016 iss. 2.0 and CASA logsheet and phase-A manufactured H/W is identified in Annex 4. ↳ CASA definition HP-2-CASA-TN-0003 Iss. 06 Draft is compliant to wiring list Iss. 2.0 and the manufactured H/W, because the SCC3901-019 03B cable have been used. ↳ ASED to correct HP-2-ASED-TN-0085 Iss. 03 according by for bundles SIH-SS-01 to -09.	=> § 9 OPW

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Reference	Results	Remarks
§ 3	NCR status list is provided in Annex 5.	
	All modified backshell types / adjusted during manufacturing of phase-A+B side will be collected in one summary CASA-NCR after phase-B completion. The backshell types are and getting controlled by ASED too prior implementation.	
	↳ ⓪ CASA raised HP121432-CASA-NC-1910 for same subject of NC-1153 on EQM. The PFM Harness shall be manufactured accordingly. => §6 OPW	see Annex 7
§ 4	No further RFD / RFW have been issued by CASA.	
§ 5	Filled in Procedures are getting issued after phase-B completion, but logsheets and historical records, see Annex 3.	
§ 7	Cleanliness status: PFM SIH-SPIRE is manufactured in the cleanroom. Manufacturing is still in progress. Mock up with routed c/H is cleaned by vac. cleaner.	

Reference	Results	Remarks
§ 6	Open work Open work is identified by ⇒ § 6 OPW with this MoM.	

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Reference	Results	Remarks
§ 8	H/W inspection • The SVM - SPIRE PFM bundles with wired phase-A connectors (= SVM - CB plug connectors) have been routed between upper closure panel and SVM internal warm units, FCU and DCU. • The FCU and DCU have been assembled with the connecter backshells, fixed to the screw lock assembly bolts, where the individual bundle is temporary fixed to the backshell for proper routing / length definition and phase-B manufacturing work. • The SVM I/F-CB Plug connectors plus all backshells mounted to it have been controlled by ASED plus the Routing on the upper closure panel towards each bundle to FCU + DCU.	

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Reference	H/W Inspection Results	Remarks
§8	Adjustments on the DCU I/F bundle light above +X DCU corner (max 85 mm) wrt. lateral panel tilting envelope have been performed by ASED.	
Note:	↳ CASA to take care during phase-B manufacturing not exceeding this envelope above the DCU connector I/F-Plane, see Annex 5.	
	• H/W inspection results are identified in Annex 3 too.	

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Reference	H/W Inspection Results	Remarks
§ 8	SPIRE FCU connector orientation are correct. Harness envelope of DCU (SPIRE) is within defined lateral panel tilting envelope; height 80 mm	

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Reference	Results	Remarks
§ 9	Procedure / Drawings for next update • CASA to provide SPIRE SVM bundle drawings ref. HP200 CK 2301 to 2313 to ASED. ⇒ • CASA to update these bundle routing drawings according lateral panel tilting envelope defined = routing stay-in areas until phase-B manufacturing is finished for EIDP and ASED integration PR establishment.	§ 6 closed on OPW ✓ 12.1.06 see Annex 6 § 6 OPW

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Reference	Results	Remarks
§ 10	AOB	
AI CASA 01	⊙ CASA to provide SPIRE SIH bundle length measured on Mockup routing, when cut for phase-B manufacturing and routing photos.	
	⊙ CASA to provide bundle diameters measured on bundles on top of SVM upper closure panel plus connector/backshell mass for bundles and phase-B cut bundles.	
AI CASA 02	⊙ CASA to finish control of phase-B connector wiring wrt. FCU/DCU connectors and provide their compliance, that all SPIRE SIH-SS-01 to 13 bundle definitions are in line with related NCRs issued and EICD 16 iss. 2.0.	
	• CASA to implement launch latch 312300 J01+J02 and interlink 312100 J1A+J1B	⇒ § 6 OPW

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Reference	Results	Remarks
§ 11	MIP Conclusion • The SPIRE FCU SIH-SUH-PFM is authorized for phase-B manufacturing after ASED clarification of optional ~~tuner~~ jumper Pin/Slot between inner and outer bundle overshield performed acc. EQM NCR-1153 and EQM EMC Test result. • The SPIRE DCU SIH-SVM is getting authorized after CASA AI02 closure.	• AIASED 03

Meeting: HP-2-ASED-MN-1148
Title: SIH SPIRE SVM PHASE "B" Cutting
Date: 11. / 12. 01.2006

Action Item List

Herschel

No.:	Description:	Due Date	Originator Comp./Pers.	Actionee Comp./Pers.	Source	Completion
01	CASA to provide SIH-SPIRE-SVM					
	bundle length, diameter and mass figures	20.1.06	Lang	Zamora		
	and routing photos to ASED					
02	CASA to finish logsheet corrections	20.1.06	Hund	Esteban		
	and to provide compliance confirma-					
	tion to ASED					
03	ASED to clarify need of EQM applied	20.1.06	Esteban	Hund		
	jumperleads between Inner and outer					
	bundle-shields at warm unit side.					

HP-2-ASED-MN- 1148 Annex 1

AGENDA : Mandatory Inspection Point

Agenda-Points :

1. Configuration Status List (CSL)
2. As-built Status
3. NCR Status
4. RFD/RFW Status
5. Filled-in Procedures / Log-Sheets / Historical records
6. Open Work
7. Cleanliness Status
8. Hardware Inspection
9. Procedures / Drawings for next activities
10. AOB
11. Conclusion / Release

HP-2-ASED-1148
Annex 2

CCLRC Rutherford Appleton Laboratory	SPIRE INTERFACE DOCUMENT.	Doc#:SPIRE-RAL-DWG-001409 Issue: 12 Date: September 2005 Page 1 of 24

Forms Annex 1 to SCI-PT-IIDB/SPIRE-02124

Subject: **SPIRE MECHANICAL INTERFACE DRAWINGS**

PREPARED BY: J. DELDERFIELD ..... 2005.10.14 11:08:40 + 01'00'

APPROVED BY: ERIC SAWYER pp M.GRIFFIN..... Digitally signed by Eric Sawyer Date: 2005.10.14 14:06:45 +01'00'

Validity unknown

Issue Drawing Change List

The detailed changes for each drawing are shown just before the drawing.

Issue 2. Update to status as of 8th October 2002

Issue 3 Update to status as of 1st November 2002
FCU, DCU & Cryogenic ICDs changed, see changelists where provided

Issue 4 Update to status as of 24/2/03. JFET drawing versions raised.

Issue 5 Updated as to status of 27th March 2003. Non-AVM DPU ICD included. JFET ICDs updated.

Issue 6 Small errors on JFET ICDs fixed.

Issue 7 New versions of FPU and JFET ICDs, see their individual change lists.

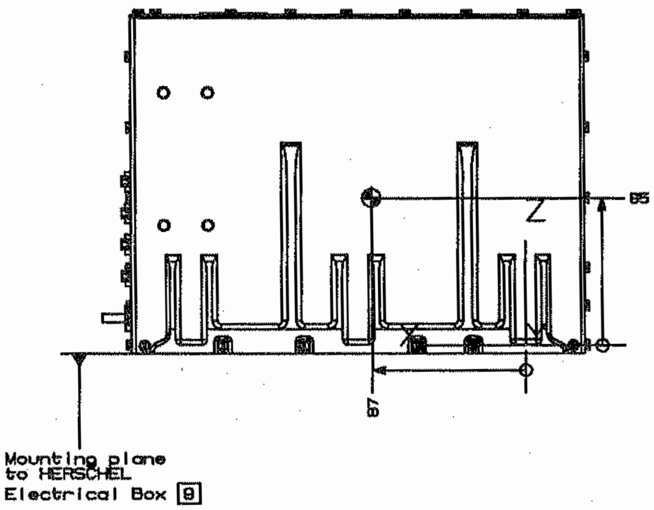
Issue 8. DRCU "QM1" I/F drawings added, red-lined with NCR information. 2Module JFET updated but changes are all internal to unit.

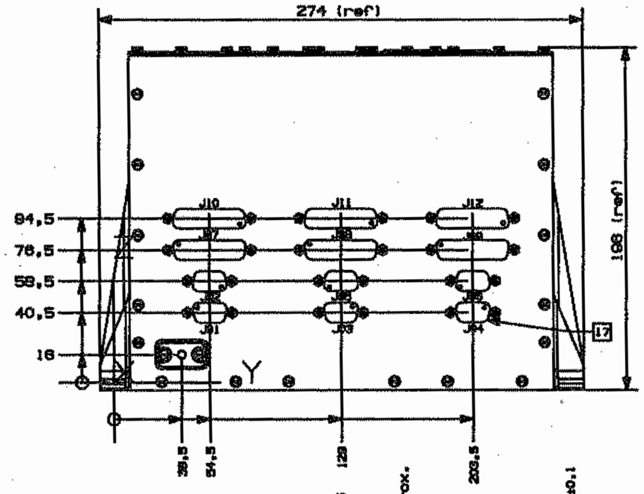
Issue 9. Incorporate updated FM FCU and DCU drawings, including their change control sheets. DRCU QM1 drawings amended to be like the hardware.

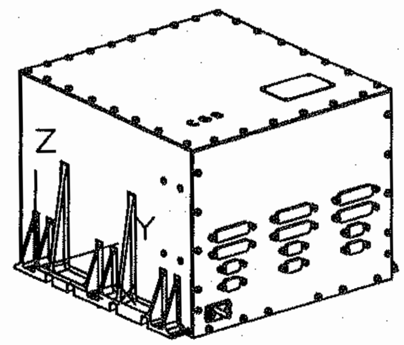
Issue10...Version 19 of Cryogenic unit I/F drawing inserted, implementing latest L0 straps. For detailed change control see drawing's change list included herein.

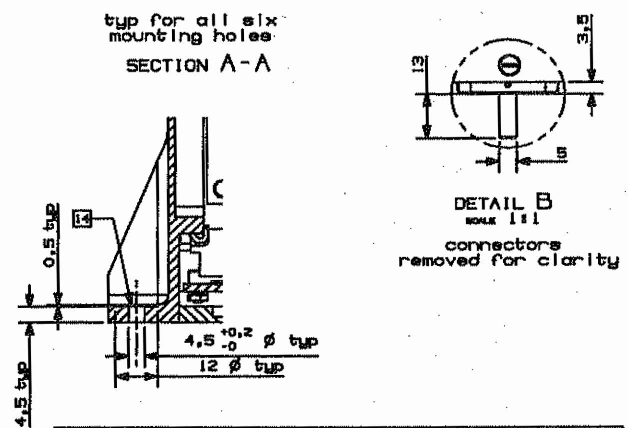
Issue 11...Omitted connectors and unit ref. holes clarified in QM1 DRCU ICDs
JFET unit drawing minor corrections, see drawings' change lists included herein
Append SPIRE cryogenic integration MGSE drawing sheets.

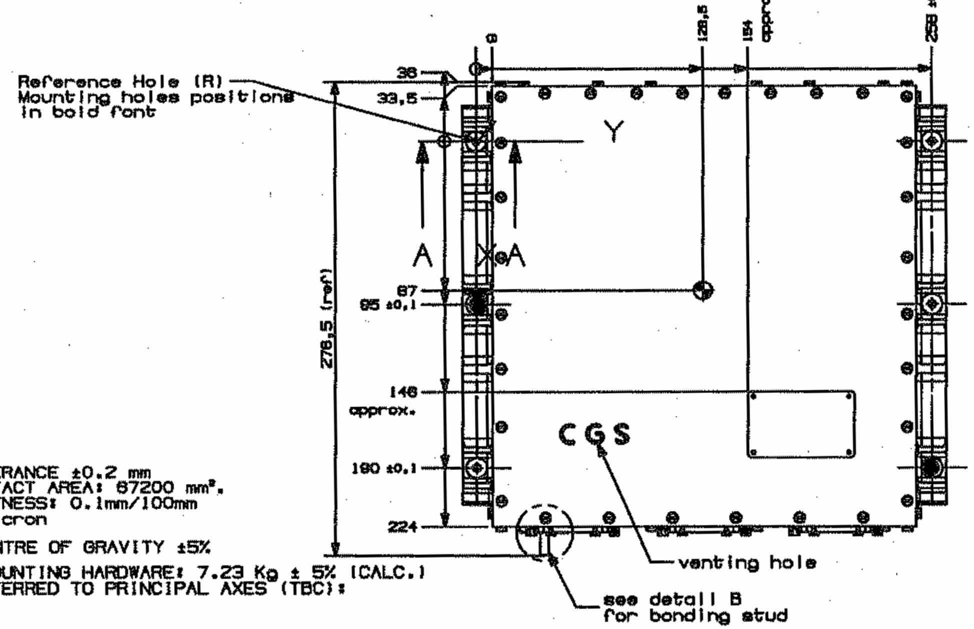
Issue 12...All drawings now represent FM build…see individual change lists except for DPU and MGSE for which these have failed to be produced











CONNECTORS TABLE

ID	P/N	Function
J01	3401002 01B DEMA9P NMBF0	from DPU Prime to PDU Prime
J02	3401002 01B DEMA9P NMBF0	from DPU Red. to PDU Red.
J03	3401002 01B DEMA9S NMBF0	from DPU Prime to Bus A Prime
J04	3401002 01B DEMA9S NMBF0	from DPU Prime to Bus B Prime
J05	3401002 01B DEMA9S NMBF0	from DPU Red. to Bus A Red.
J06	3401002 01B DEMA9S NMBF0	from DPU Red. to Bus B Red.
J07	3401002 01B DBMA25P NMBF0	from DPU Prime to DCE Prime
J08	3401002 01B DBMA25P NMBF0	from DPU Red to DCE Red.
J09	3401002 01B DBMA25P NMBF0	from DPU Prime to MCE Prime
J10	3401002 01B DBMA25P NMBF0	from DPU Red to MCE Red.
J11	3401002 01B DBMA25P NMBF0	from DPU Prime toSCE Prime
J12	3401002 01B DBMA25P NMBF0	from DPU Red to SCE Red.

NOTES:

1. GENERAL ASSEMBLY TOLERANCE ±0.2 mm
2. MOUNTING SURFACE CONTACT AREA: 67200 mm².
   MOUNTING SURFACE FLATNESS: 0.1mm/100mm
   AND ROUGHNESS: 2.6 micron
3. (symbol) INDICATES THE CENTRE OF GRAVITY ±5%
4. MASS NOT INCLUDING MOUNTING HARDWARE: 7.23 Kg ± 5% (CALC.)
5. MOMENT OF INERTIA REFERRED TO PRINCIPAL AXES (TBC):
   $J_{xx} = 0.8 \times 10^{-1}$ Kgm²
   $J_{yy} = 7.81 \times 10^{-1}$ Kgm²
   $J_{zz} = 9.06 \times 10^{-2}$ Kgm²
6. EMISSIVITY: 0.85 (OUTER WALLS)
7. POWER DISSIPATION MAX 27.85 W
8. SEE FAMILY TREE FOR ENGINEERING DRAWINGS: HERS-HIFI-DT-CGS-001
9. CHO-TERM 1671 P/N 60-12-0808 FOR TERMAL CONTACT
10. ALL WALLS IN AL 7075 T7351 QQ-A 250/12 or EQUIVALENT
11. BONDING STUD IN AISI 316 PASSIVATION ACCORDING TO QQ-P-35
    BONDING STUD FASTENING TORQUE 4 Nm ± 0.1
12. OUTER SURFACE TREATMENT: BLACK ANODIZE ACCORDING TO
    MIL-A-8625 TYPE III CLASS 2. BASEPLATE: ALODINE 1200 MIL-C-5541 CLASS 3
13. ALL CONNECTORS ID ENGRAVINGS ARE LOCATED AS PER DWG 10-SPIRE-00.04
14. MOUNTING BOLTS M4
15. CONNECTORS TORQUE AS PER ESA SCC 3401/022
16. NO EIGEN MODES WITH FREQUENCY LOWER THAN 140Hz AND EFFECTIVE
    ASSOCIATED MASS HIGHER THAN 5% PRESENT IN INSTALLED CONFIGURATION
17. * INDICATES CONNECTOR PIN 1

FILE MODEL: herschel_case_rev5
FILE DRAWING: cd_spire_dwg_rev5

-01	10-SPIRE-00.00
DASH NUMBER	NEXT ASSY
APPLICATION	

/ MV 21-09-03

DRAWING TITLE: HERSCHEL SPIRE (DPU) INTERFACE CONTROL DOCUMENT

CARLO GAVAZZI SPACE

N.A.

ISO 2768-

N.A.

SIZE: A2

DRAWING NUMBER: 10-SPIRE-00.02

REV: /

SHEET 1 OF 1

THIS IS A CAD DRAWING NO MANUAL ALTERATION

List of changes

Document identification

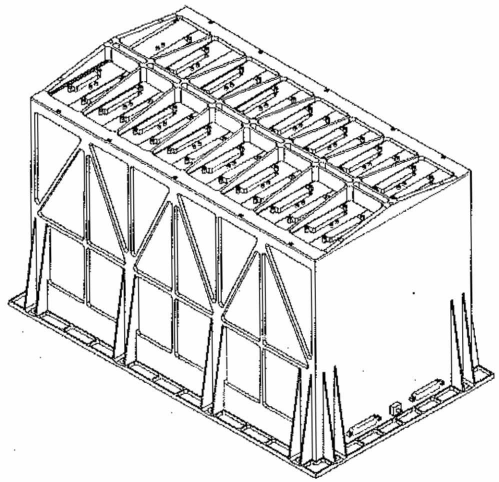
Document n°		SPIR-MX-5100 000
Title of document		SPIRE DCU Electronic box mechanical i/f drawing
Changes	From rev.	Rev. E (01/2004)
	To rev.	Rev. G (08/2004)

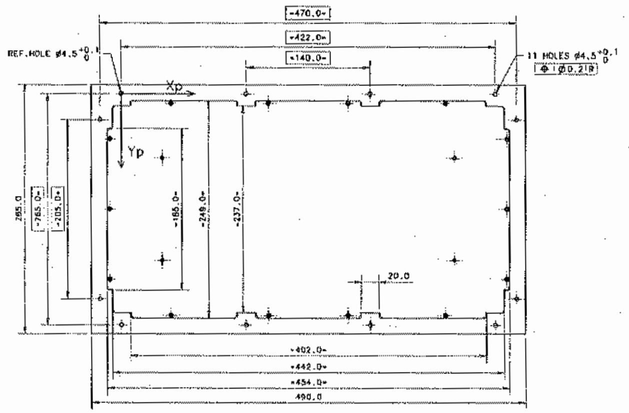
Nota : rev F has not been released.

Detail of changes

Description	Associated RFD / ECR (if any)	Status
No changes introduced, only added follwing informations : - base plate height 4mm ("Coupe partielle A-A") - position of top connectors on Xp and Zp - position of fixation hole on Xp (470mm)	--	--

	Position	Name	Signature
Prepared by	PA manager	J. Fontignie	03/09/04
Verified by	Mechanical Designer	T. Tourrette	27/09/04
Approved by	Project manager	J.L. Augueres	28/09/04

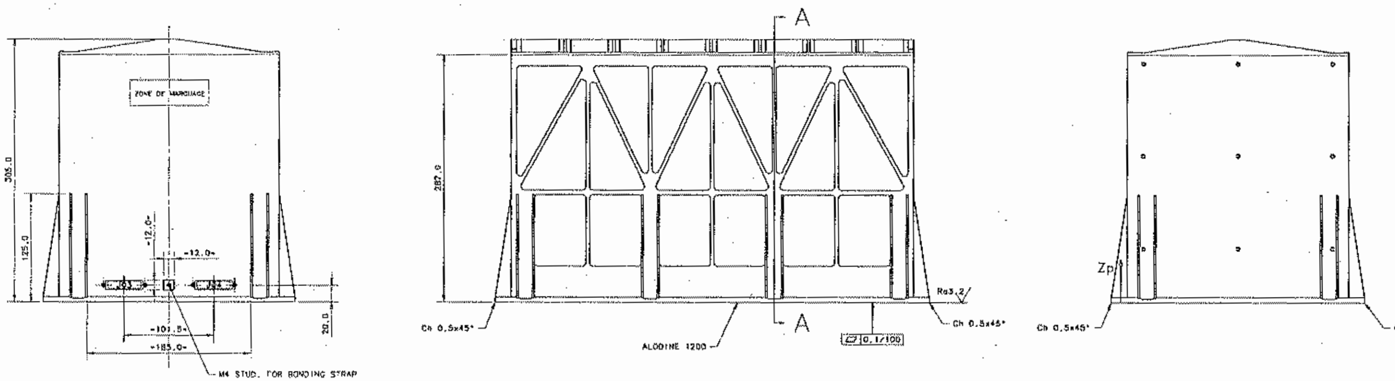


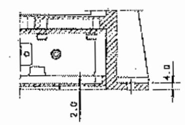


CONNECTORS					
IDENT	TYPE	FUNCTIONS	IDENT	TYPE	FUNCTIONS
J01	DBMA 25S	DAQ_IF_M/DPU_M	J17	DDMA 50P	LIA_P_7/FPU
J02	DBMA 25S	DAQ_IF_R/DPU_R	J18	DDMA 50P	LIA_P_7/FPU
J03	DBMA 25P	DCU/PSU_M	J19	DDMA 50P	LIA_P_8/FPU
J04	DBMA 25P	DCU/PSU_R	J20	DDMA 50P	LIA_P_8/FPU
J05	DDMA 50P	LIA_P_1/FPU	J21	DDMA 50P	LIA_P_9/FPU
J06	DDMA 50P	LIA_P_1/FPU	J22	DDMA 50P	LIA_P_9/FPU
J07	DDMA 50P	LIA_P_2/FPU	J23	DCMA 37P	LIA_S_1/FPU
J08	DDMA 50P	LIA_P_2/FPU	J24	DCMA 37P	LIA_S_1/FPU
J09	DDMA 50P	LIA_P_3/FPU	J25	DCMA 37P	LIA_S_2/FPU
J10	DDMA 50P	LIA_P_3/FPU	J26	DCMA 37P	LIA_S_2/FPU
J11	DDMA 50P	LIA_P_4/FPU	J27	DCMA 37P	LIA_S_3/FPU
J12	DDMA 50P	LIA_P_4/FPU	J28	DCMA 37P	LIA_S_3/FPU
J13	DDMA 50P	LIA_P_5/FPU	J29	DDMA 78S	BIAS_M/FPU
J14	DDMA 50P	LIA_P_5/FPU	J30	DDMA 78S	BIAS_R/FPU
J15	DDMA 50P	LIA_P_6/FPU	J31	DCMA 37S	BIAS_M/FPU
J16	DDMA 50P	LIA_P_6/FPU	J32	DCMA 37S	BIAS_R/FPU

NOTES

MATERIAL AL 6082
CENTRE OF GRAVITY REFERRED TO REFERENCE HOLE
X=213.2mm Y=132.4mm Z=157.9mm
MOMENTS OF INERTIA REFERRED TO CENTRE OF GRAVITY
JXp=0,471 Kg.m2 JYp=0,250 Kg.m2 JZp=0,444 Kg.m2
CONTACT AREA MOUNTING FEET=28180mm2
THERMAL COATING AND BLACK ANODISING ESA.PSS.703
SURFACE EMISSIVITY >0.85
TORQUE VALUE FOR CONNECTOR FIXATION SCREWS=
- MALE=0.3mN
- FEMALE=0.45mN
SPECIFIC HEAT 1170 J/Kg.°K
ESTIMATED MASS=14442g





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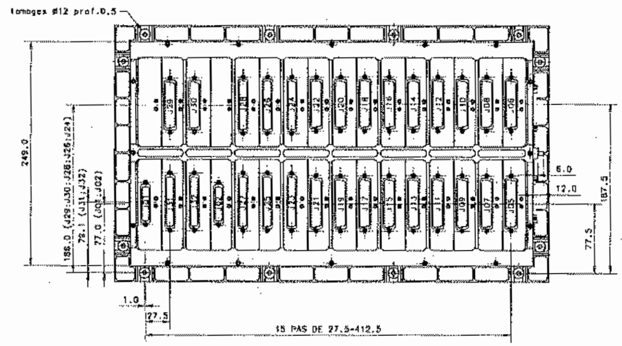
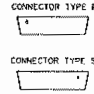


CONNECTOR TYPE P

CONNECTOR TYPE S



Indice	Modifications	Date	Dessiné par	Vérifié par	Approuvé par
G	Mise à jour	08/04	CHENAIN		
F	Mise à jour	06/04	CHENAIN		
E	Mise à jour	01/04	CHENAIN		
D	Ajout coupe A-A	10/02	CHENAIN		
C	Mise à jour	09/02	CHENAIN		
B	Mise à jour	05/02	CHENAIN		
A	Origine	11/01	CHENAIN		

Spécifications particulières

Tolérances générales — Indice de rugosité général XXX — Tol.gag.:XXX — Casser les angles vifs — SOUS-TRAITANT

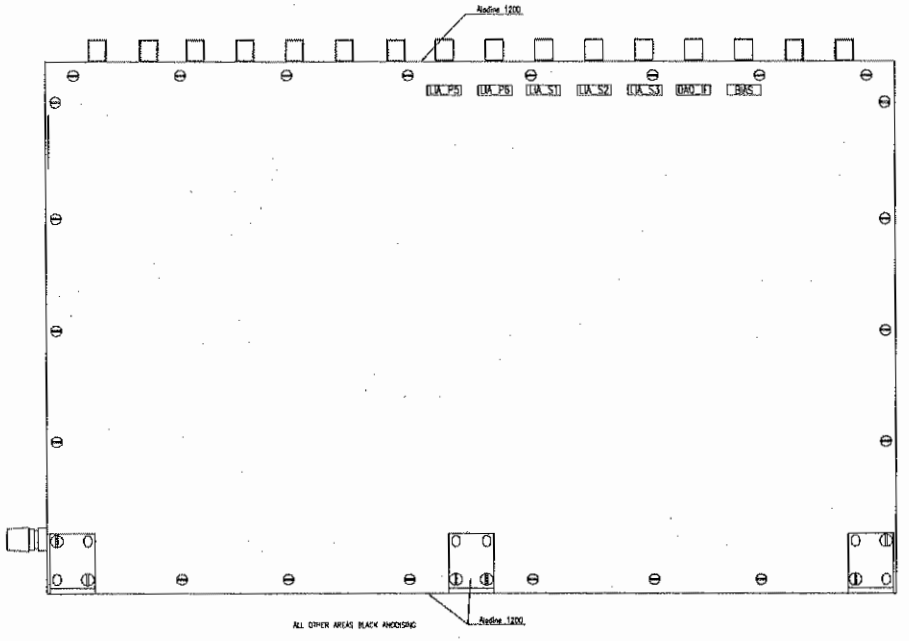
Matière: — Protection: — Traitement thermique: — Echelle 1/2 — Poids — Niveau qualité

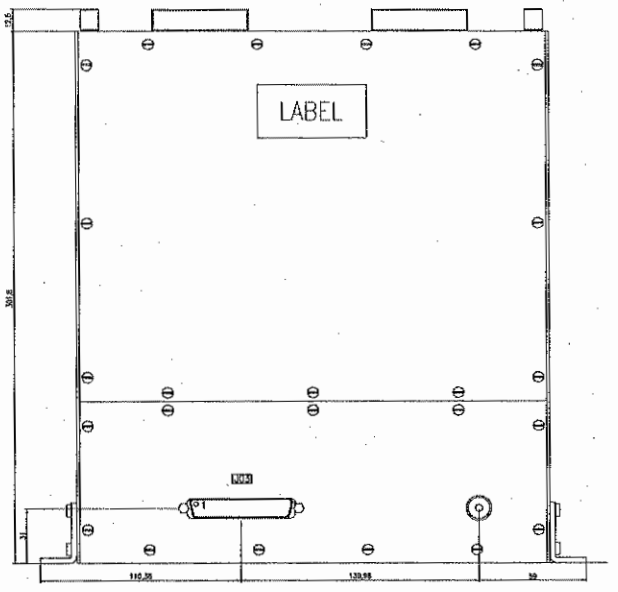
SPIRE
HSDCU ELECTRONIC BOX
MECHANICAL INTERFACE CONTROL DRAWING

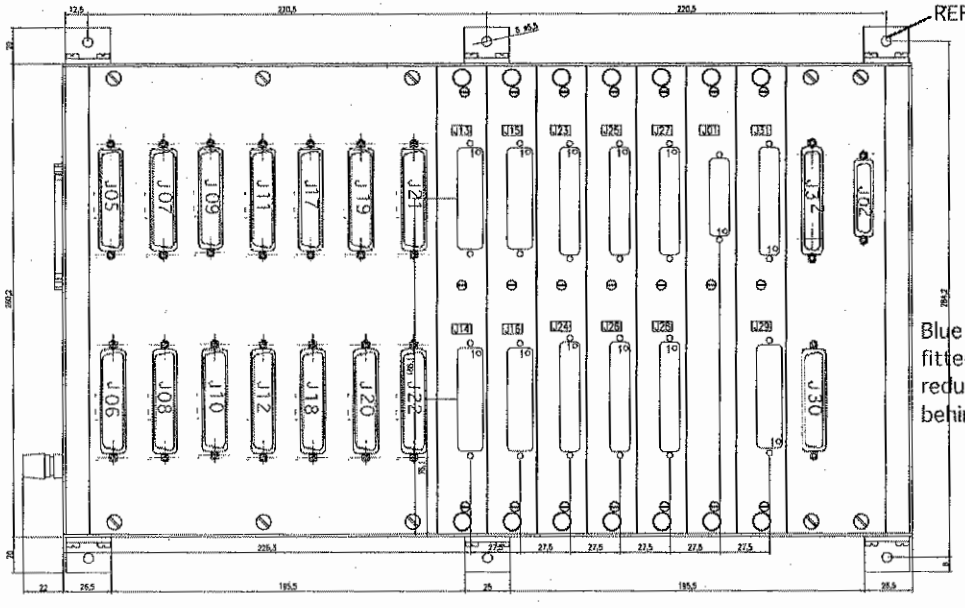
SAP/CERES
Tel:01 69.08.78.25
01.69.08.59.76
Fax:01.69.08.79.96

COMMISSARIAT A L'ENERGIE ATOMIQUE — C.E.N SACLAY

A0 SPIR-MX-5100 000 G







CONNECTORS					
IDENT	TYPE	FUNCTION	IDENT	TYPE	FUNCTION
J01	DBMA 25S	DAO_IF_M/DPU	J24	DCMA 37P	UA_S_1/FPU
J03	DBMA 25P	DCU/PSU_M	J25	DCMA 37P	UA_S_2/FPU
J13	DDMA 50P	UA_P_5/FPU	J26	DCMA 37P	UA_S_2/FPU
J14	DDMA 50P	UA_P_5/FPU	J27	DCMA 37P	UA_S_3/FPU
J15	DDMA 50P	UA_P_6/FPU	J28	DCMA 37P	UA_S_3/FPU
J16	DDMA 50P	UA_P_6/FPU	J29	DDMA 78S	BIAS_M/FPU
J23	DCMA 37P	UA_S_1/FPU	J31	DCMA 37S	BIAS_M/FPU

Blue signifies connectors fitted but without redundant side electronics behind them.

CONNECTOR TYPE P

CONNECTOR TYPE S

ONLY FOR QM1

CEA /SAP 91191 GIF/YVETTE Cedex	MANIERE : Alu 2017A TRAITEMENT : Alodine 1200	PROTECTION : DESSINE : SREX DATE : 02/12/02 VERIFIE : VISA :	
ECHELLE : 3/4	TOLERANCES GENERALES : ±0.2	Rev1.6	
DESIGNATION ICD HS DCU/QM1	SRIR-MX-5101 000 A	0 A1	

List of changes

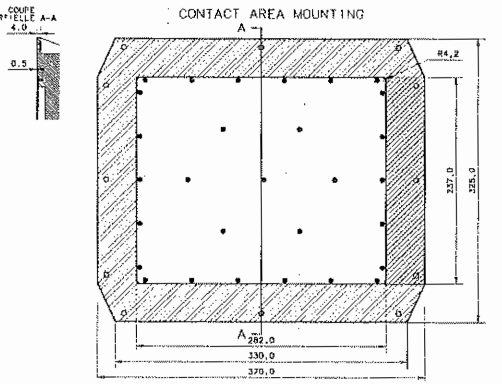
Document identification

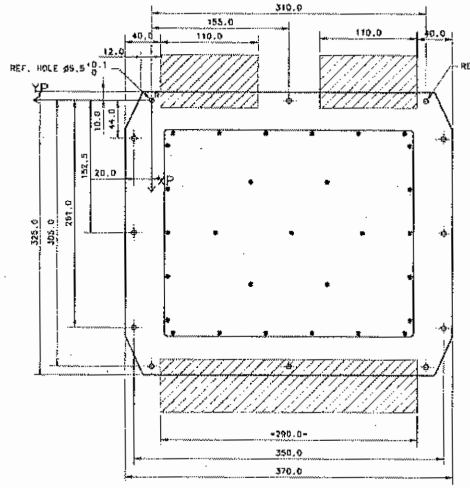
Document n°		SPIR-MX-5200 000
Title of document		SPIRE FCU Electronic box mechanical i/f drawing
Changes	From rev.	Rev. J (01/2004)
	To rev.	Rev. K (08/2004)

Detail of changes

Description	Associated RFD / ECR (if any)	Status
No changes introduced, only added follwong informations : - base plate height 4mm ("Coupe partielle A-A") - enhanced readability of top connectors position on Xp - position of fixation hole on Xp (350mm)	--	--

	Position	Name	Signature
Prepared by	PA manager	J. Fontignie	03/09/04
Verified by	Mechanical Designer	T. Tourrette	27/09/04
Approved by	Project manager	J.L. Augueres	28/09/04





NOTES

MATERIAL AL 6082

CENTRE OF GRAVITY REFFERED TO REFERENCE HOLE

X=148.8mm Y=-153mm Z=138.5mm

MOVENTS OF INERTIA REFERRED TO CENTRE OF GRAVITY

JX=0.338 Kg.m2 JY=0.318 Kg.m2 JZ=0.282 Kg.m2

CONTACT AREA MOUNTING FEET=51656mm2

THERMAL COATING AND BLACK ANODISING ESA.PSS.703

SURFACE EMISSIVITY >0,85

TORQUE VALUE FOR CONNECTOR FIXATION SCREWS=

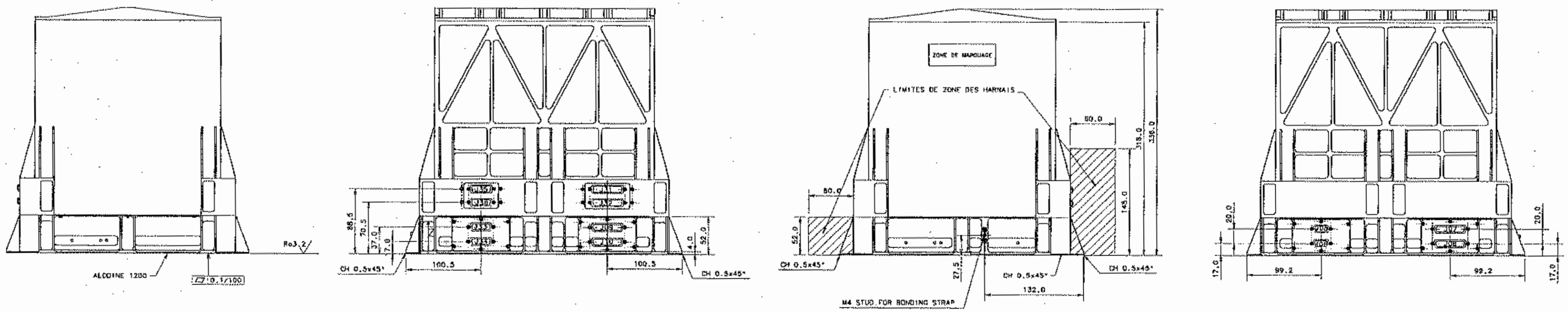
-MALE=0.3mN

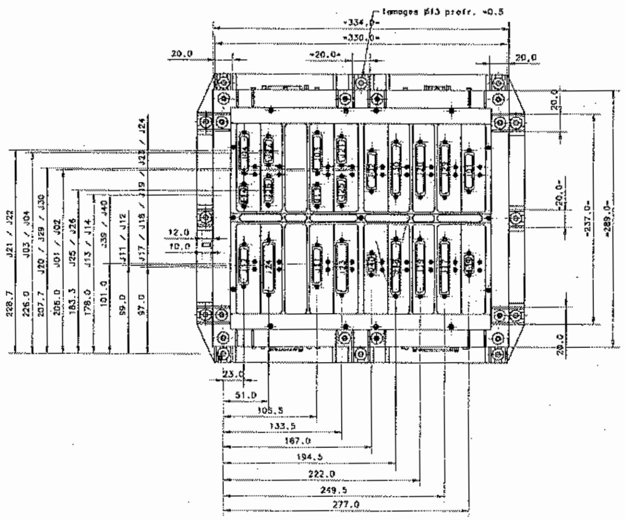
-FEMALE=0.45mN

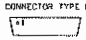
ESTIMATED MASS=16254g

CP=1170j/kg.°K

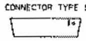
CONNECTORS					
IDENT	TYPE	INTERFACE NAME	IDENT	TYPE	INTERFACE NAME
J01	DBMA 25S	MAC-M/DPU-M	J21	DAMA 15S	TEMP-M/FPU-TS-1-M
J02	DBMA 25S	MAC-R/DPU-R	J22	DAMA 15S	TEMP-R/FPU-TS-1-R
J03	DBMA 25S	CCHK-IF-M/DPU-M	J23	DDMA 50S	TEMP-M/FPU-TS-2-M
J04	DBMA 25S	CCHK-IF-R/DPU-R	J24	DDMA 50S	TEMP-R/FPU-TS-2-R
J05	DEMA 9P	PSU-M/PCDU-M	J25	DAMA 15S	TEMP-M/FPU-MEC-TS-M
J06	DEMA 9P	PSU-R/PCDU-R	J26	DAMA 15S	TEMP-R/FPU-MEC-TS-R
J07	DBMA 25S	PSU-M/DCU	J27	NA	NA
J08	DBMA 25S	PSU-R/DCU	J28	NA	NA
J09	DBMA 25S	PSU-M/MCU-M	J29	DCMA 37P	SMEC-M/FPU-SMECm-2-M
J10	DBMA 25S	PSU-R/MCU-R	J30	DCMA 37P	SMEC-R/FPU-SMECm-2-R
J11	DBMA 25S	CCHK-IF-M/FPU-COOL-CAL-M	J31	DBMA 25P	MCU-M/PSU-M
J12	DBMA 25S	CCHK-IF-R/FPU-COOL-CAL-R	J32	DBMA 25P	MCU-R/PSU-R
J13	DEMA 9S	CCHK-IF-M/FPU-PH-STIM-M	J33	DAMA 15S	PSU-M/SCU-M
J14	DEMA 9S	CCHK-IF-R/FPU-PH-STIM-R	J34	DAMA 15S	PSU-R/SCU-R
J15	NA	NA	J35	DAMA 15P	SCU-M/PSU-M
J16	NA	NA	J36	DAMA 15P	SCU-R/PSU-R
J17	DCMA 37S	SMEC-M/FPU-SMECm-1-M	J37	NA	NA
J18	DCMA 37S	SMEC-R/FPU-SMECm-1-R	J38	NA	NA
J19	DCMA 37S	BSM-M/FPU-BSM-M	J39	DEMA 9S	MAC-H/JTAG
J20	DCMA 37S	BSM-R/FPU-BSM-R	J40	DEMA 9S	MAC-R/JTAG



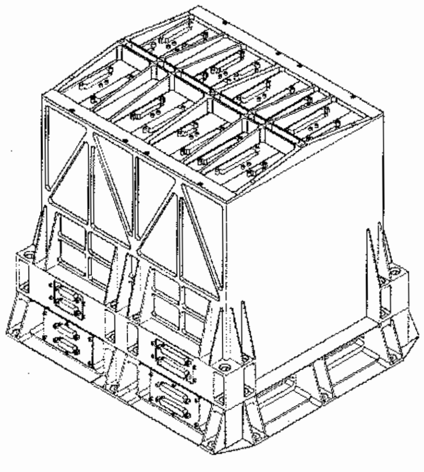




CONNECTOR TYPE P



CONNECTOR TYPE S



Indice	Modifications	Date	Dessiné par	Vérifié par	Approuvé par
K	Mise à jour	[illegible]	CHEVAIN		
J	Mise à jour	[illegible]	CHEVAIN		
I	Modif position CdG	[illegible]	CHEVAIN		
H	Mise à jour	[illegible]	CHEVAIN		
G	Mise à jour	[illegible]	CHEVAIN		
F	Mise à jour	[illegible]	CHEVAIN		
E	Mise à jour connecteurs	[illegible]	CHEVAIN		
D	Mise à jour	[illegible]	CHEVAIN		
C	Mise à jour	[illegible]	CHEVAIN		
B	Mise à jour	[illegible]	CHEVAIN		
A	Origine	[illegible]	CHEVAIN		

Spécifications particulières

Tolérances générales: Indice de rugosité général; Tol.ang.; Casser les angles vifs

SOUS-TRAITANT

Matière:

Traitement thermique:

Protection

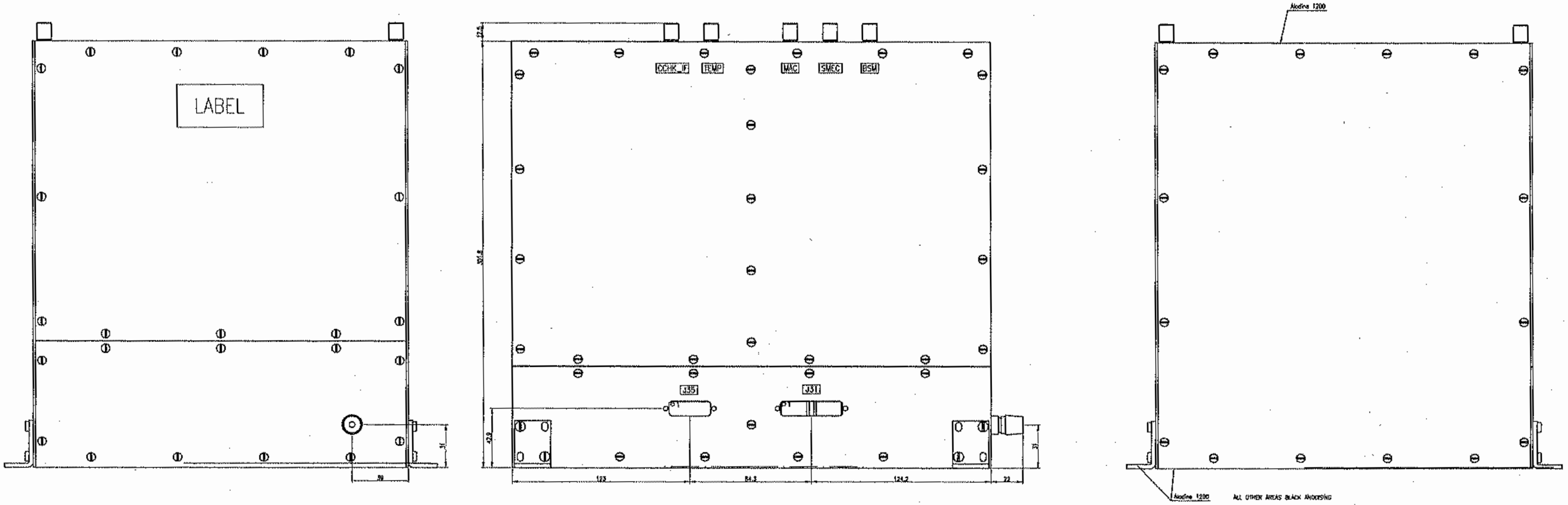
Echelle: 1/2 | Poids | Niveau qualité

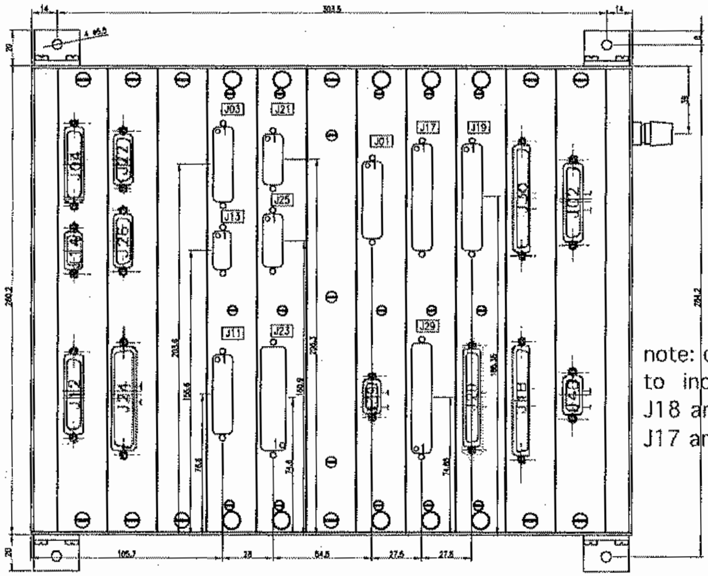
SPIRE
FCU ELECTRONIC BOX
MECHANICHAL INTERFACE CONTROL DRAWING

SAP/GERES
Tel:01.69.08.78.25
01.69.08.59.76
Fax:01.69.08.79.56

COMMISSARIAT A L'ENERGIE ATOMIQUE
C.E.N SACLAY

A0 SPIR-MX-5200 000 K





ONLY FOR QM1

Blue signifies connectors fitted but without redundant side electronics behind them.

note: do not intend to incorrectly transpose J18 and J30 just because J17 and J39 are swapped!

CONNECTORS					
IDENT	TYPE	FUNCTION	IDENT	TYPE	FUNCTION
J01	DBMA 25S	MAC/DPU	J21	DAMA 15S	TEMP/FPU-TS-1
J03	DBMA 25S	CCHK-IF/DPU	J23	DDMA 50S	TEMP/FPU-TS-2
J11	DBMA 25S	CCHK-IF/FPU-COOL-CAL	J25	DAMA 15S	TEMP/FPU-MEC-TS
J13	DEMA 9S	CCHK-IF/FPU-PH-STIM	J29	DCMA 37P	SMEC/FPU-SMECm-2
J17	DCMA 37S	SMEC/FPU-SMECm-1	J31	DBMA 25P	MCU/PSU
J19	DCMA 37S	BSM/FPU-BSM	J35	DAMA 15P	SCU/PSU

CEA /SAP
91191 GIF/YVETTE Cedex

MATIERE : Alu 2017A
PROTECTION :
TRAITEMENT : ALODINE 1200
DESSINE : SREE
DATE : 08/09/03
VERIFIE :
VISA :

ECHELLE : 3/4
TOLERANCES GENERALES : ±0.2
Ra1,6

DESIGNATION ICD HS FCU/QM1

SPIR-MX-5201 000 C
0
A1

UCL
MSSL

SPIRE – STRUCTURE INTERFACE DRAWING ISSUE 20 AND MODIFICATION SHEET

Document Number: MSSL/SPIRE/SP005.05 .....30 September 2005

ISSUE 20

SHEET	MODIFICATION
All Sheets	Drawing redrawn due to loss of Computer File
All Sheets	Main Instrument Mounts replaced with CFRP mounts
All Sheets	Details of the Level 1 Thermal Interface added
All sheets	The PFM spectrometer level 0 strap replaed the CAM spec strap.
Sheet 1	Addition of dimension between end of L0 straps and the centre line pf the fixed cone mount
Sheet 1	Addition of dimension at bottom of Evaporator L0 strap (4.5 mm)
Sheet 3	Addition of dimension from centre of fixed cone mount to the First Optical Datum
Sheet 6	Addition of pictorial view and cross section of the Level 1 thermal interface

ISSUE 19

SHEET	MODIFICATION
All Sheets	Level '0' Cold Straps and relevant Dimensions updated.
All Sheets	JFETS and relevant dimensions updated.
1	Mass Properties updated.
1	Dim 202.00 (HOB datum to SPIRE focal plane) "CRYOGENIC" added.
1	Note "SPIRE AXES ETC" - word "DIRECTIONS" added.
1	Level '0' Straps – max rads. added.
3	Optical Beams note added.
3	Optical beam dims note "STAY OUT AREA" note modified.
4	"+ RUNNING TORQUES" added to interface torque figures.
4	Temperature sensor holes added.
5	Notes wrt Level '0' interfaces to S/C modified/deleted/added.
5	Torques for Level '0' straps deleted – note "TORQUE AS SPECIFIED BY ASTRIUM" added.
5	Level '1' fixings torques – "+ RUNNING TORQUES" added.
5	Temp sensor/Level '0' fixings modified
6	JFET Harness zone dimensions modified.
7	PACS & HIFI labelled.

ISSUE 18

SHEET	MODIFICATION
1	Mass properties updated to the latest sub system estimates/measured masses. No mass received for the harnesses (A guess in the model)
1	No weighed masses for Busbar Supports, Light traps, SCAL (Cardiff), SMEC (LAM) and SOB Harness, Photo BDA, Spectro BDA (Techdata)
1	Notes, "Work in Progress" referring to BDA connector panels deleted
1	Note WRT Aperture cover added
1	Notes WRT surface finish at L0 and L1 interfaces added
1	Aperture cover added
1	BDA connector flanges updated
2	Pictorial changes WRT BDA connector flanges ad aperture cover to reflect sheet 1
3	Pictorial changes WRT BDA connector flanges ad aperture cover to reflect sheet 1
4	Pictorial changes WRT BDA connector flanges ad aperture cover to reflect sheet 1
5	Surface roughness on L0 straps added with "BY VISUAL INSPECTION ONLY" note
5	Gold finish on L0 straps
5	Surface roughness and Alochrom 1200 finish note added for L1 straps
5	M4 Torques were 1.26 Nm
6	"Work in progress" notes wrt BDA connector panels deleted
6	Note reminding that M4 grounding hole does not have a locking insert fitted added
6	Dims to BDA connectors added
7	Pictorial changes WRT BDA connector flanges ad aperture cover to reflect sheet 1

ISSUE 17

SHEET	MODIFICATION
1	RF Filter Connector numbers added
1,2,3	Cryostat hole diameter was 270mm
1	Spire axes coincident with Spacecraft axes – note added
1	Reference cube to be dismounted after installation on spacecraft – note added
1	Dimension to 'A' Frame top pin centre added
1,3	Redundant dimensions deleted
1	Level 1 grounding strap positions moved and applicable note modified (Reference HR-SP-RAL-ECR-034v1)
1	'Alternative Level 1' note deleted
2	Beams removed bottom LH view
3	Optical reference cube note modified – reference to A3/5264/305-6 added
3	Beam angle added (Bottom LH view)
3	'Cryogenic' added to two dimensions
ALL	'UNLESS OTHERWISE SPECIFIED' added to note wrt. 'ALL DIMENSIONS AT ROOM TEMPERATURE'
3	Dimension to top of reference cube added
3	Note stating U/S of SOB is Yu & Zu Optical Datum Deleted
4	Front mounting cone centre – positional tolerances added
4	SPIRE interface bolt material and torques added
5	Level 'O' cold strap interfaces modified. Bolt types, torques and Belleville types added.
7	Beam clearance dimension 0.92 reviewed
1	Note WRT clearance between FPU and Inner Shield Added
1,2,3	Cryostat Inner shield updated
5	"Stay Out" zone around Level '0' straps added

ISSUE 16

SHEET	MODIFICATION
2	JFET note modified.
1	Dimensions over Blade Mounts added.
1	'Zu' axis added. Spacecraft co-ordinates note added.
1	"Optical Datum Pin" note deleted.
4	Mounting referencing hole added (fixed mounting).
2	Section description note changed.
3	10 mm mechanical clearance zone deleted.
3	Shaded optical beams extended.
3	Note wrt. Beam dimensions added.
3	Reference cube angular mounting ad absolute accuracy note added.
4	Floating details removed.
4	Alignment of HOB wrt. Herschel to permit Spire to be aligned.
5	Unit axes added.
5	Cold Straps detail deleted (saved on new drawing A1/5264/300A).
5	JFET thermal Interfaces note added. External to MSSL note added.
5	HSFPU thermal finishes added. Note wrt. JFET thermal interfaces added.
6	Electrical isolation note wrt. Cold straps added.
1	Mass updated. Moments of Inertia added.
4	FPU mounting cone interface holes modified.
4	Contact area of FPU interface Vespel insulators added.
4	Note wrt. HOB flatness and tilt to Herschel X Axis added.
5	Detail of FPU internal Level '0' straps deleted – Now on drawing A1/5264/300A
6	JFET harness "Stay Out" zones added.
7	FPU cone to PACS clearance dimension added.
ALL	BDA- Obsolete harness feedthroughs deleted.
2	Addition of RF Filter connector numbers

DRAWING No.		
A1	5264	300 sht1

USED ON HERSCHEL

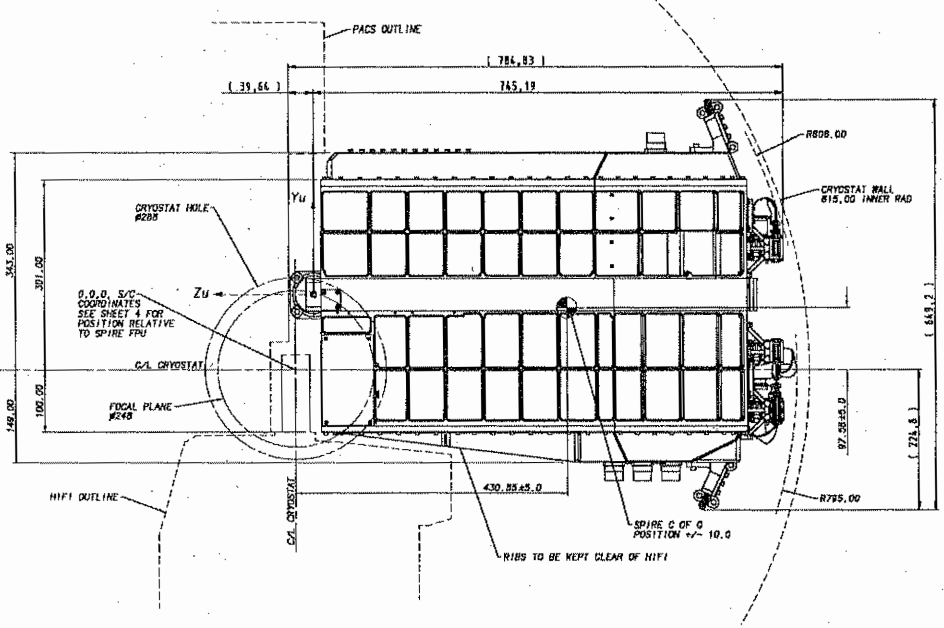
THIRD ANGLE PROJECTION

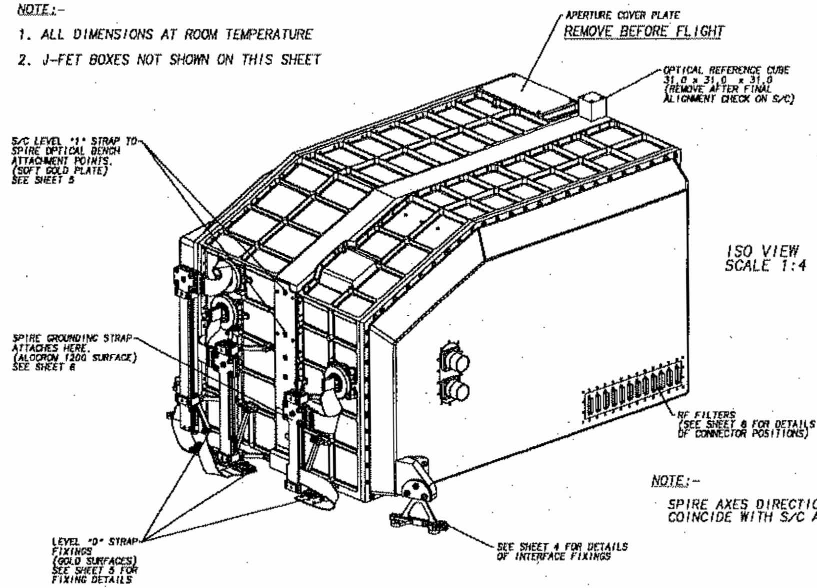
DO NOT SCALE

REMOVE ALL BURRS & SHARP EDGES

NOTE:-

1. ALL DIMENSIONS AT ROOM TEMPERATURE
2. J-FET BOXES NOT SHOWN ON THIS SHEET





ISO VIEW
SCALE 1:4

NOTE:-

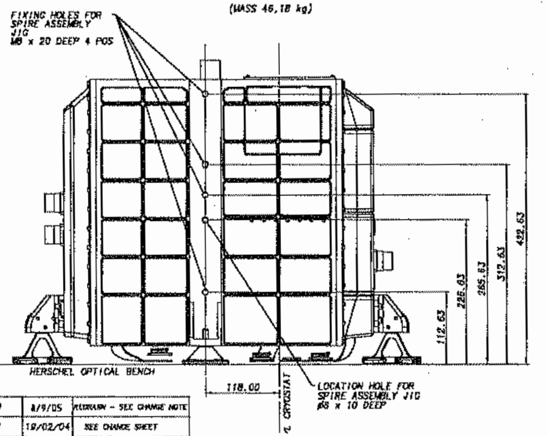
SPIRE AXES DIRECTIONS COINCIDE WITH S/C AXES

MOMENTS OF INERTIA ABOUT CG:-

(NOTE:- ALL MASS PROPERTIES EXCLUDE JFETS, EXTERNAL FPU HARNESSES AND ASTRIUM SUPPLIED LEVEL "0" INTERFACE PARTS)

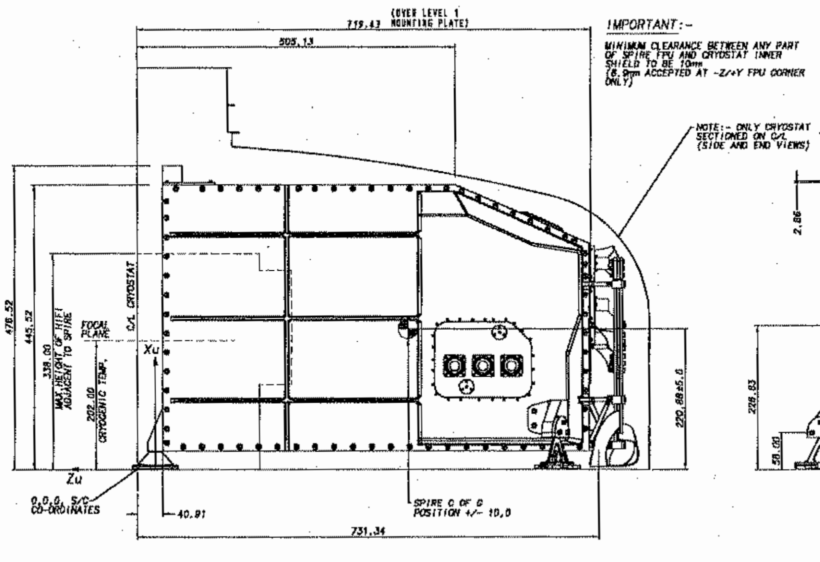
Ixx = 3,056 kg m^2
Iyy = 3,008 kg m^2
Izz = 1,559 kg m^2

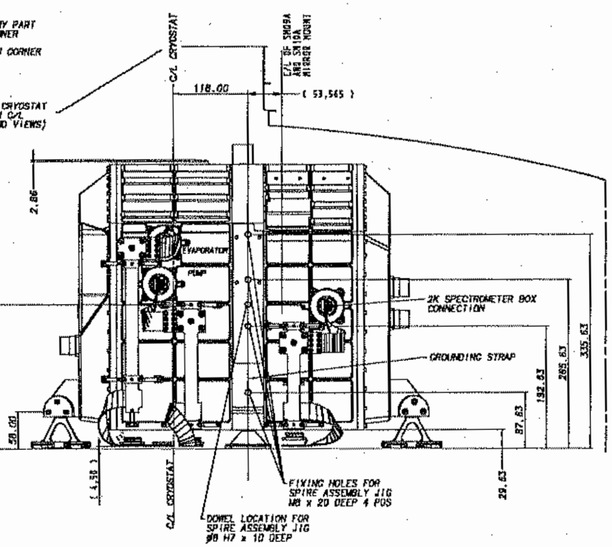
(MASS 46,18 kg)



IMPORTANT:-

MINIMUM CLEARANCE BETWEEN ANY PART OF SPIRE FPU AND CRYOSTAT INNER SHIELD TO BE 10mm (8,9mm ACCEPTED AT -Z/+Y FPU CORNER ONLY)





	ISSUE	DATE	AMENDMENT
	20	8/9/05	REDRAWN - SEE CHANGE NOTE
	19	19/02/04	SEE CHANGE SHEET
	18	4/07/03	SEE CHANGE SHEET
	17	16/10/02	SEE CHANGE SHEET
CHECKED	16	28/08/02	MODIFICATIONS AND CHANGE SHEET CREATED DRAWING UPDATED TO ISSUE 16 THERE-ON
	15	27/04/01	THERMAL STRAP INTERFACE MODIFIED, LEVEL 1 STRAP FIXING HOLES MOVED
TRACED PGC	14	23/11/01	CENTRE OF GRAVITY ADDED TO SHT 1. J-FET DESIGN UPDATED, STAY OUT HOLES REMOVED
	13	19/11/01	UPDATED RF FILTER & PHOT CONNECTORS ADDED, FOCAL PLANE & 'A' FRAME MOUNT DIM ADDED, SHEET 7 ADDED
DRAWN AJC	1	24/11/01	

NOTE:-

SEE CHANGE SHEET FOR DETAILS OF CHANGES MADE FROM ISSUE 16 ONWARDS

SPIRE INTERFACE mar 2002 (ASSEMBLY MODEL)

COMPUTER FILE

PROTECTIVE FINISH	MATERIAL & SPEC.	TOLERANCES UNLESS OTHERWISE STATED -
ALOCROM 1200 AL PARTS GOLD PLATED AREAS ON COPPER PARTS (ST.STEEL PARTS NATURAL)	AS LISTED	LINEAR +/- 0.10 ANGULAR +/- 0°15'
ESTD WT. 45,63kg (NO CONT) SEE NOTE SHT.1		
ACTL WT.	DIMENSIONS IN mm	SCALE 1:4

DEPARTMENT OF SPACE AND CLIMATE PHYSICS
UNIVERSITY COLLEGE LONDON
MULLARD SPACE SCIENCE LABORATORY, HOLMBURY ST. MARY, DORKING, SURREY.

TITLE: SPIRE INTERFACE (GENERAL DIMENSIONS)

DRAWING No		
A1	5264	300 sht1

SHEET 1 OF 7

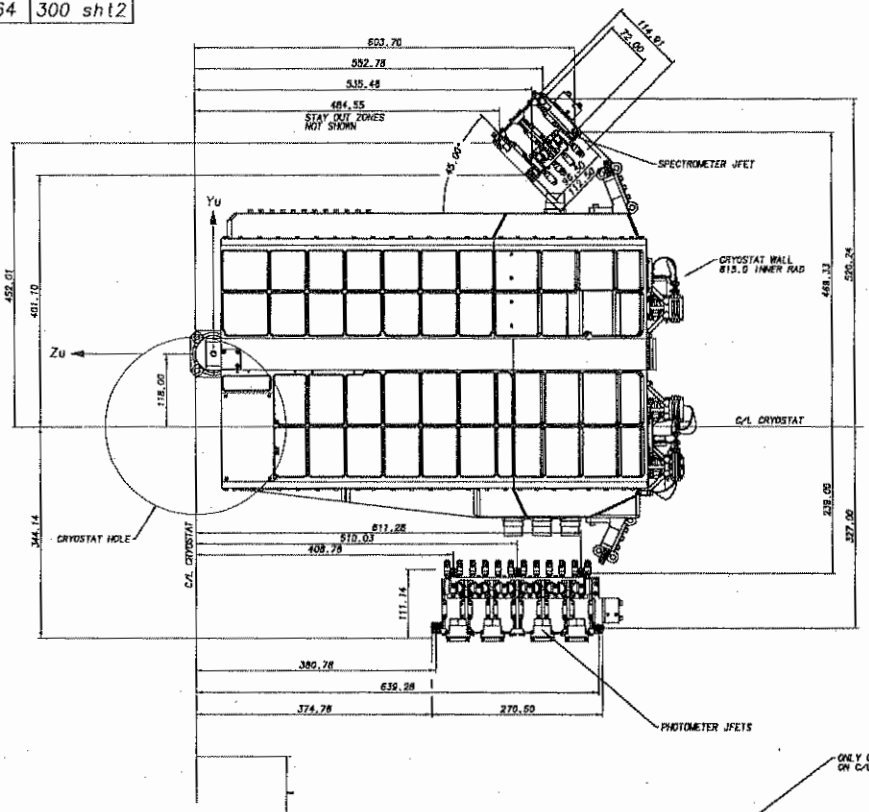
DRAWING No.		
A1	5264	300 sht2

USED ON HERSCHEL

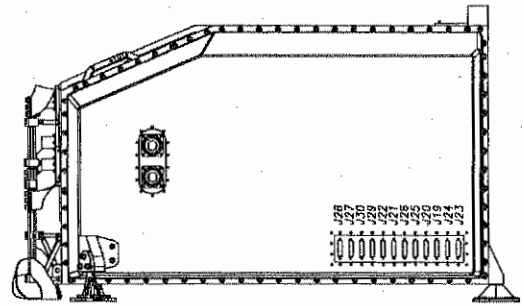
THIRD ANGLE PROJECTION

DO NOT SCALE

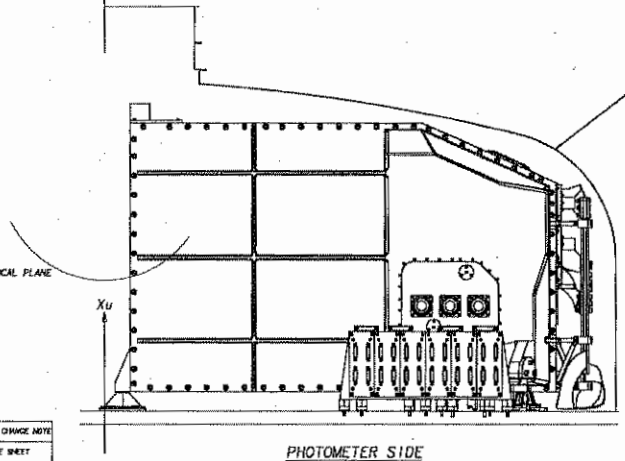
REMOVE ALL BURRS & SHARP EDGES



NOTE:-
ALL DIMENSIONS AT ROOM TEMPERATURE

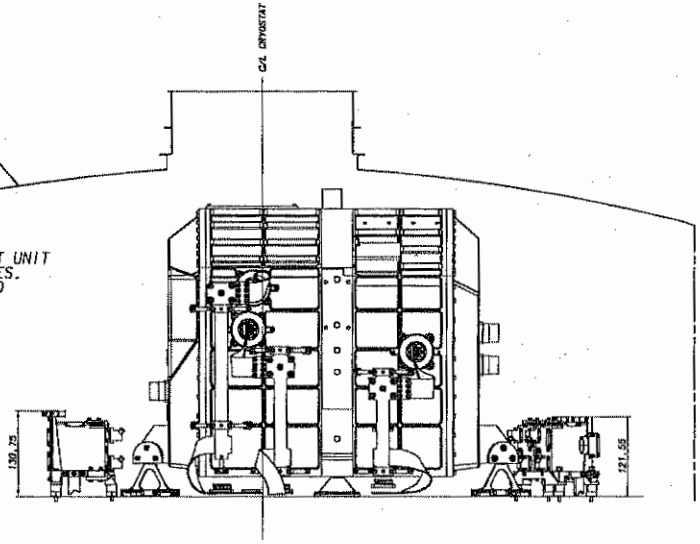


SPECTROMETER SIDE
(VIEWED IN -Yu DIRECTION)



PHOTOMETER SIDE

ONLY CVV INSTRUMENT SHIELD SECTIONED ON C/L (SIDE AND END VIEWS)



NOTE:-
THIS DRAWING REFERENCES THE JFET UNIT MOUNTINGS TO HOB S/C CO-ORDINATES. THE JFETS HAVE SEPARATE DETAILED INTERFACE DRAWINGS

ISSUE	DATE	AMENDMENT
20	8/1/05	REDRAWN-SEE CHANGE NOTE
19	18/02/04	SEE CHANGE SHEET
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13	19/11/01	UPDATED FPU FILTER & SHOT CONNECTORS ADDED. FOCAL PLANE & "A" FRAME MOUNT DIM ADDED. SHEET 7 ADDED

CHECKED

TRACED PGC

DRAWN AJC

NOTE:-
SEE CHANGE SHEET FOR DETAILS OF CHANGES MADE FROM ISSUE 16 ONWARDS

SPIRE INTERFACE Mar 2002 (ASSEMBLY MODEL)

COMPUTER FILE

PROTECTIVE FINISH	MATERIAL & SPEC.	TOLERANCES UNLESS OTHERWISE STATED -
ALOCROM 1200 (ST.STEEL PARTS NATURAL)	AS LISTED	LINEAR +/- 0.10
ESTD WT. 45.63kg (NO CONT) SEE NOTE SHT.1		ANGULAR +/- 0°15'
ACTL WT.	DIMENSIONS IN mm	SCALE 1:4

DEPARTMENT OF SPACE AND CLIMATE PHYSICS
UNIVERSITY COLLEGE LONDON
MULLARD SPACE SCIENCE LABORATORY, HOLMBURY ST. MARY, DORKING, SURREY.

TITLE: SPIRE INTERFACE (J-FET POSITIONS)

DRAWING No		
A1	5264	300 sht2

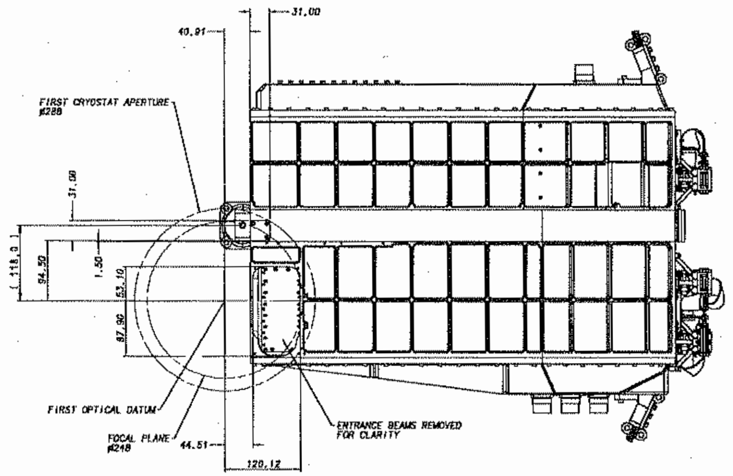
DRAWING No.		
A1	5264	300 sht3

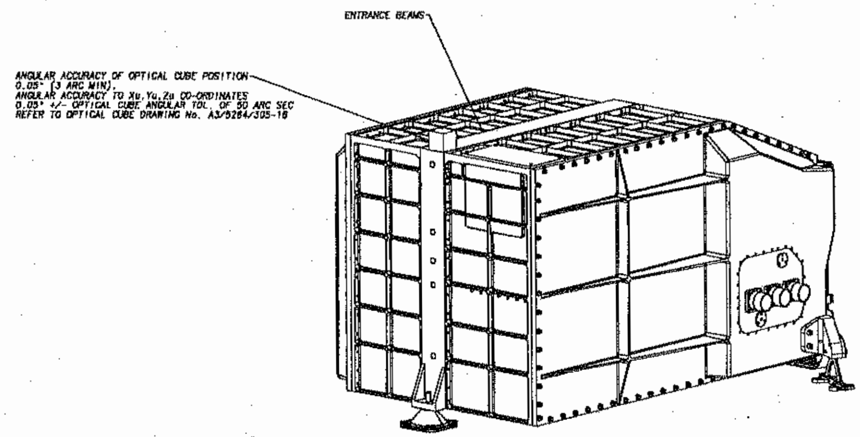
USED ON HERSCHEL

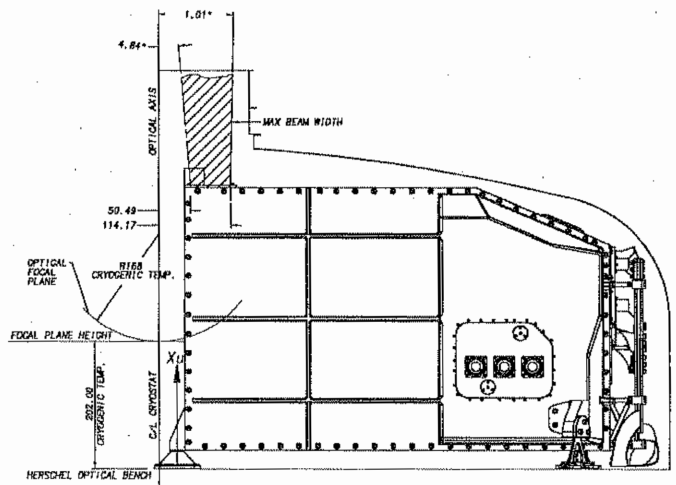
THIRD ANGLE PROJECTION

DO NOT SCALE

REMOVE ALL BURRS & SHARP EDGES

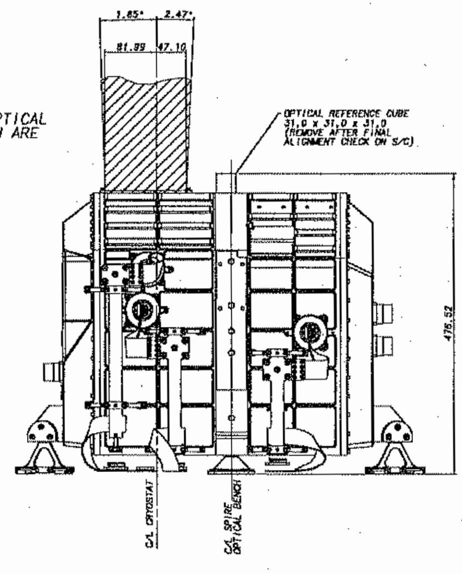






OPTICAL BEAM DIMENSIONS:-

ONLY DIMENSIONS DEFINING THE VOLUME FOR THE OPTICAL BEAMS WHICH SHALL REMAIN FREE FROM OBSTRUCTION ARE SHOWN.
REFER TO IID-B FOR MORE DETAILED INFORMATION



NOTE:-

1. ALL DIMENSIONS AT ROOM TEMPERATURE UNLESS OTHERWISE SPECIFIED

	ISSUE	DATE	AMENDMENT
	20	6/9/05	REDRAWN-SEE CHANGE NOTE
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DRAWN AJC	1	24/11/01	

NOTE:-

SEE CHANGE SHEET FOR DETAILS OF CHANGES MADE FROM ISSUE 16 ONWARDS

SPIRE INTERFACE mar 2002 (ASSEMBLY MODEL)

COMPUTER FILE

PROTECTIVE FINISH: ALOCROM 1200 (ST.STEEL PARTS NATURAL)

MATERIAL & SPEC.: AS LISTED

TOLERANCES UNLESS OTHERWISE STATED -
LINEAR +/- 0.10
ANGULAR +/- 0°15'

ESTD WT. 45.63kg (NO CONT) SEE NOTE SHT.1

ACTL WT.

DIMENSIONS IN mm

SCALE 1:4

DEPARTMENT OF SPACE AND CLIMATE PHYSICS
UNIVERSITY COLLEGE LONDON
MULLARD SPACE SCIENCE LABORATORY, HOLMBURY ST. MARY, DORKING, SURREY.

TITLE: SPIRE INTERFACE (OPTICAL DETAILS)

DRAWING No: A1 5264 300 sht3

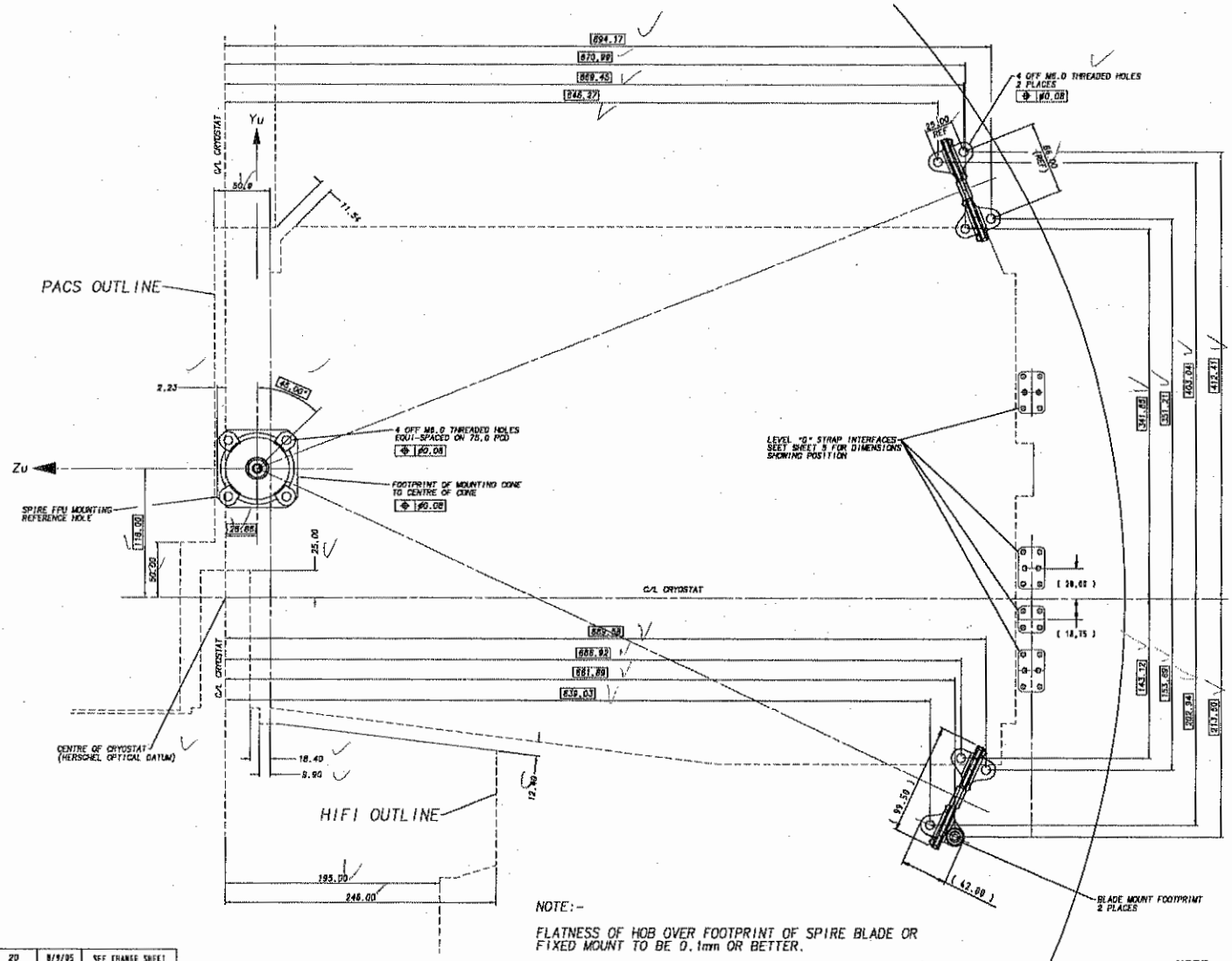
DRAWING No.		
A1	5264	300 sht4

USED ON HERSCHEL

THIRD ANGLE PROJECTION

DO NOT SCALE

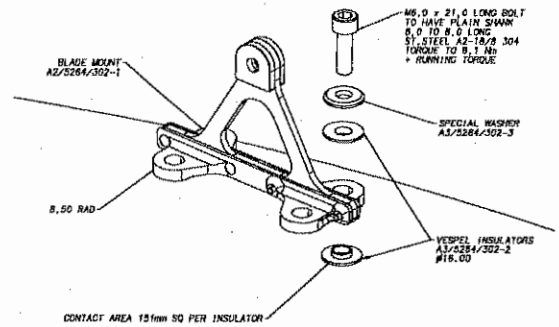
REMOVE ALL BURRS & SHARP EDGES



NOTE:-

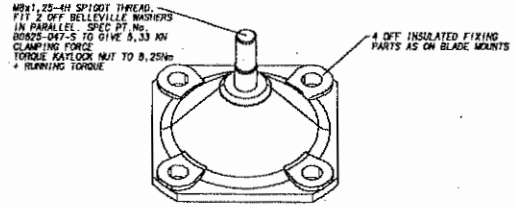
FLATNESS OF HOB OVER FOOTPRINT OF SPIRE BLADE OR FIXED MOUNT TO BE 0.1mm OR BETTER.

MAX. TILT OF HOB FROM HERSCHEL X AXIS TO BE 5 ARC.MIN. TO ENABLE SPIRE FPU TO BE MACHINED OR SHIMMED INTO ALIGNMENT (IF REQUIRED).



DETAIL OF BLADE MOUNT FIXINGS

SCALE 1:1



DETAIL OF FIXED MOUNTING

SCALE 1:1

NOTE:-

1. ALL DIMENSIONS AT ROOM TEMPERATURE

ISSUE	DATE	AMENDMENT
20	8/9/05	SEE CHANGE SHEET
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18	4/07/03	SEE CHANGE SHEET
17	18/10/02	SEE CHANGE SHEET
16	28/08/02	MODIFICATIONS AND CHANGE SHEET CREATED DRAWING UPDATED TO ISSUE 16 THERE-ON
15	27/04/01	THERMAL STRAP INTERFACE MODIFIED, LEVEL 1 STRAP FIXING HOLES MOVED
14	23/11/01	CENTRE OF GRAVITY ADDED TO SHT.1. J-FET DESIGN UPDATED, STAY OUT HOLES REMOVED
13	19/11/01	UPDATED HE1 FILTER & PHOT CONNECTORS ADDED, FOCAL PLANE & 'A' FRAME MOUNT DIA ADDED. SHEET 7 ADDED
1	24/11/01	

CHECKED	
TRACED	PGC
DRAWN	AJC

NOTE:-
SEE CHANGE SHEET FOR DETAILS OF CHANGES MADE FROM ISSUE 16 ONWARDS

SPIRE INTERFACE mar 2002 (ASSEMBLY MODEL)
COMPUTER FILE

PROTECTIVE FINISH	MATERIAL & SPEC.	TOLERANCES UNLESS OTHERWISE STATED –
ALODRINE 1200 (ST. STEEL PARTS NATURAL)	AS LISTED	LINEAR +/- 0.10 ANGULAR +/- 0°15'
ESTD WT. 45.63kg (NO CONT) SEE NOTE SHT. 1		
ACTL WT.	DIMENSIONS IN mm	SCALE 1:2 & 1:1

DEPARTMENT OF SPACE AND CLIMATE PHYSICS
UNIVERSITY COLLEGE LONDON
MULLARD SPACE SCIENCE LABORATORY, HOLMBURY ST. MARY, DORKING, SURREY.

TITLE: SPIRE INTERFACE (INTERFACE FIXING DETAILS)

DRAWING No: A1 5264 300 sht4

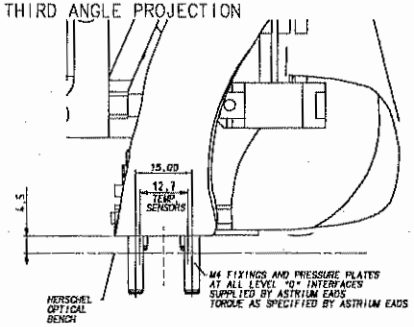
DRAWING No.		
A1	5264	300 sht5

USED ON HERSCHEL

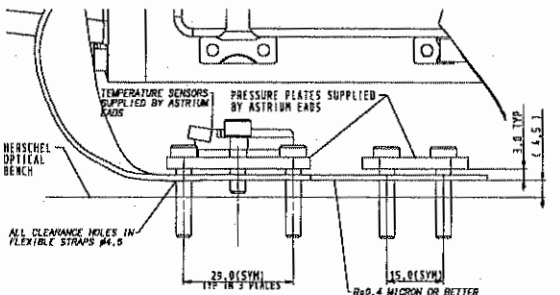
THIRD ANGLE PROJECTION

DO NOT SCALE

REMOVE ALL BURRS & SHARP EDGES



DETAIL "B" OF LEVEL "0" TO S/C INTERFACE
(SCALE 1.5:1)



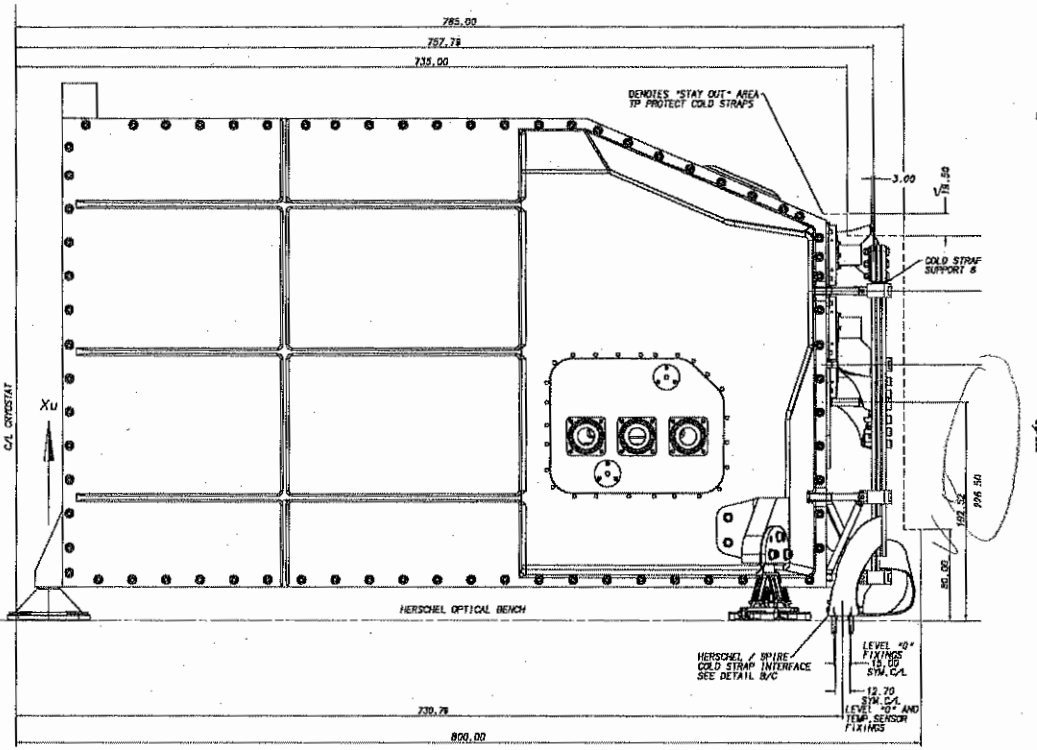
DETAIL C OF LEVEL 0 TO S/C INTERFACE
(SCALE 1.5:1)

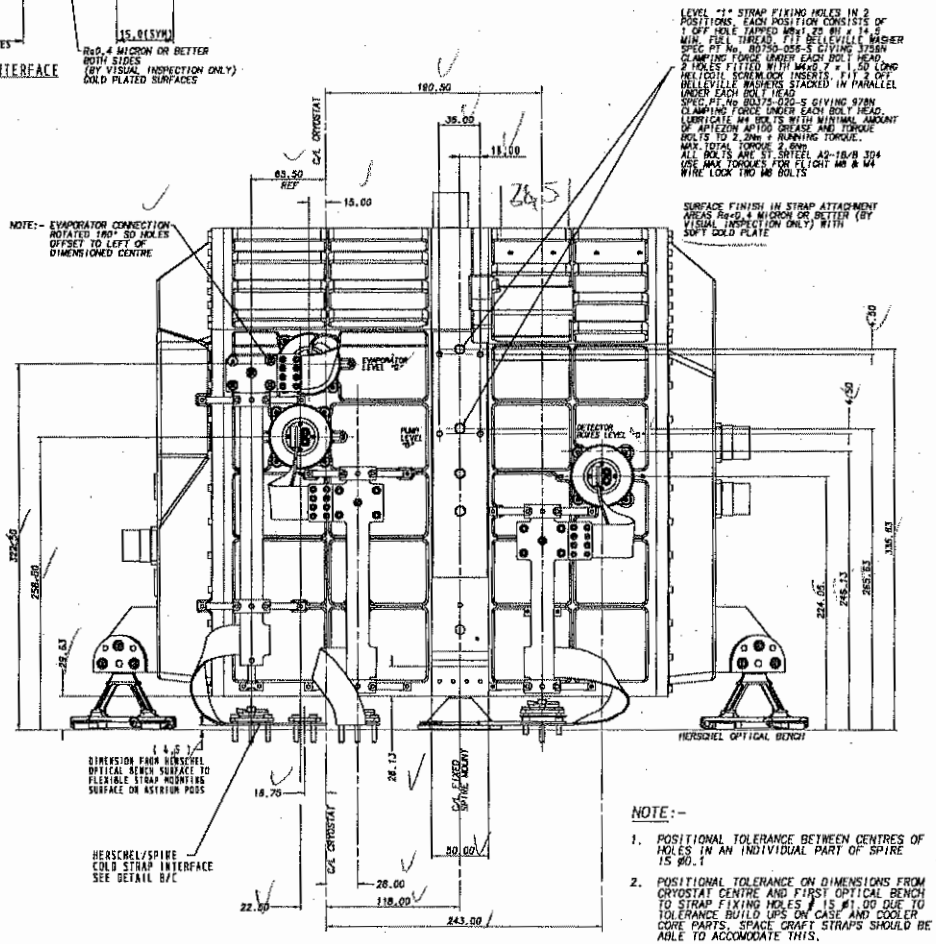
HSFPU EXTERNAL FINISHES:-

INSTRUMENT CASE AND EXTERNAL COVERS. BLADE AND FIXED MOUNTING.	ALOCROM 1200 NATURAL ST.STEEL & CARBON FIBRE
EXTERNAL FIXINGS, COLD STRAPS	NATURAL ST.STEEL GOLD PLATED

NOTE:-

ANY THERMAL INTERFACE PROVISIONS NEEDED FOT THE JFET UNITS ARE SHOWN ON INTERFACE DRAWINGS RELATING TO THOSE UNITS.





NOTE:-

1. POSITIONAL TOLERANCE BETWEEN CENTRES OF HOLES IN AN INDIVIDUAL PART OF SPIRE IS ⌀0.1
2. POSITIONAL TOLERANCE ON DIMENSIONS FROM CRYOSTAT CENTRE AND FIRST OPTICAL BENCH TO STRAP FIXING HOLES IS ⌀1.00 DUE TO TOLERANCE BUILD UPS ON CASE AND COOLER CORE PARTS. SPACE CRAFT STRAPS SHOULD BE ABLE TO ACCOMODATE THIS.

20	8/9/05	SEE CHANGE SHEET
19	19/02/04	SEE CHANGE SHEET
18	4/07/03	SEE CHANGE SHEET
17	15/10/02	SEE CHANGE SHEET

CHECKED	16	28/08/02	MODIFICATIONS AND CHANGE SHEET CREATED DRAWING UPDATED TO ISSUE 16 THERE-ON
	15	27/04/01	THERMAL STRAP INTERFACE MODIFIED. LEVEL 1 STRAP FIXING HOLES MOVED
TRACED PGC	14	23/11/01	CENTRE OF GRAVITY ADDED TO SHT 1. J-FET DETOR UPDATED, STAY OUT HOLES REMOVED
	13	19/11/01	UPDATED WITH FILTER & PHOT CONNECTORS ADDED. FOCAL PLANE & "A" FRAME MOUNT DIA ADDED. SHEET 7 ADDED
DRAWN AJC	ISSUE 1	DATE 24/11/01	AMENDMENT

SPIRE INTERFACE mar 2002 (ASSEMBLY MODEL)

COMPUTER FILE

NOTE:-
SEE CHANGE SHEET FOR DETAILS OF CHANGES MADE FROM ISSUE 16 ONWARDS

NOTE:-
ALL DIMENSIONS AT ROOM TEMPERATURE

PROTECTIVE FINISH	MATERIAL & SPEC.	TOLERANCES UNLESS OTHERWISE STATED -
ALOCROM 1200 AND SOFT GOLD PLATE (ST.STEEL PARTS NATURAL)	AS LISTED	LINEAR +/- 0.10 ANGULAR +/- 0°15'
ESTD WT. 45.63kg (NO CONT) SEE NOTE SHT.1		
ACTL WT.	DIMENSIONS IN mm	SCALE 0.45:1 & 2:1

DEPARTMENT OF SPACE AND CLIMATE PHYSICS
UNIVERSITY COLLEGE LONDON
MULLARD SPACE SCIENCE LABORATORY, HOLMBURY ST. MARY, DORKING, SURREY.

TITLE

SPIRE INTERFACE
(THERMAL STRAP CONNECTIONS)

DRAWING No		
A1	5264	300 sht5

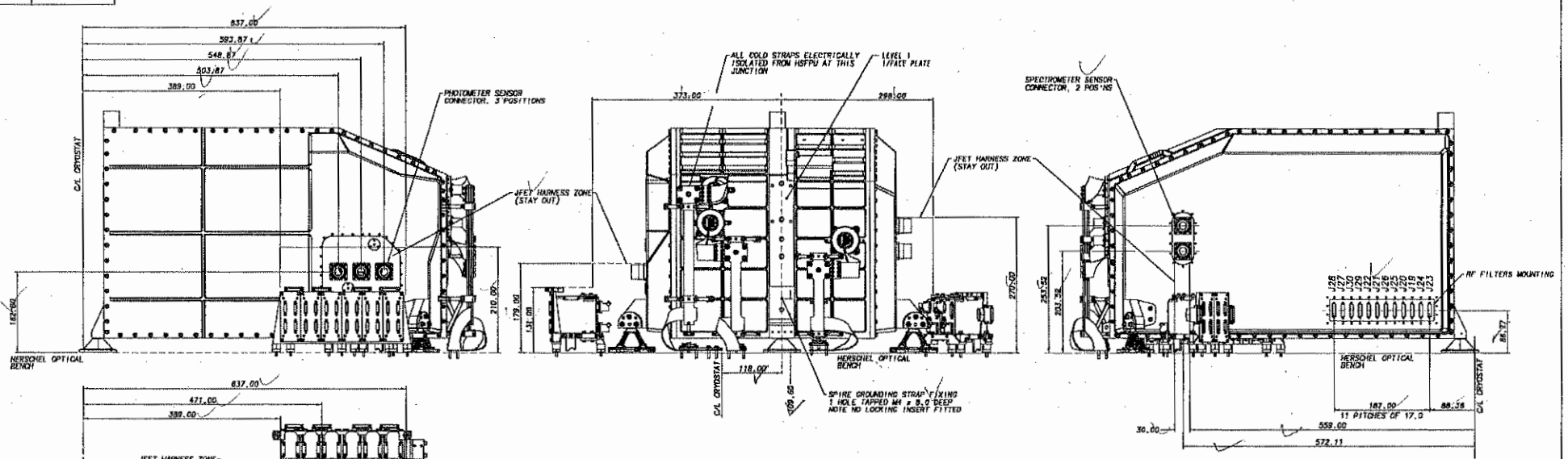
DRAWING No.		
A1	5264	300 sht6

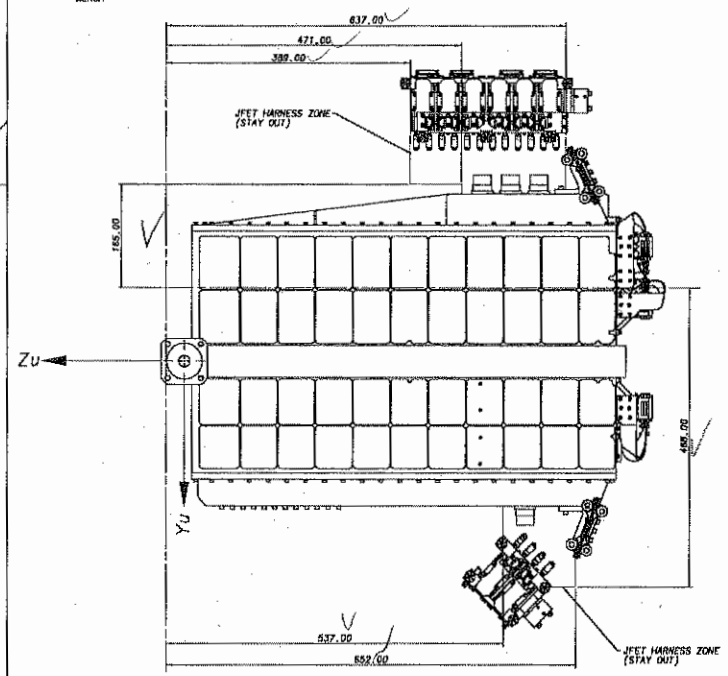
USED ON HERSCHEL

THIRD ANGLE PROJECTION

DO NOT SCALE

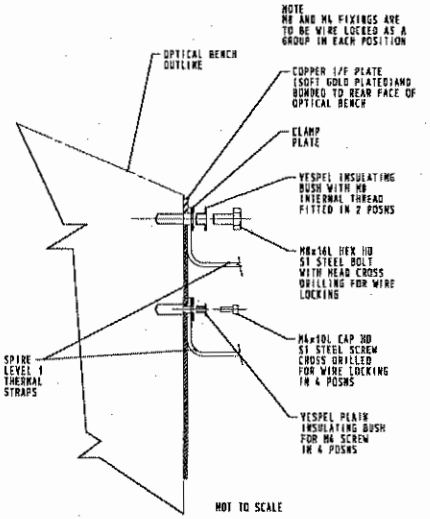
REMOVE ALL BURRS & SHARP EDGES





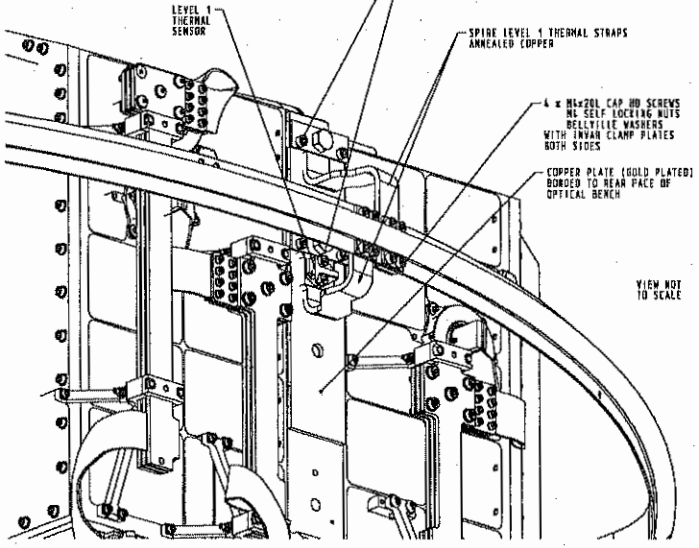
VIEW ON Xu (UNDERSIDE OF SPIRE)

NOTE
M8 AND M6 FIXINGS ARE TO BE WIRE LOCKED AS A GROUP IN EACH POSITION



NOT TO SCALE

PICTORIAL VIEW OF
LEVEL 1 THERMAL STRAPS
(FROM SPIRE INTERFACE mar 2002 (ASSY) CONFIG-DWG SHEET 5)



NOTE:-
1. ALL DIMENSIONS AT ROOM TEMPERATURE

ISSUE	DATE	AMENDMENT
20	13/02/03	REDRAWN-SEE CHANGE SHEET
19	19/02/04	SEE CHANGE SHEET
18	4/07/03	SEE CHANGE SHEET
17	18/10/02	SEE CHANGE SHEET
16	28/08/02	MODIFICATIONS AND CHANGE SHEET CREATED DRAWING UPDATED TO ISSUE 16 THERE-ON
15	27/04/01	THERMAL STRAP INTERFACE MODIFIED. LEVEL 1 STRAP FIXING HOLES MOVED
14	23/11/01	CENTRE OF GRAVITY ADDED TO SHT.1. J-FET DESIGN UPDATED, STAY OUT HOLES REMOVED
13	19/11/01	UPDATED WIT FILTER & STRUT DIMENSIONS ADDED. FOCAL PLANE & 'A' FRAME MOUNT DIA ADDED. SHEET 7 ADDED
1	24/11/01	

NOTE:-
SEE CHANGE SHEET FOR DETAILS OF CHANGES MADE FROM ISSUE 16 ONWARDS

SPIRE INTERFACE mar 2002 (ASSEMBLY MODEL)

COMPUTER FILE

CHECKED	
TRACED	PGC
DRAWN	AJC

PROTECTIVE FINISH	ALODROM 1200 AL PARTS SELECTIVE GOLD PLATE OF COPPER PARTS (ST.STEEL PARTS NATURAL)
ESTD WT.	45.63kg (MD CONT) SEE NOTE SHT.1
ACTL WT.	
MATERIAL & SPEC.	AS LISTED
DIMENSIONS IN	mm
TOLERANCES UNLESS OTHERWISE STATED -	
LINEAR	+/- 0.10
ANGULAR	+/- 0°15'
SCALE	1:4

DEPARTMENT OF SPACE AND CLIMATE PHYSICS
UNIVERSITY COLLEGE LONDON
MULLARD SPACE SCIENCE LABORATORY, HOLMBURY ST. MARY, DORKING, SURREY.

TITLE: SPIRE INTERFACE

DRAWING No		
A1	5264	300 sht6

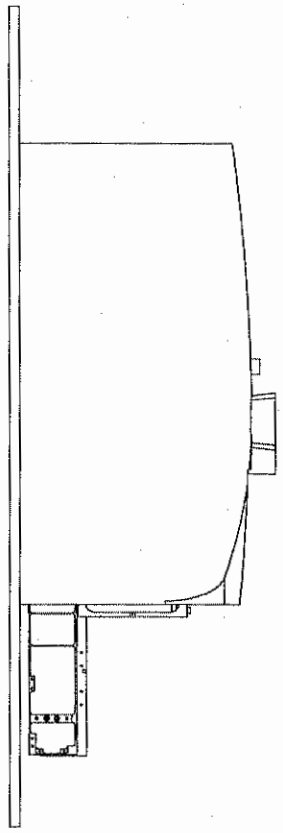
DRAWING No.		
A1	5264	300 sht7

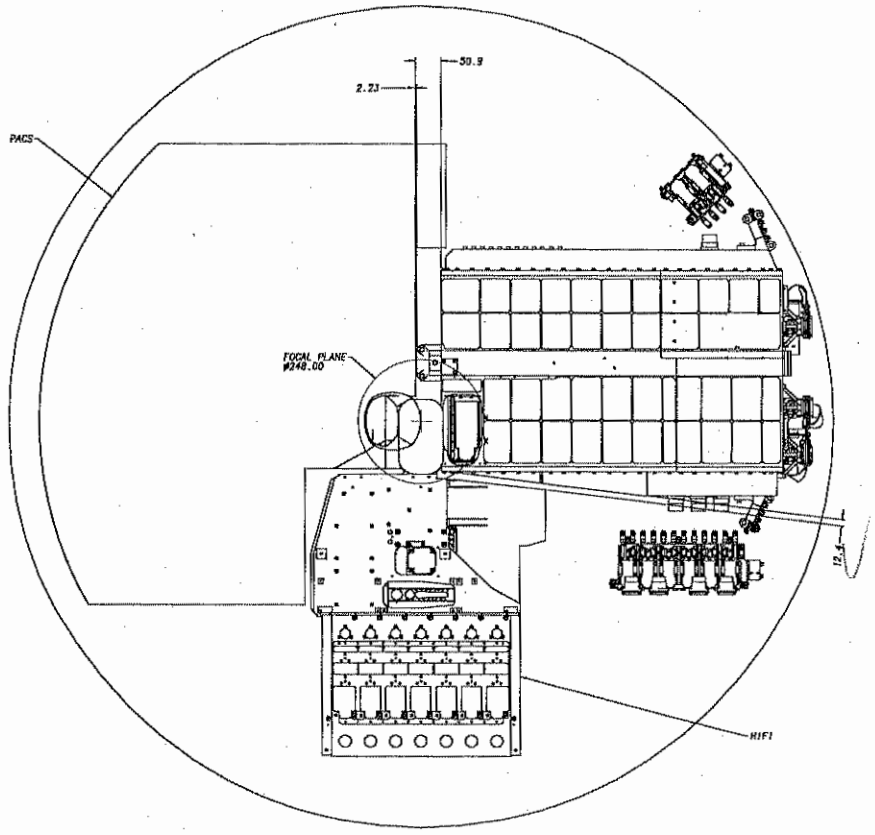
USED ON HERSCHEL

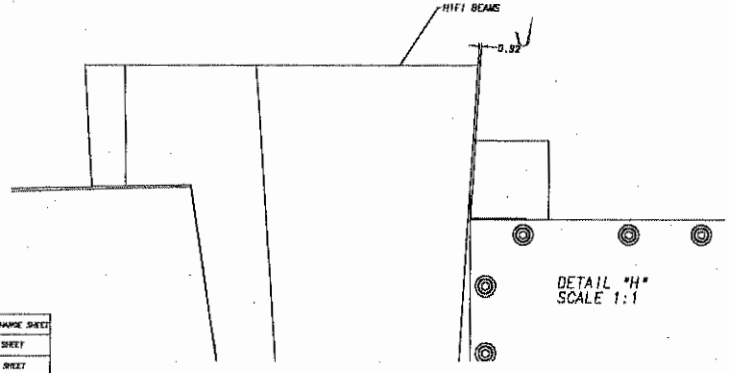
THIRD ANGLE PROJECTION

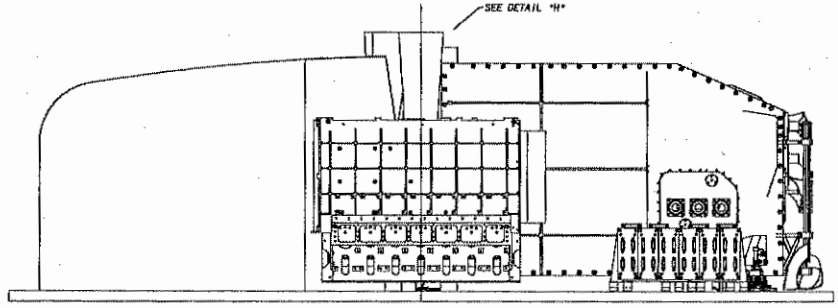
DO NOT SCALE

REMOVE ALL BURRS & SHARP EDGES









ISSUE	DATE	AMENDMENT
20	8/11/05	REDRAWN-SEE CHANGE SHEET
19	18/02/04	SEE CHANGE SHEET
18	4/07/03	SEE CHANGE SHEET
17	18/10/02	SEE CHANGE SHEET
16	28/08/02	MODIFICATIONS AND CHANGE SHEET CREATED DRAWING UPDATED TO ISSUE 18 THERE-ON
15	27/04/01	THERMAL STRAP INTERFACE MODIFIED, LEVEL 1 STRAP FIXING HOLES MOVED
14	23/11/01	CENTRE OF GRAVITY ADDED TO SHT.1. V-FKT DESIGN UPDATED. STAY OUT HOLES REMOVED
13	19/11/01	UPDATED REF FILTER & PMT CONNECTORS ADDED. FOCAL PLANE & "A" FRAME MOUNT DIM ADDED. SHEET 7 ADDED
1	24/11/01	

CHECKED

TRACED PGC

DRAWN AJC

NOTE:-

SEE CHANGE SHEET FOR DETAILS OF CHANGES MADE FROM ISSUE 16 ONWARDS

SPIRE INTERFACE mar 2002 (ASSEMBLY MODEL)

COMPUTER FILE

PROTECTIVE FINISH	MATERIAL & SPEC.	TOLERANCES UNLESS OTHERWISE STATED –
ALOCROM 1200 (ST.STEEL PARTS NATURAL)	AS LISTED	LINEAR +/- 0.10
		ANGULAR +/- 0°15'
ESTD WT. 45.638g (NO CONT) SEE NOTE SHT.1		
ACTL WT.	DIMENSIONS IN mm	SCALE

DEPARTMENT OF SPACE AND CLIMATE PHYSICS
UNIVERSITY COLLEGE LONDON
MULLARD SPACE SCIENCE LABORATORY, HOLMBURY ST. MARY, DORKING, SURREY.

TITLE

SPIRE INTERFACE

(PACS & HIFI OPTICAL & CLEARANCES)

DRAWING No		
A1	5264	300 sht7

MODIFICATION SHEET

KE-2952

THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY

DRAWING NUMBER: KE-0104-360

DRAWING TITLE: 2 JFET RACK INTERFACE DRAWING

Date: 12-Mar-2003

NCR/ECR:

Modification Description:

1. Thermal standoff positional dimensions changed to basic dimensions.
2. Thermal strap interface dimensions added
3. Note 3 modified to clarify that stud is set to depth then nut is torqued to 2.1Nm.
4. Height of JFET rack dimension added.
5. Note 8 added regarding the protrusion and trimming of the parylene coating
6. Annotation moved (next to balloon) stating that the KE-0104-357 and 358 should not be confused (as they have different lengths of parylene coating).
7. Typos fixed
8. Unit mounting hole size and positional accuracy added

Issue raised to:	G	By:	Iain Gilmour

Date: 20-May-2003

NCR/ECR:

Modification Description:

Added note to size of tapped holes for attachment of cooling strap (L-1/2)

2 HOLES M4x0.7 1.5D LG HELICOIL
FASTENER TO ENGAGE 1.5d
TORQUE NOT TO EXCEED 2.5Nm

SUPERSEDED ISSUES OF ALL DRAWING HARD COPIES TO BE DESTROYED

KE-2952

MODIFICATION SHEET

KE-2952

THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY

DRAWING NUMBER: KE-0104-360

DRAWING TITLE: 2 JFET RACK INTERFACE DRAWING

Issue raised to:	H	By:	Kevin Burke

Date: 13-Oct-2003

NCR/ECR:

Modification Description:

1. Reflects new thermal standoff design with additional bush and upper and lower feet washers. Subsequent dimensions in X direction updated to new interface plane. New parts added to Parts List.
2. Reflects new harness layout which simulates actual physical layout. Micro-D 15 way connector added to harness representation. Micro-D 37 way elliptical entry backshells replace standard circular entry versions. Mass of harness increased from 110g to 205g.
3. L3 strap and interface assembly added. Views updated to show interface details and L3 strap hole definition.
4. Mass of JFET modules reduced from 305g to 260g.
5. Kapton tape removed from fastener and stand-off interfaces (note 7 deleted).
6. Moments of inertia updated along with C of G position.
7. Kapton tape note removed from L3 interface area.
8. Incorrectly specified M2.5 x 8 long fasteners used to fasten JFET modules to front plate replaced with M3 x 8 long.
9. Temperature sensor interface shown on both sides of the L3 interface sub-assembly.
10. Distance between S/C connector I/F and rear of JFET harness increased due to addition of 15-way connectors to JFET harness.
11. New dimensions applied to L3 interface area.
12. Connector fasteners and nuts added to spacecraft connectors.

Issue raised to:	I	By:	Dave Smart

SUPERSEDED ISSUES OF ALL DRAWING HARD COPIES TO BE DESTROYED

KE-2952

MODIFICATION SHEET

KE-2952

THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY

DRAWING NUMBER: KE-0104-360

DRAWING TITLE: 2 JFET RACK INTERFACE DRAWING

Date: 12-Nov-2003

NCR/ECR:

Modification Description:

1. Harness re-routed to show clearance required to access connectors on the rear of the JFETS. Reference to note 6 added.
2. Harness tie down parts added.
3. Note 8 added concerning the pre-fitting of the M4 fasteners prior to the assembly of the harness.

Issue raised to:	J	By:	Dave Smart

SUPERSEDED ISSUES OF ALL DRAWING HARD COPIES TO BE DESTROYED

KE-2952

MODIFICATION SHEET

KE-2952

THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY

DRAWING NUMBER: KE-0104-360

DRAWING TITLE: 2 JFET RACK INTERFACE DRAWING

Date: 10-Mar-2004

NCR/ECR:

Modification Description:

1. Note 9 and leaders added indicating 3mm jackscrew length below the mating plane.
2. Label added to Part 23836-10209722 (JFET) to indicate orientation:

SPIRE

10209750

JFET MODULE

JPL

(NOTE: 10209750 is the JPL part number, 10209722 is the JPL ICD drawing number. JD wishes to leave the ProE part name as 23836-10209722)

Issue raised to:	K	By:	Dave Smart

Date: 05-Aug-2005

NCR/ECR:

Modification Description:

1. Note added to describe removal of Carbon Whiskers and coating with D222a

RAISED TO ISSUE L

Issue raised to:	L	By:	Sam Tobin

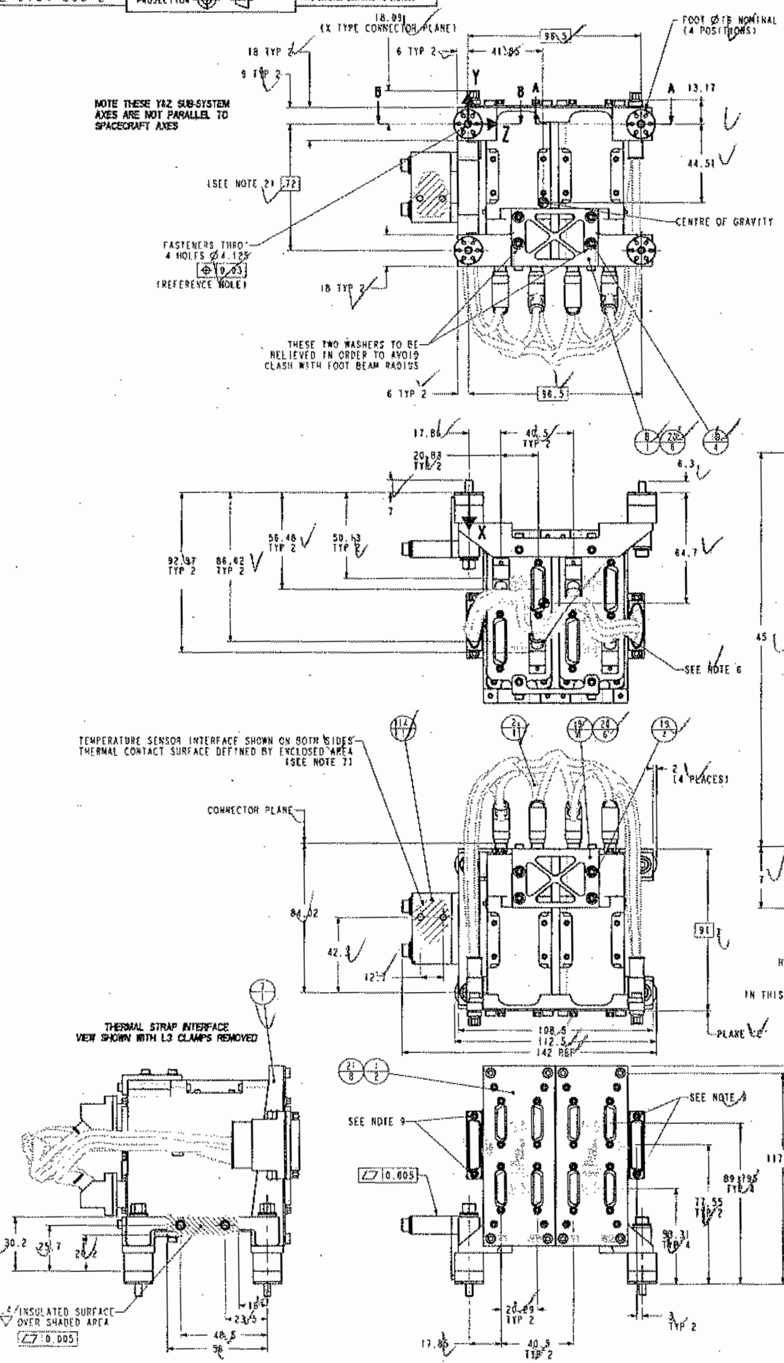
SUPERSEDED ISSUES OF ALL DRAWING HARD COPIES TO BE DESTROYED

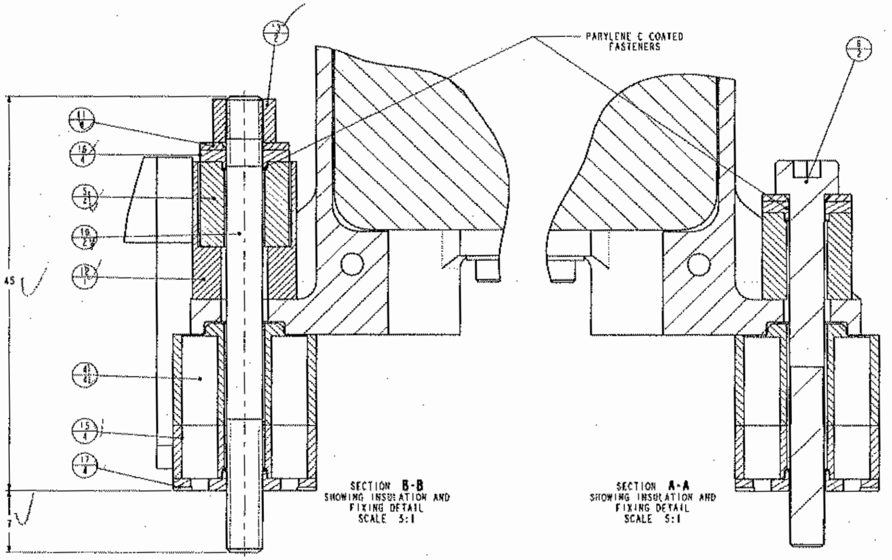
KE-2952

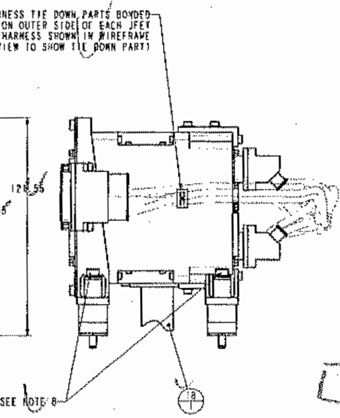
A 0-KE-0104-360-L

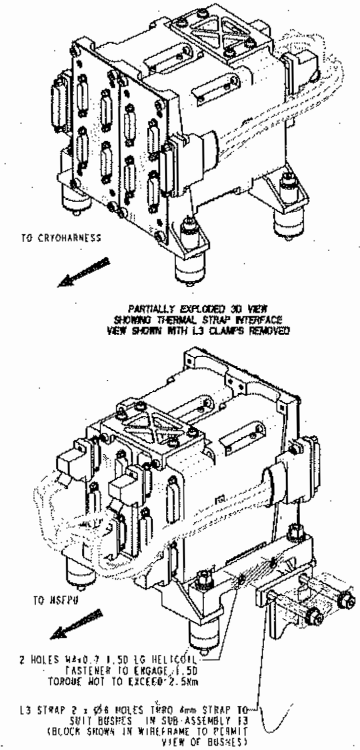
PROJECTION

THIS DRAWING CONFORMS TO B.S.308









CONNECTOR TABLE

LABEL	TYPE	FUNCTION
J1	ALL MDM25P	ALL SIGNAL FEEDS TO CRYOHARNESS
J2		
J3		
J4		
J5		
J6		
J7		
J8		
J9	MDM37S	BIAS WIRES FROM CRYOHARNESS
J10		
J11	ALL MDM51P	SIGNALS IN FROM DETECTORS
J12		
J13		
J14		
J15	ALL MDM15P	BIAS FEEDS INTO MODULES
J16		
J17		
J18		

MOMENTS OF INERTIA (kg.mm²) WITH RESPECT TO C OF G	
I_{xx}	1.81e+03
I_{yy}	1.94e+03
I_{zz}	2.31e+03

ITEM	PART NO.	DESCRIPTION	QTY	MASS/ITEM	TOTAL MASS	COMMENTS
1	23836-10209722	JFET MODULE	2	260.00	520.00	JPL SUPPLY
2	2JFET_HARNESS	BACKHARNESS (10209784.11	1	216.95	216.95	JPL SUPPLY
3	HARNESS_CLIP		2			
4	KE-0104-354	STEPPED THERMAL STANDOFF	4	1.70	6.80	
5	KE-0104-355	TOP THERMAL STANDOFF	4	0.87	3.47	
6	KE-0104-358	M4 BOLT (PARYLENE C COATED 26.5mm)	2	4.70	9.39	
7	KE-0104-361	FRONT PLATE - 2 JFET	1	48.01	48.01	
8	KE-0104-362	REAR FOOT BEAM - 2 JFET	1	33.69	33.69	
9	KE-0104-363	REAR TOP BEAM - 2 JFET	1	8.62	8.62	
10	KE-0104-365	M4 STUD (PARYLENE C COATED)	2	5.08	10.16	
11	KE-0104-367	THERMAL STANDOFF WASHER	4	0.39	1.55	
12	KE-0104-368	THERMAL STRAP ASSY - 2 JFET	1	23.28	23.28	
13	KE-0104-386	M4 NUT (5mm LONG)	2	1.31	2.62	
14	KE-0104-393	L3 INTERFACE ASSY	1	64.18	64.18	
15	KE-0104-397	THERMAL STANDOFF BUSH	4	0.94	3.76	
16	KE-0104-398	FOOT UPPER WASHER	4	0.14	0.55	
17	KE-0104-399	FOOT LOWER WASHER	4	0.34	1.35	
18	L3_STRAP_A	L3 STRAP	1	N/A		HERSCHEL SUPPLY
19	M2-5_WASHER	WASHER	8	0.11	0.86	S/STEEL BS970/150F 304S 11/15/31
20	M2-5_X_BLG.CPHD_SKT_SS	FASTENER	12	0.58	6.93	S/STEEL BS3506-1:1998 A2-70
21	M3_X_BLG.CPHD_SKT__SS	FASTENER	8	0.74	5.95	S/STEEL BS3506-1:1998 A2-70
				ASSEMBLY MASS	968.13 GRAMS	

NOTES:-

1. BOND ITEM 15 TO 4 PRIOR TO ASSEMBLY.
   BOND ITEMS 16 & 14 TO 3 PRIOR TO ASSEMBLY.
   ITEMS 3 & 4 TO BE PERMANENTLY GLUED TO MATING SURFACES.
2. TO ATTAIN THE CORRECT MOUNTING INTERFACE DIMENSION, AND TO COMPENSATE FOR ACTUAL JFET MODULE SIZES, THE FOLLOWING PROCEDURE MUST BE FOLLOWED:
   PARTS 1 ARE TO BE MOUNTED TO PART 6. MEASURE FROM THE TOP OF PARTS 1 SHOWN AS PLANE 'C' TO THE TAIL END FACE OF PARTS 6, NOTING THE TWO VALUES.
   MACHINE RAISED PADS ON PART 7 TO REMOVE (VALUE - 87.7). PADS ON ITEM 8 WILL ALSO NEED MACHINING IF TRIAL ASSEMBLY OF RACK ON FLAT SURFACE SHOWS GAPS BEFORE FASTENERS ARE TIGHTENED.
3. ITEMS 6 TO BE TORQUED TO 2.1 Nm ABOVE LOCKING INSERT RUNNING TORQUE.
   ITEMS 13 TO BE TORQUED TO 2.1 Nm WITH STUD SET TO DEPTH SHOWN IN HOB LOCKING INSERT.
4. UNIT SHOWN FITTED WITH BACK-HARNESS MATING TO J9 - J10 & J15 - J18 BECAUSE THIS WILL BE FITTED BEFORE ITEM IS INTEGRATED TO HOB.
5. HEAT CAPACITY AT RT = 700 JOULES / KELVIN.
6. FITTED BACKHARNESS TO AFFORD OPEN ACCESS TO 51 WAYS AS SHOWN.
7. AFFIX ONE SENSOR WITH LONG BOLTS AND THEN THE OTHER ON THE REVERSE WITH NUTS
8. ITEMS 6 AND 11 TO BE PRE-FITTED BEFORE ITEM 2 IS FITTED
9. ONLY 3mm JACKSCREW LENGTH GUARANTEED BELOW THE MATING PLANE
10. INNER SURFACES OF PARTS 4, 5 AND 15 TO BE CLEAN OF CARBON WHISKERS AND OVERCOATED WITH D222A AFTER ASSEMBLY.

L	05-Aug-05	KE-2952.	D. SMART			ISSUED
ISSUE	DATE	MOD. No.	DRN. BY	CHKD.	APPD.	STATUS

TOLERANCES UNLESS STATED ±0.2 mm ±0.3 °	FINISH CLEAN REMOVE ALL BURRS	ORIGINAL SCALE 1:1 DO NOT SCALE
MATERIAL & SPEC. SEE DETAILS	SURFACE TEXTURE µm SEE DETAILS ✓UNLESS STATED	0 50mm

USED ON

CENTRAL LABORATORY OF THE RESEARCH COUNCILS

TITLE

2 JFET RACK INTERFACE DRAWING

SPIRE

A 0-KE-0104-360-L 1 OF 1

FORM_MECH_009_Iss1_SSTD_A0

MODIFICATION SHEET

KE-2953

THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY

DRAWING NUMBER: KE-0104-350

DRAWING TITLE: 6 JFET RACK INTERFACE DRAWING

Date: 12-Mar-2003

NCR/ECR:

Modification Description:

1. Thermal standoff positional dimensions changed to basic dimensions.
2. Thermal strap interface dimensions added
3. Note 8 added regarding the protrusion and trimming of the parylene coating
4. Typos fixed
5. 2 off thermal strap standard washers replaced with Belleville washers, BOM updated to this effect.
6. Unit mounting hole size and positional accuracy added

Issue raised to:	E	By:	Iain Gilmour

Date: 20-May-2003

NCR/ECR:

Modification Description:

1. Note Associated with tapped holes in the Thermal Strap Interface, first line modified for clarity to read:
   2 HOLES M4x0.7 1.5D LG HELICOIL

Issue raised to:	F	By:	Kevin Burke

SUPERSEDED ISSUES OF ALL DRAWING HARD COPIES TO BE DESTROYED

KE-2953

MODIFICATION SHEET

KE-2953

THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY

DRAWING NUMBER: KE-0104-350

DRAWING TITLE: 6 JFET RACK INTERFACE DRAWING

Date: 13-Oct-2003

NCR/ECR:

Modification Description:

1. Reflects new thermal standoff design with additional bush and upper and lower feet washers. Subsequent dimensions in X direction updated to new interface plane. New parts added to Parts List.
2. Reflects new harness layout which simulates actual physical layout. Micro-D 15 way connector added to harness representation. Micro-D 37 way elliptical entry backshells replace standard circular entry versions. Mass of harnesses increased from 165g to 270g.
3. L3 strap and interface assembly added. Views updated and added to show interface details and L3 strap hole definition.
4. Mass of JFET modules reduced from 305g to 260g.
5. Kapton tape removed from fastener and stand-off interfaces (note 7 deleted).
6. Moments of inertia updated along with C of G position.
7. Fastener for thermal strap assembly changed to non parylene coated M4 x 45mm long.
8. Kapton tape note removed from L3 interface area.
9. Incorrectly specified M2.5 x 8 long fasteners used to fasten JFET modules to front plate replaced with M3 x 8 long.
10. Temperature sensor interface shown on both sides of the L3 interface sub-assembly.
11. Distance between S/C connector I/F and rear of JFET harness increased due to addition of 15-way connectors to JFET harness. Dimension between S/C connector plane and rear face of JFET module added.
12. New dimensions applied to L3 interface area.
13. Connector fasteners and nuts added to spacecraft connectors.

SUPERSEDED ISSUES OF ALL DRAWING HARD COPIES TO BE DESTROYED

KE-2953

MODIFICATION SHEET

KE-2953

THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY

DRAWING NUMBER: KE-0104-350

DRAWING TITLE: 6 JFET RACK INTERFACE DRAWING

Issue raised to:	G	By:	Dave Smart

Date: 10-Mar-2004

NCR/ECR:

Modification Description:

1. Note 8 and leaders added indicating 3mm jackscrew length below the mating plane.
2. Label added to Part 23836-10209722 (JFET) to indicate orientation:

   SPIRE

   10209750

   JFET MODULE

   JPL

(NOTE: 10209750 is the JPL part number, 10209722 is the JPL ICD drawing number. JD wishes to leave the ProE part name as 23836-10209722)

Issue raised to:	H	By:	Dave Smart

Date: 05-Aug-2005

NCR/ECR:

Modification Description:

1. Note added to describe removal of Carbon Whiskers and coating with D222a

RAISED TO ISSUE J

Issue raised to:	J	By:	Sam Tobin

SUPERSEDED ISSUES OF ALL DRAWING HARD COPIES TO BE DESTROYED

KE-2953

MODIFICATION SHEET

KE-2953

THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY

DRAWING NUMBER: KE-0104-350

DRAWING TITLE: 6 JFET RACK INTERFACE DRAWING

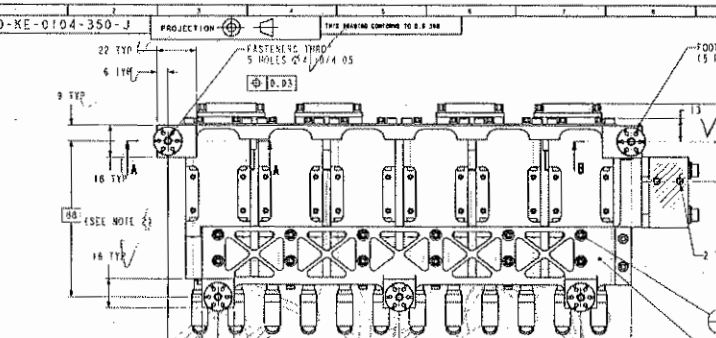
SUPERSEDED ISSUES OF ALL DRAWING HARD COPIES TO BE DESTROYED

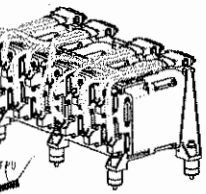
KE-2953

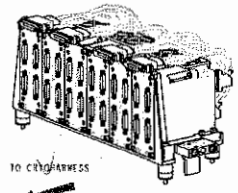
A0-KE-0104-350-J

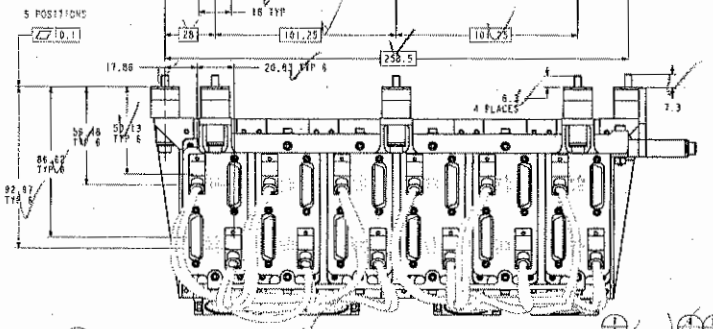
MOMENTS OF INERTIA (KG m²) WITH RESPECT TO C OF G	
I_{xx}	1.70e-04
I_{yy}	1.66e-04
I_{zz}	4.73e-03

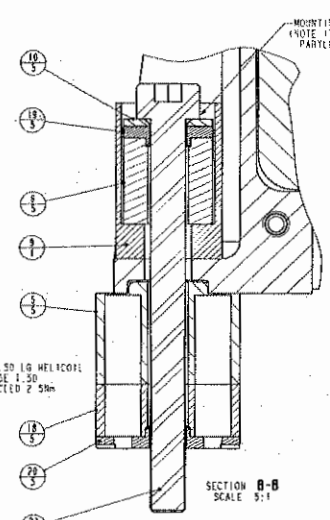
ITEM	PART NO.	DESCRIPTION	QTY	MASS/ITEM	TOTAL MASS	COMMENTS
1	23836-10209722	JFET MODULE	6	260.00	1560.00	JPL SUPPLY
2	KE-0104-351	FRONT PLATE 6 JFET	1	128.66	128.66	
3	KE-0104-352	REAR FOOT BEAM - 6 JFET	1	69.55	69.55	
A	KE-0104-353	REAR TOP BEAM - 6 JFET	1	32.56	32.56	
5	KE-0104-354	STEPPED THERMAL STANDOFF	5	1.70	8.50	
6	KE-0104-355	TOP THERMAL STANDOFF	5	0.87	4.34	
7	10209785_1	BACKHARNESS (10209785_1)	1	265.65	265.65	JPL SUPPLY
8	KE-0104-356	M4 BOLT (PARYLENE C COATED 26.5mm)	4	4.70	18.78	
9	KE-0104-359	THERMAL STRAP ASSY - 6 JFET	1	23.76	23.76	
10	KE-0104-367	THERMAL STANDOFF WASHER	5	0.39	1.94	
11	M2-S_WASHER	WASHER	24	0.11	12.57	S/STEEL BS970/1501 304S BT745/31
12	M2-S_X_BLG_CPHD_SKT_SS	FASTENER	35	0.58	20.79	S/STEEL BS3506-1:1998 A2-70
13	M3_NUT	NUT	2	0.48	0.97	S/STEEL BS8105 A2-50 DIN 912
14	58-3205	BELLEVILLE WASHER	2	0.17	0.34	BELLEVILLE SPRINGS LTD, BATCH 17415
15	M3_X_20LG_CPHD_SKT_SS	FASTENER	2	1.26	2.52	S/STEEL BS3506-1:1998 A2-70
16	10209786_1	BACKHARNESS (10209786_1)	1	267.70	267.70	JPL SUPPLY
17	KE-0104-383	L3 INTERFACE ASSY	1	64.18	64.18	
18	KE-0104-389	THERMAL STANDOFF BUSH	5	0.94	4.70	
19	KE-0104-395	FOOT UPPER WASHER	5	0.14	0.69	
20	KE-0104-398	FOOT LOWER WASHER	5	0.34	1.69	
21	L3_STRAP_B	L3 STRAP	1	N/A		HERSCHEL SUPPLY
22	M3_X_8LG_CPHD_SKT_SS	FASTENER	24	0.74	17.88	S/STEEL BS3506-1:1998 A2-70
23	M4_X_45LG_CPHD_SKT_SS	FASTENER	1	5.15	5.15	S/STEEL BS3506-1:1998 A2-70
		ASSEMBLY MASS			2502.84 GRAMS	

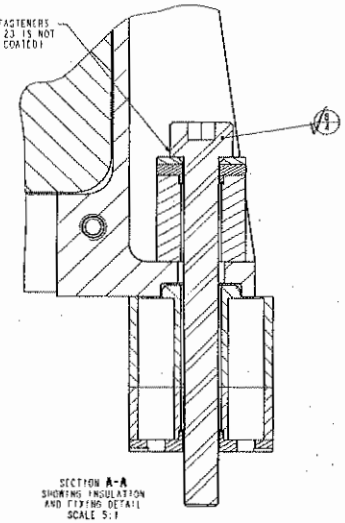


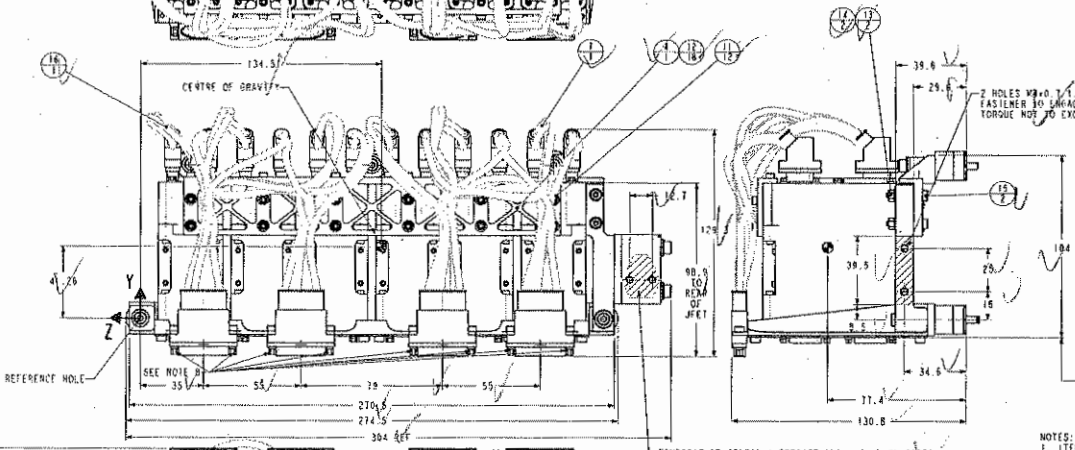


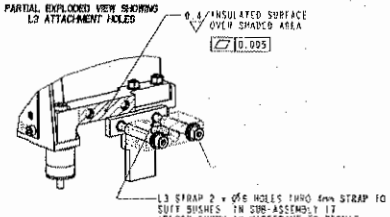


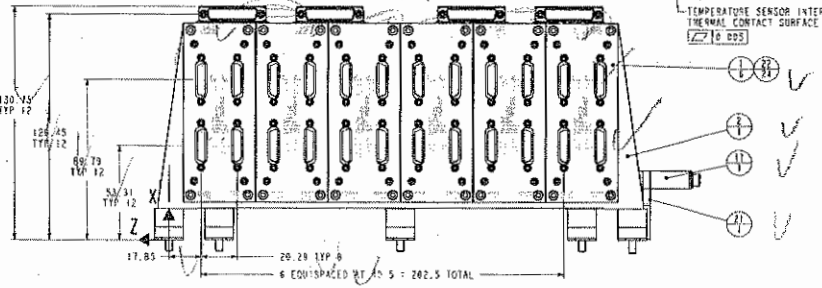












CONNECTOR TABLE		
LABEL	TYPE	FUNCTION
J1		
J2		
J3		
J4		
J5		
J6		
J7		
J8		
J9		
J10		
J11		
J12	ALL 40WAY	ALL SIGNAL FEEDS TO CRYOHARNESS
J13		
J14		
J15		
J16		
J17		
J18		
J19		
J20		
J21		
J22		
J23		
J24		
J25		
J26	40WAY25	BIAS WIRES FROM CRYOHARNESS
J27		
J28		
J29		
J30		
J31		
J32		
J33	ALL 40WAY	SIGNALS IN FROM DETECTORS
J34		
J35		
J36		
J37		
J38		
J39		
J40		
J41		
J42		
J43		
J44		
J45		
J46	ALL 40WAY	BIAS FEEDS INTO MODULES
J47		
J48		
J49		
J50		
J51		
J52		

NOTES:-

1. ITEM 19 TO BE BONDED TO ITEM 6 PRIOR TO ASSEMBLY.
   ITEMS 20 & 18 TO BE BONDED TO ITEM 5 PRIOR TO ASSEMBLY
   ITEMS 5 & 6 TO BE PERMANENTLY GLUED TO MATING SURFACES.
2. TO ATTAIN THE CORRECT MOUNTING INTERFACE DIMENSION, AND TO COMPENSATE FOR ACTUAL JFET MODULE SIZES, THE FOLLOWING PROCEDURE MUST BE FOLLOWED.
   PARTS 1 ARE TO BE MOUNTED TO PART 2. MEASURE FROM THE TOP OF PARTS 1 SHOWN AS PLANE 'C' TO THE TAIL END FACE OF PARTS 2. NOTING THE DIF VALUES MACHINE RAISED PADS ON PART 3 TO REMOVE (VALUE - 87.7). PADS ON ITEM 4 WILL ALSO NEED MACHINING IF TRIAL ASSEMBLY OF RACK ON FLAT SURFACE SHOWS GAPS BEFORE FASTENERS ARE TIGHTENED.
3. ITEMS 22 AND 8 TO BE TORQUED TO 2.1 Nm ABOVE LOCKING INSERT RUNNING TORQUE.
4. UNIT SHOWN FITTED WITH BACK-HARNESS MATING TO J25-28 & J41-52 BECAUSE THIS WILL BE FITTED BEFORE ITEM 15 INTEGRATED TO HOB.
5. HEAT CAPACITY AT 8T = 2100 JOULES / KELVIN.
6. FITTED BACKHARNESS TO AFFORD OPEN ACCESS TO 51 WAYS AS SHOWN.
7. AFFIX ONE SENSOR WITH LONG BOLTS AND THEN THE OTHER ON THE REVERSE WITH NUTS
8. ONLY 3mm JACSCREW LENGTH GUARANTEED BELOW MOUNTING PLANE
9. INNER SURFACES OF PARTS 5, 6 AND 18 TO BE CLEAN OF CARBON WHISKERS AND OVERCOATED WITH DC228 AFTER ASSEMBLY.

ISSUE	DATE	MOD. No.	DRN. BY	CHKD.	APPD.	STATUS
J	05-AUG-05	KE-2953.	D. SMART			ISSUED

TOLERANCES UNLESS STATED	FINISH	ORIGINAL SCALE
±0.5 mm ±0.3 °	CLEAN REMOVE ALL BURRS	DO NOT SCALE
MATERIAL & SPEC. SEE DETAILS	SURFACE TEXTURE µm SEE DETAILS ✓UNLESS STATED	0 59mm

USED ON

CENTRAL LABORATORY OF THE RESEARCH COUNCILS

TITLE

6 JFET RACK INTERFACE DRAWING

SPIRE

A	0-KE-0104-350-J	1 OF 1

FORM_MECH_009_Iss1_SSTD_A0

DRAWING No.			
A1	5264	404	SHT 4

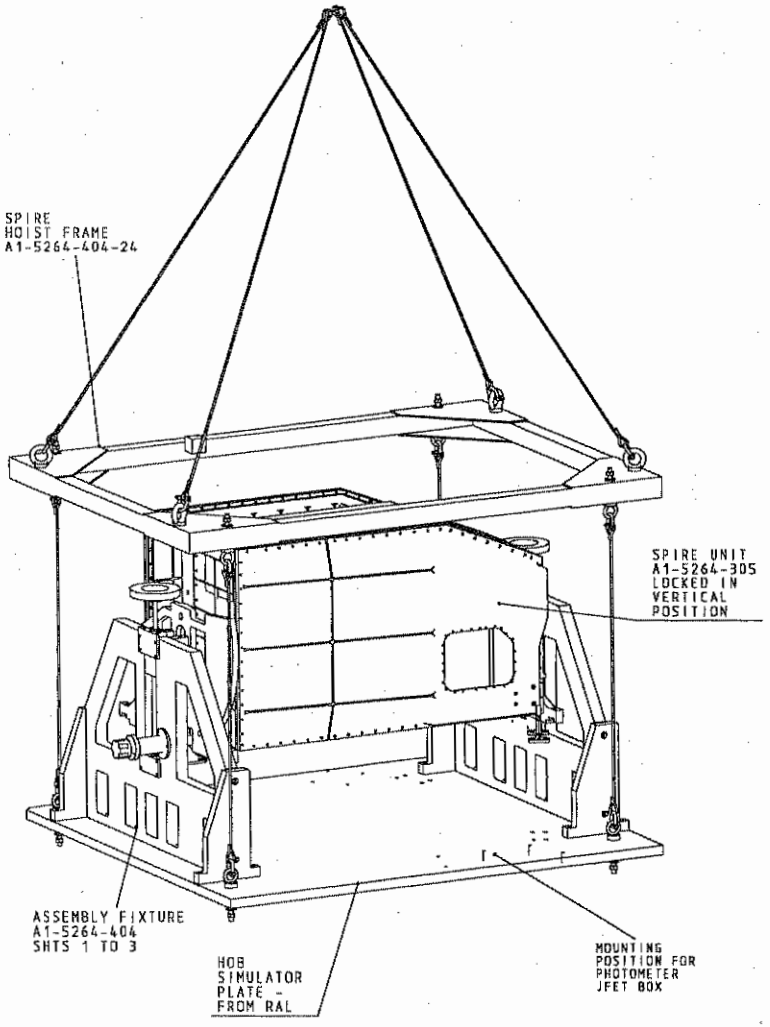
USED ON
SPIRE
MGSE

THIRD ANGLE PROJECTION

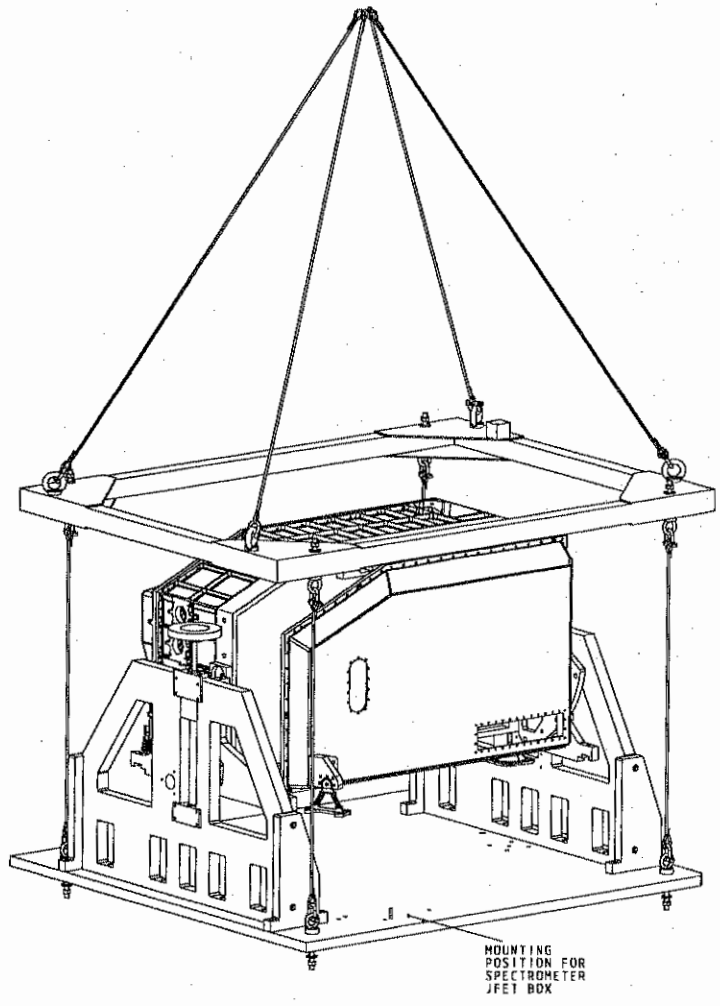
DO NOT SCALE

REMOVE ALL BURRS & SHARP EDGES

NOTES
1 SEE SHEET 5 FOR FRAME DETAILS AND PARTS LIST



VIEW TAKEN FROM HOIST-FRAME-KIT CONFIG2-HOIST-SPIRE



VIEW TAKEN FROM HOIST-FRAME-KIT CONFIG2-HOIST-SPIRE

CHECKED			
TRACED	3	26/3/04	M10 PLAIN NUTS REPLACED WITH M10 NYLOC NUTS
	2	28/3/03	
DRAWN	ISSUE	DATE	AMENDMENT
PMB	1	2/10/02	

COMPUTER FILE DRAWING A1-5264-404-sht4and5 ASSEMBLY HOIST-FRAME-KIT CONFIG1 AND 2

PROTECTIVE FINISH	MATERIAL & SPEC.	TOLERANCES UNLESS OTHERWISE STATED –
		LINEAR +/- 0.1G
		ANGULAR +/- 0°15'
ESTD WT.		
ACTL WT.	DIMENSIONS IN mm	SCALE NTS

DEPARTMENT OF SPACE AND CLIMATE PHYSICS
UNIVERSITY COLLEGE LONDON
MULLARD SPACE SCIENCE LABORATORY, HOLMBURY ST. MARY,
DORKING, SURREY.

TITLE
SPIRE LIFTING HOIST
GENERAL ARRANGEMENT

DRAWING No			
A1	5264	404	SHT 4

DRAWING No.		
A1	5264	404 SHT 6

THIRD ANGLE PROJECTION

DO NOT SCALE

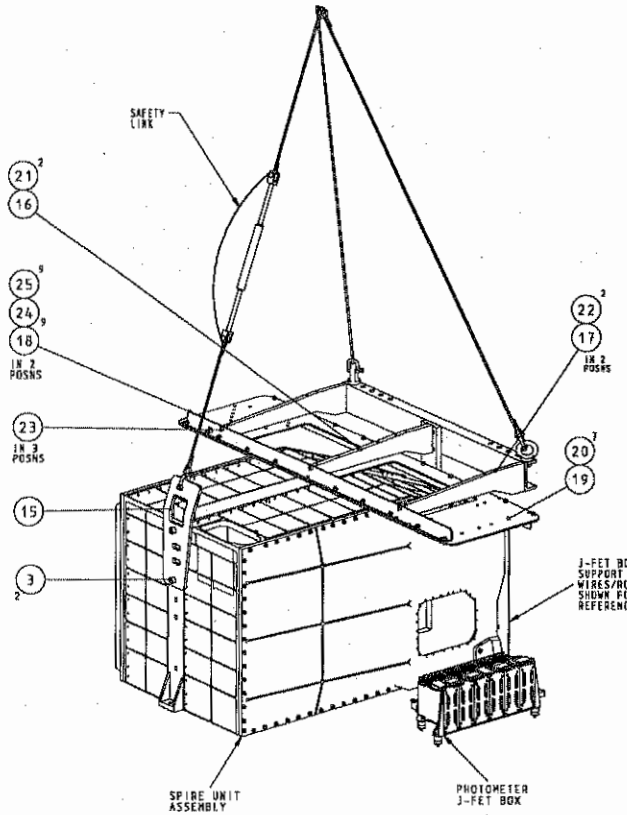
REMOVE ALL BURRS & SHARP EDGES

USED ON SPIRE MGSE

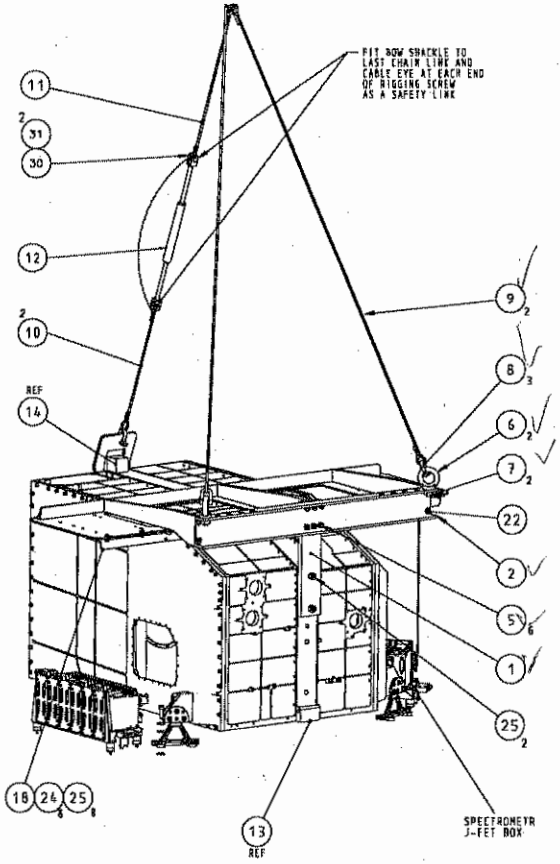
NOTES
1 DIMENSIONS ARE NOMINAL AND MAY VARY DUE TO MANUFACTURING TOLERANCES

NOTE
1 SEE SHEET 7 FOR SPIRE INSTALLATION LIFTING REFERENCE DIMENSIONS

2 PLEASE NOTE THAT BILL OF MATERIALS IS GENERATED FROM THE CORRESPONDING ASSEMBLY MODEL EXCEPT FOR ITEMS 30 AND 31



VIEW SCALE 0.2 : 1



VIEW SCALE 0.2 : 1

Item	Part #	Name	Qty
31	KEY-	BOW SHACKLE	2
30	KEY-	CHAIN	0.5M
29	KE-0104-350_ASM	KE-0104-350_ASM	1
28	KE-0104-360_ASM	KE-0104-360_ASM	1
27	REFERENCE	PHOT COVER ASSEMBLY	1
26	REFERENCE	SPEC COVER ASSEMBLY	1
25		NUT-M4-NYLOC-ST-STL	17
24	ST STL	SCR-M4x12L-CAP-HD	17
23		SCR-M5x12L-CAP-HD	3
22		SCR-M6x20L-CSK-SKT-HD	4
21		SCR-M5x20-SKT-CSK-HD	2
20		SCR-M5x20-SKT-BUTT-HD	7
19	5264-404-37	yoke	1
18	5264-404-39	yoke-stiffener	2
17	5264-404-38	yoke-support-fillet	2
16	5264-404-36	yoke-center-support	1
15		front-lift-strap-2	1
14	REFERENCE	reference cube	1
13	REFERENCE	dummy-SOB	1
12	ANGLIA-HANDLING	RIGGING-SCREW-M12-JAW-JAW-CLOSED	1
11	5264-404-35	hoist-cable-split	1
10	A3-5264-404-36	hoist-cable-short-2	1
9	A3-5264-404-22	hoist-cable-long	2
8	KEY-927A078N	shackle-STD	3
7		NUT-M10-NYLOC-ST-STL	2
6	ANGLIA-HANDLING-ST-STL	shoulder-eyebolt-M10	2
5	ST STL	SCR-M6x20L-CAP-HD	6
4	ST STL	SCR-M8x25L-CAP-HD	2
3	ST STL	SCR-M8x20L-CAP-HD	2
2	5264-404-16	rear-lift-channel	1
1	A3-5264-404-15	rear-lift-plate	1

	ISSUE	DATE	AMENDMENT
CHECKED	5	2/2/04	SUPPORT PLATE FOR JFET BOXES ADDED
	4	28/1/04	ASSEMBLY TIO PARTS REMOVED DUE TO SPACE LIMITATIONS
TRACED	3	8/8/03	FRONT LIFT BRACKET REPLACED WITH FRONT LIFT STRAP
	2	28/3/03	
DRAWN	ISSUE	DATE	AMENDMENT
PMB	1	2/10/02	
	9	29/9/05	ITEMS 30 AND 31 ADDED/SHEET 8 ADDED
	8	15/7/05	ITEM BALLOONS REDEFINED
	7	17/5/05	UPDATED FOR M12 RIGGING SCREW AND NEW SPLIT CABLES
	6	29/3/04	BOM ADDED
	ISSUE	DATE	AMENDMENT

COMPUTER FILE: SPIRE-LIFT (ASSEMBLY) 3 CONFIGURATIONS A1-5264-404-SHT 6 / 7 and 8(dwg)

PROTECTIVE FINISH	MATERIAL & SPEC.	TOLERANCES UNLESS OTHERWISE STATED –
ESTD WT.		LINEAR +/– 0.10
ACTL WT.	DIMENSIONS IN mm	ANGULAR +/– 0°15'
		SCALE SEE VIEWS

DEPARTMENT OF SPACE AND CLIMATE PHYSICS
UNIVERSITY COLLEGE LONDON
MULLARD SPACE SCIENCE LABORATORY, HOLMBURY ST. MARY, DORKING, SURREY.

TITLE: SPIRE LIFTING FOR INSTALLATION

DRAWING No: A1 5264 404 SHT 6

DRAWING No.		
A1	5264	404 SHT 7

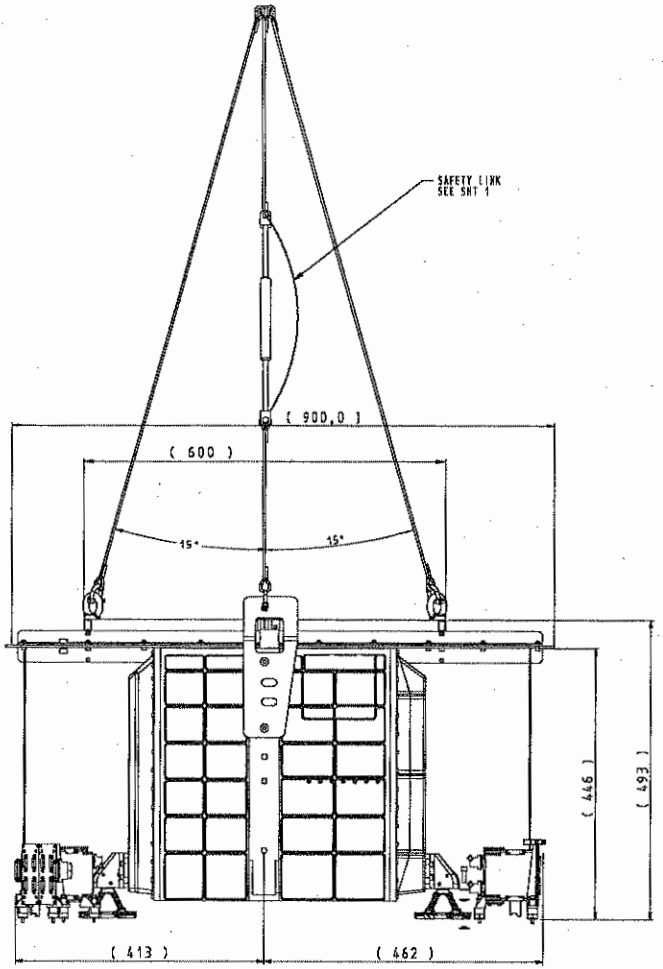
THIRD ANGLE PROJECTION

DO NOT SCALE

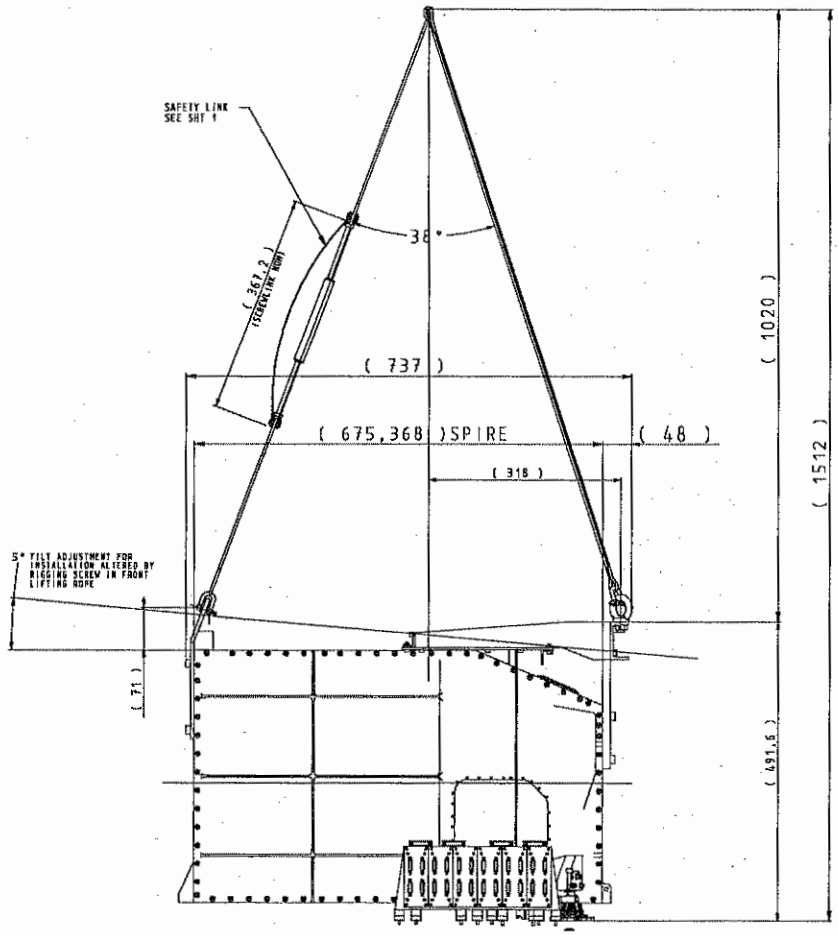
REMOVE ALL BURRS & SHARP EDGES

USED ON
SPIRE
MGSE

NOTES
1 DIMENSIONS ARE NOMINAL AND MAY VARY DUE TO MANUFACTURING TOLERANCES



VIEW SCALE 0.25:1



VIEW SCALE 0.25:1

	ISSUE	DATE	AMENDMENT
CHECKED	5	2/2/04	SUPPORT PLATE FOR JFET BOXES ADDED
	4	28/1/04	ASSEMBLY JIG PARTS REMOVED DUE TO SPACE LIMITATIONS
TRACED	3	8/8/03	FRONT LIFT BRACKET REPLACED WITH FRONT LIFT STRAP
	2	28/3/03	
DRAWN	ISSUE	DATE	AMENDMENT
PMB	1	2/10/02	

ISSUE	DATE	AMENDMENT
9	23/9/05	ITEMS 30 AND 31 ADDED/SHEET 8 ADDED
8	15/7/05	ITEM BALLOONS REDEFINED
7	17/5/05	UPDATED FOR M12 RIGGING SCREW AND NEW SPLIT CABLES
6	29/3/04	BOM ADDED
ISSUE	DATE	AMENDMENT

COMPUTER FILE SPIRE-LIFT (ASSEMBLY)
3 CONFIGURATIONS
A1-5264-404-SHT 6 / 7 and 8(dwg)

PROTECTIVE FINISH	
ESTD WT.	
ACTL WT.	
MATERIAL & SPEC.	
DIMENSIONS IN mm	
TOLERANCES UNLESS OTHERWISE STATED –	
LINEAR +/- 0.10	
ANGULAR +/- 0°15'	
SCALE SEE VIEWS	

DEPARTMENT OF SPACE AND CLIMATE PHYSICS
UNIVERSITY COLLEGE LONDON
MULLARD SPACE SCIENCE LABORATORY, HOLMBURY ST. MARY,
DORKING, SURREY.

TITLE
SPIRE LIFTING FOR INSTALLATION

DRAWING No		
A1	5264	404 SHT 7

HP-2-ASED-MN-1148 Annex 3

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-01	121432-03-321	05	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-01)

Documentary Support

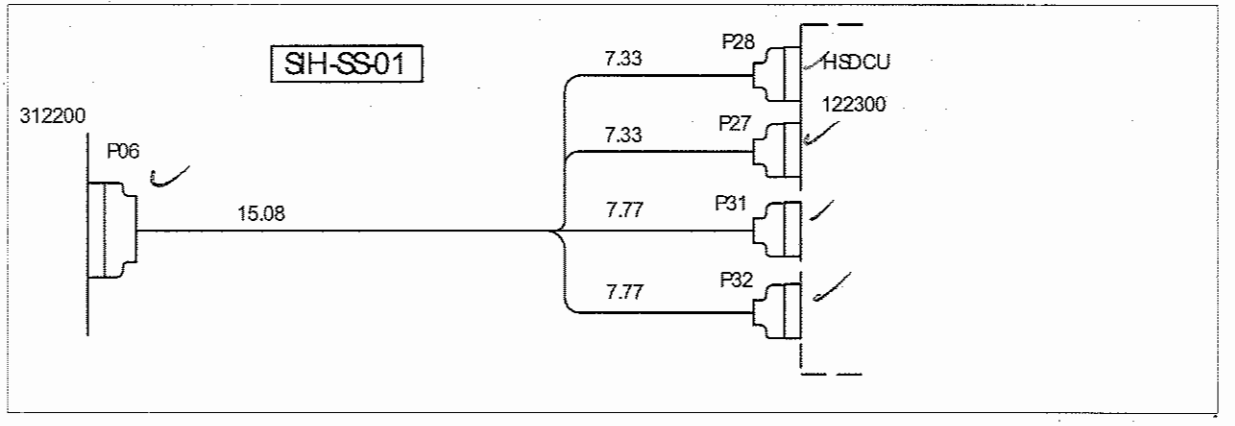
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2301	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-01)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 05 ---------- ⇒ Bundle iss. 05 follows WL 2.0 contents

CHANGES wrt Bundle Issue 04:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity and type of cable, CASA takes WL.

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. General review based on TN-0085 3.0

(TN-0085 Iss. 03 contents are older than definition in WL HP-2-ASED-IC-0014 iss. 2.0)

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2
2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   - 122300 P027: old CA-43-37 - new CA-48-37
   - 122300 P028: old CA-43-37 - new CA-48-37
   - 122300 P031: old CA-43-37 - new CA-48-37
   - 122300 P032: old CA-43-37 - new CA-48-37
   - 312200 P06: old 380FS007M2405 - new 380FS007M2409

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-01	121432-03-321	05	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-01)

"From" Connectors and Backshells List

Unit Code	Conn.	Connector Part Nbr.	BackshellComponentId
312200	P06	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 09 L3

"To" Connectors and Backshells List

Unit Code	Conn.	Connector Part Nbr.	BackshellComponentId
122300	P27	340100201B D C MA-37S-NMB-FO	CA-48-37
122300	P28	340100201B D C MA-37S-NMB-FO	CA-48-37
122300	P31	340100201B D C MA-37P-NMB-FO	CA-48-37
122300	P32	340100201B D C MA-37P-NMB-FO	CA-48-37

Cables List

From (Unit)	Conn.	To (Unit)	Conn.	Cable Original Ref	Cable Component Part Nbr.	Qty	Length Model	Theorical Length	Real Length
312200	P06	122300	P27	TS2CC-28	3901019 57B3	12	PFM	915	N.A.
			P28	T01C0-26	3901019 03B	1	PFM	1018	N.A.
				TS2CC-28	3901019 57B3	12	PFM	1018	N.A.
			P31	T01C0-26	3901019 03B	3	PFM	945	N.A.
				TS2CC-28	3901019 57B3	13	PFM	945	N.A.
			P32	T01C0-26	3901019 03B	3	PFM	931	N.A.
				TS2CC-28	3901019 57B3	13	PFM	931	N.A.

2, 1x T01C0-26

EADS CASA ESPACIO

HERSCHEL CRYO HARNESS
Hoja de seguimiento de mazo

Doc: 121432-03-321

MAZO:	SIH-SS-01	Indice mazo: 05 ~~0304~~	MODELO:	PFM
CI Code:	121432-03-321	Conjunto:	PFM SIH SVM Harness (121432-03) - SPIRE	

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	1	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	02		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición: 06 DRAFT ~~05~~ ~~3,0~~			
		Plano de montaje(Routing): HP200CK2301	Edición:	P00		
		Otros (PM's....):				

Kit — Preparación del Kit necesario para la fabricación del mazo

1

Conectores: Código Eléctrico	Tipo + Backshell	N°Lote	N°Lote
122300-P27	340100201B D C MA-37S-NMB-FO + CA-48-37		
122300-P28	340100201B D C MA-37S-NMB-FO + CA-48-37		
122300-P31	340100201B D C MA-37P-NMB-FO + CA-48-37		
122300-P32	340100201B D C MA-37P-NMB-FO + CA-48-37		
312200-P06	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24 09	0335.	0541

2

Cables: REF.		Cantidad(m)	N°Lote
S-1CC26	3901019 03B = 1 unshielded wire	9,90	813100
TS-2CC28	3901019 57B3	62,60	0242A

= 7 TOACO26 ✓

3

Otros materiales: REF.		Cantidad	N°Lote
Malla	DWQ-575-2-019/021/032 (según necesidad)		59092
Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
Cinta Gore	Cinta Gore GTS3 (según necesidad)		0324
BOENAS 3401045028			

EADS CASA ESPACIO	HERSCHEL CRYO HARNESS Hoja de seguimiento de mazo	Doc: 121432-03-321 Pág. 2 / 2

MAZO:	SIH-SS-01		Indice mazo:	05 ~~03~~ ~~04~~	MODELO:	PFM
CI Code:	121432-03-321		Conjunto:	PFM SIH SVM Harness (121432-03) - SPIRE		
Fase	**OP.**	**DESCRIPCION**	**REALIZADO**	**FECHA**	**CONTROL**	**HRM/NCR**
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	01	29/06/05	A A-13	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	01	12/07/05	A A-13	
	2	Retención de contactos según RC-100-F/Q	01	12/07/05	A A-13	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	5/01/06	A 13	
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				

EADS CASA ESPACIO

HERSCHEL CRYO-HARNESS

Doc.: Mating/Demating Record
Página/Page: 1
Edición/Issue: -
Fecha/Date: 14/06/2005

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation SIH-SS-01

CICode	Bundle Iss.	Bundle Model	Length Model
121432-03-321	050324	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-01)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312200 - P06	**Conexión:**										
Connector:	340104401B 06 G 24-35 S N - L	**Tipo:**										
Backshell:	380 F S 007 M 24 09	**Desconexión:**										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122300 - P27	**Conexión:**										
Connector:	10100201B D C MA-37S-NMB-P	**Tipo:**										
Backshell:	CA-48-37	**Desconexión:**										
Interface:	122300 - P28	**Conexión:**										
Connector:	10100201B D C MA-37S-NMB-P	**Tipo:**										
Backshell:	CA-48-37	**Desconexión:**										
Interface:	122300 - P31	**Conexión:**										
Connector:	10100201B D C MA-37P-NMB-P	**Tipo:**										
Backshell:	CA-48-37	**Desconexión:**										
Interface:	122300 - P32	**Conexión:**										
Connector:	10100201B D C MA-37P-NMB-P	**Tipo:**										
Backshell:	CA-48-37	**Desconexión:**										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-02	121432-03-322	07	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-02)

Documentary Support

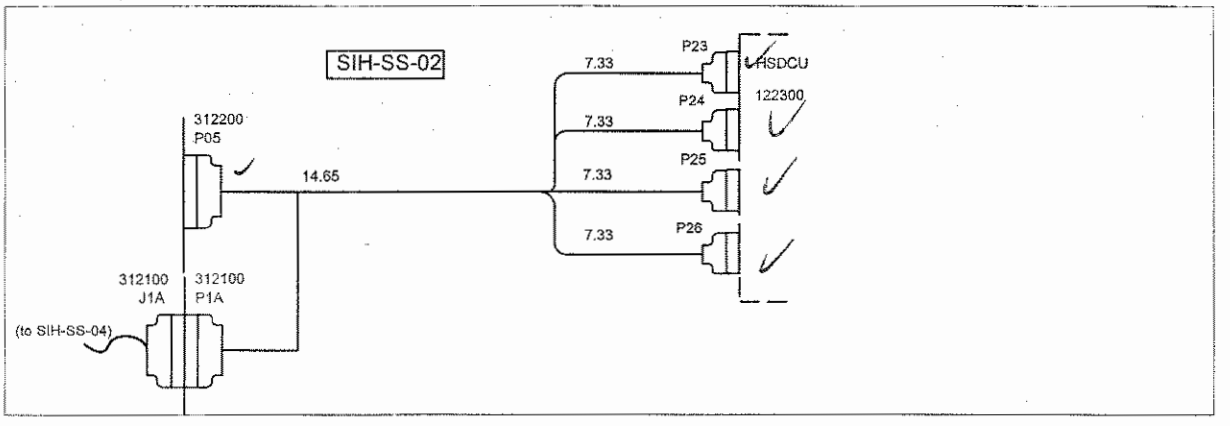
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2302	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-02)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 07 ----------
CHANGES wrt Bundle Issue 06:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity and type of cable, CASA takes WL.

---------- Bundle Issue 06 ----------
CHANGES wrt Bundle Issue 05:
1. General review based on TN-0085 Is. 3.0
   1.1- The connector 312100 P1A is missing.

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. Updated backshell for 312100 P01A acc. To HP-ASED-MN-1079:
   312100 P01A: old 507 T 196 M 9 - new CA-04-09
2. Addition of connector and backshell acc. To HP-ASED-MN-1079:
   312200 J01A and backshell CA-04-09.

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. Addition of 312100 P1A acc.to WL IC-0016 Is 2 and Block Diagram ID-0091-01-0B.
   DISCREPANCIES: This connector is missing in TN-0085 Is 2.2

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-02	121432-03-322	07	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-02)

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2
2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   122300 P023: old CA-43-37 - new CA-48-37
   122300 P024: old CA-43-37 - new CA-48-37
   122300 P025: old CA-43-37 - new CA-48-37
   122300 P026: old CA-43-37 - new CA-48-37
   312200 P05: old 380FS007M2405 - new 380FS007M2409

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312100	J01A	340100201B D E MA-09P-NMB-FO	CA-04-09
312200	P05	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 09 L3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122300	P23	340100201B D C MA-37S-NMB-FO	CA-48-37
122300	P24	340100201B D C MA-37S-NMB-FO	CA-48-37
122300	P25	340100201B D C MA-37S-NMB-FO	CA-48-37
122300	P26	340100201B D C MA-37S-NMB-FO	CA-48-37
312100	P01A	340100201B D E MA-09S-NMB-FO	CA-04-09

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312200	P05	122300	P23	TS2CC-28	3901019 57B3	12	PFM	903	N.A.
			P24	T01C0-26	3901019 03B	1	PFM	1006	N.A.
				TS2CC-28	3901019 57B3	12	PFM	1006	N.A.
			P25	TS2CC-28	3901019 57B3	12	PFM	906	N.A.
			P26	T01C0-26	3901019 03B	1	PFM	1006	N.A.
				TS2CC-28	3901019 57B3	6	PFM	1006	N.A.
		312100	P01A	TS2CC-28	3901019 57B3	3	PFM	960	N.A.

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-322** Pág. 1 / 2

MAZO:	**SIH-SS-02**	Indice mazo:	07 ~~03~~06	MODELO:	PFM
CI Code:	**121432-03-322**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	**1**	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	~~02~~		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición:	06 DRAFT ~~05 3,0~~		
		Plano de montaje(Routing): HP200CK2302	Edición:	**P00**		
		Otros (PM's....):				

Kit — Preparación del Kit necesario para la fabricación del mazo

1

Conectores: Código Eléctrico	Tipo + Backshell	NºLote	NºLote
122300-P23	340100201B D C MA-37S-NMB-FO + CA-48-37		
122300-P24	340100201B D C MA-37S-NMB-FO + CA-48-37		
122300-P25	340100201B D C MA-37S-NMB-FO + CA-48-37		
122300-P26	340100201B D C MA-37S-NMB-FO + CA-48-37		
312200-P05	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24 09	03/35	0541

2

Cables: REF.		Cantidad(m)	NºLote
S-1CC26	3901019 03B = T-1CO 26 ✓	5,00	813100
TS-2CC28	3901019 57B3	60,20	813123

3

Otros materiales: REF.		Cantidad	NºLote
Malla	DWQ-575-2-019/021/032 (según necesidad)		59092
Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
Cinta Gore	Cinta Gore GTS3 (según necesidad)		0324
BORJAS 340104502B			0343

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-322** Pág. 2 / 2

MAZO:	**SIH-SS-02**	Indice mazo:	07 ~~0306~~	MODELO:	PFM
CI Code:	**121432-03-322**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	01	29/06/05	A-13	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	16457.	julio05	A-80	
	2	Retención de contactos según RC-100-F/Q	16472.	julio05	A-	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	5/01/06		
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation	CICode	Bundle Iss.	Bundle Model	Length Model
SIH-SS-02	121432-03-322	07~~04~~06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-02)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312200 - P05	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24 09	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122300 - P23	Conexión:										
Connector:	10100201B D C MA-37S-NMB-P	Tipo:										
Backshell:	CA-48-37	Desconexión:										
Interface:	122300 - P24	Conexión:										
Connector:	10100201B D C MA-37S-NMB-P	Tipo:										
Backshell:	CA-48-37	Desconexión:										
Interface:	122300 - P25	Conexión:										
Connector:	10100201B D C MA-37S-NMB-P	Tipo:										
Backshell:	CA-48-37	Desconexión:										
Interface:	122300 - P26	Conexión:										
Connector:	10100201B D C MA-37S-NMB-P	Tipo:										
Backshell:	CA-48-37	Desconexión:										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation		Bundle CICode	B. Issue	B. Model	Length Model
	SIH-SS-03	121432-03-323	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-03)

Documentary Support

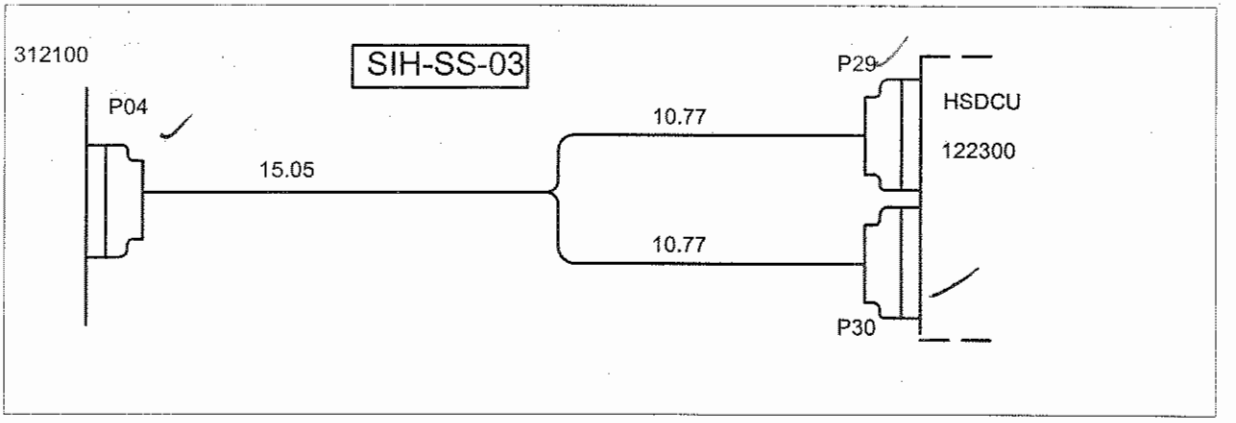
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2303	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-03)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 06 ----------
CHANGES wrt Bundle Issue 05:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity of cable, CASA takes WL.

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. General review based on TN-0085 3.0

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. Updated backshells for destination connectors.

REMARKS to Bundle Issue 04:
1. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to outlet direction problems) for:
   122300 P30: old CA-42-50 - new CA-45-50

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2
2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   122300 P29: old CA-35-50 - new CA-43-50

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-03	121432-03-323	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-03)

122300 P30: old CA-34-50 - new CA-42-50
312100 P04: old 380FS007M2405 - new 380FS007M2409

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312100	P04	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 09 L 3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122300	P29	340100202B D D MA-78P-NMB-FO	CA-43-50
122300	P30	340100202B D D MA-78P-NMB-FO	CA-45-50

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312100	P04	122300	P29	T01C0-26	3901019 03B	3	PFM	1247	N.A.
				TS2CC-28	3901019 57B3	25	PFM	1247	N.A.
			P30	T01C0-26	3901019 03B	3	PFM	1248	N.A.
				TS2CC-28	3901019 57B3	25	PFM	1248	N.A.

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-323** Pág. 1 / 2

MAZO:	**SIH-SS-03**	Indice mazo: 06 ~~0304~~	MODELO:	PFM
CI Code:	**121432-03-323**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**	

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	1	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	02		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición:	06 DRAFT ~~05~~ ~~3,0~~		
		Plano de montaje(Routing): HP200CK2303	Edición:	P00		
		Otros (PM's....):				

Kit — Preparación del Kit necesario para la fabricación del mazo

1

Conectores: Código Eléctrico	Tipo + Backshell	N°Lote	N°Lote
122300-P29	340100202B D D MA-78P-NMB-FO + CA-43-50		
122300-P30	340100202B D D MA-78P-NMB-FO + CA-45-50		
312100-P04	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24 09	0335	9513

2

Cables:	REF.	Cantidad(m)	N°Lote
S-1CC26	3901019 03B	12,40	813100
TS-2CC28	3901019 57B3	77,40	813123

3

Otros materiales:	REF.	Cantidad	N°Lote
Malla	DWQ-575-2-019/021/032 (según necesidad)		59092
Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
Cinta Gore	Cinta Gore GTS3 (según necesidad)		1007539
BORNAS 340104502B			0324

EADS CASA ESPACIO	HERSCHEL CRYO HARNESS **Hoja de seguimiento de mazo**	Doc: 121432-03-323 Pág. 2 / 2

MAZO:	SIH-SS-03		Indice mazo:	0306	MODELO:	PFM
CI Code:	121432-03-323		Conjunto:	PFM SIH SVM Harness (121432-03) - SPIRE		
Fase	**OP.**	**DESCRIPCION**	**REALIZADO**	**FECHA**	**CONTROL**	**HRM/NCR**
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	06	1/07/05	A-70	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	06	7/07/05	A-70	
	2	Retención de contactos según RC-100-F/Q	06	7/07/05	A-70	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	9/01/06	A 13	
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation SIH-SS-03

CICode	Bundle Iss.	Bundle Model	Length Model
121432-03-323	~~04~~06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-03)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312100 - P04	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24 09	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122300 - P29	Conexión:										
Connector:	10100202B D D MA-78P-NMB-R	Tipo:										
Backshell:	CA-43-50	Desconexión:										
Interface:	122300 - P30	Conexión:										
Connector:	10100202B D D MA-78P-NMB-R	Tipo:										
Backshell:	CA-45-50	Desconexión:										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-04	121432-03-324	07	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-04)

Documentary Support

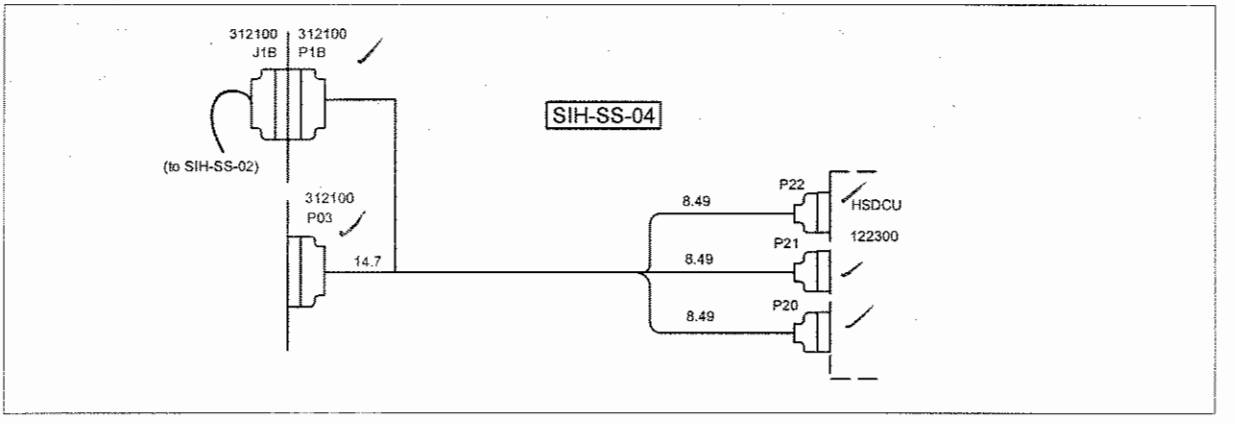
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B)
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2304	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-04)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 07 ----------
CHANGES wrt Bundle Issue 06:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity and type of cable, CASA takes WL.
2. Error in WL, updated cable type acc. To email:"HP-ASED-EM-0516-05: Answer to HP-CASA-EM-0043-05":

---------- Bundle Issue 06 ----------
CHANGES wrt Bundle Issue 05:
1. General review based on TN-0085 Is. 3.0
   1.1 The connector 312100 P1B is missing.

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. Updated backshell acc. To HP-ASED-MN-1079 for:
   312100 P01B: old 507 T 196 M 9 - new CA-04-09
2. Addition of connector and backshell acc. To HP-ASED-MN-1079:
   312200 J01B and backshell CA-04-09.

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. Addition of 312100 P1B acc.to WL IC-0016 Is 2 and Block Diagram ID-0091-01-0B.
   DISCREPANCIES: This connector is missing in TN-0085 Is 2.2
2. Updated backshells for destination connectors.

REMARKS to Bundle Issue 04:
1. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to outlet direction problems) for:

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-04	121432-03-324	07	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-04)

122300 P20: old CA-42-50 - new CA-45-50
122300 P21: old CA-42-50 - new CA-45-50
122300 P22: old CA-42-50 - new CA-45-50

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2
2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   122300 P020: old CA-34-50 - new CA-42-50
   122300 P021: old CA-34-50 - new CA-42-50
   122300 P022: old CA-34-50 - new CA-42-50
   312100 P03: old 380FS007M2405 - new 380FS007M2409

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312100	J01B	340100201B D E MA-09S-NMB-FO	CA-04-09
312100	P01B	340100201B D E MA-09P-NMB-FO	CA-04-09
312100	P03	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 09 L3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122300	P20	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P21	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P22	340100201B D D MA-50S-NMB-FO	CA-45-50

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312100	P01B	122300	P22	TS2CC-28	3901019 57B3	3	PFM	1400	N.A.
	P03		P20	T01C0-26	3901019 03B	1	PFM	1349	N.A.
				TS2CC-28	3901019 57B3	16	PFM	1349	N.A.
			P21	T01C0-26	3901019 03B	1	PFM	1256	N.A.
				TS2CC-28	3901019 57B3	16	PFM	1256	N.A.
			P22	T01C0-26	3901019 03B	1	PFM	1348	N.A.
				TS-2CC28	3901019 57B3	13	PFM	1348	N.A.

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-324** Pág. 1 / 2

MAZO:	**SIH-SS-04**	Indice mazo:	~~03~~ ~~04~~	MODELO:	PFM
CI Code:	**121432-03-324**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	**1**	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	**02**		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición:	~~05~~ ~~DRAFT 3,0~~		
		Plano de montaje(Routing): HP200CK2304	Edición:	**P00**		
		Otros (PM's....):				
Kit	Preparación del Kit necesario para la fabricación del mazo					

	Conectores: Código Eléctrico	Tipo + Backshell	NºLote	NºLote
1	122300-P20	340100201B D D MA-50S-NMB-FO + CA-45-50		
	122300-P21	340100201B D D MA-50S-NMB-FO + CA-45-50		
	122300-P22	340100201B D D MA-50S-NMB-FO + CA-45-50		
	312100-P03	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24 09	0335	0541
	312100-P01B	340100201B DEMA-09P-NMB-FOT.CA 0409	0302A	0341

	Cables:	REF.	Cantidad(m)	NºLote
2	S-1CC26	3901019 03B	9,70	813100
	TS-2CC28	3901019 57B3	77,60	813123

	Otros materiales:	REF.	Cantidad	NºLote
3	Malla	DWQ-575-2-019/021/032 (según necesidad)		59092
	Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
	Cinta Gore	Cinta Gore GTS3 (según necesidad)		1007539
	BORNAS	340104502B		0324

EADS CASA ESPACIO	HERSCHEL CRYO HARNESS Hoja de seguimiento de mazo	Doc: 121432-03-324 Pág. 2 / 2

MAZO:	SIH-SS-04		Indice mazo:	07 ~~03~~ 06	MODELO:	PFM
CI Code:	121432-03-324		Conjunto:	PFM SIH SVM Harness (121432-03) - SPIRE		
Fase	**OP.**	**DESCRIPCION**	**REALIZADO**	**FECHA**	**CONTROL**	**HRM/NCR**
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	06	5/07/05	A-79	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	06	19/07/05	A-79	
	2	Retención de contactos según RC-100-F/Q	06	20/07/05	A-79	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	9/01/06	A 13	
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				
		INCLUIDA MODIFICACION SEGUN HP-ASED-EM-516-05 10/11/05	01	10/11/05	A 13	

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation	CICode	Bundle Iss.	Bundle Model	Length Model
SIH-SS-04	121432-03-324	07/04/06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-04)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312100 - P01B	Conexión:										
Connector:	10100201B D E MA-09P-NMB-F	Tipo:										
Backshell:	507 T 196 M 9	Desconexión:										
Interface:	312100 - P03	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24 09	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122300 - P20	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P21	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P22	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation		Bundle CICode	B. Issue	B. Model	Length Model
	SIH-SS-05	121432-03-325	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-05)

Documentary Support

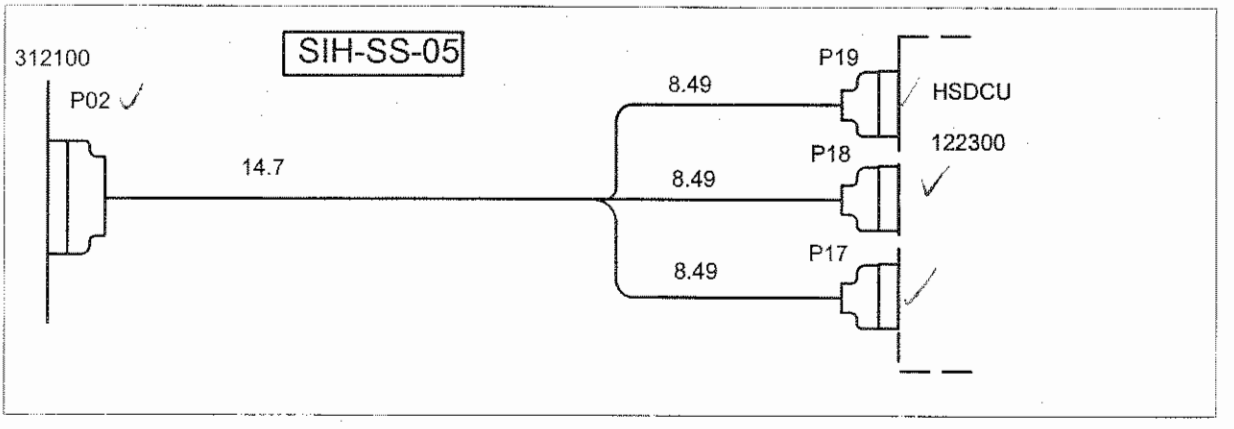
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2305	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-05)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 06 ----------
CHANGES wrt Bundle Issue 05:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity of cable, CASA takes WL.

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. General review based on TN-0085 Is. 03

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. Updated backshells for destination connectors.

REMARKS to Bundle Issue 04:
1. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to outlet direction problems) for:
   122300 P17: old CA-42-50 - new CA-45-50
   122300 P18: old CA-42-50 - new CA-45-50
   122300 P19: old CA-42-50 - new CA-45-50

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-05	121432-03-325	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-05)

2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
122300 P17: old CA-34-50 - new CA-42-50
122300 P18: old CA-34-50 - new CA-42-50
122300 P19: old CA-34-50 - new CA-42-50
312100 P02: old 380FS007M2405 - new 380FS007M2409

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312100	P02	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 07 L3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122300	P17	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P18	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P19	340100201B D D MA-50S-NMB-FO	CA-45-50

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312100	P02	122300	P17	T01C0-26	3901019 03B	1	PFM	1337	N.A.
				TS2CC-28	3901019 57B3	16	PFM	1337	N.A.
			P18	T01C0-26	3901019 03B	1	PFM	1428	N.A.
				TS2CC-28	3901019 57B3	16	PFM	1428	N.A.
			P19	T01C0-26	3901019 03B	1	PFM	1341	N.A.
				TS2CC-28	3901019 57B3	16	PFM	1341	N.A.

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-325** Pág. 1 / 2

MAZO:	**SIH-SS-05**	Indice mazo:	06 ~~03~~ ~~04~~	MODELO:	PFM
CI Code:	**121432-03-325**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	1	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	**02**		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición: 06 DRAFT ~~05~~ ~~3,0~~			
		Plano de montaje(Routing): HP200CK2305	Edición:	**P00**		
		Otros (PM's....):				
Kit		Preparación del Kit necesario para la fabricación del mazo				

	Conectores: Código Eléctrico	Tipo + Backshell	N°Lote	N°Lote
1	122300-P17	340100201B D D MA-50S-NMB-FO + CA-45 5 0		
	122300-P18	340100201B D D MA-50S-NMB-FO + CA-45 5 0		
	122300-P19	340100201B D D MA-50S-NMB-FO + CA-45 5 0		
	312100-P02	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24	07 03/35	9943

	Cables:	REF.	Cantidad(m)	N°Lote
2	S-1CC26	3901019 03B	10,00	813100
	TS-2CC28	3901019 57B3	80,00	813123

	Otros materiales:	REF.	Cantidad	N°Lote
3	Malla	DWQ-575-2-019/021/032 (según necesidad)		59092
	Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
	Cinta Gore	Cinta Gore GTS3 (según necesidad)		10075539
	BORNAS	3401 045 02B		0324

EADS CASA ESPACIO	HERSCHEL CRYO HARNESS Hoja de seguimiento de mazo	Doc: 121432-03-325 Pág. 2 / 2

MAZO:	SIH-SS-05		Indice mazo:	0306	MODELO:	PFM
CI Code:	121432-03-325		Conjunto:	PFM SIH SVM Harness (121432-03) - SPIRE		
Fase	**OP.**	**DESCRIPCION**	**REALIZADO**	**FECHA**	**CONTROL**	**HRM/NCR**
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	OG	7/07/05	A-T9	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	1645. Julio, Agosto-05		A-C	
	2	Retención de contactos según RC-100-F/Q	"	Agosto - 05	A-80	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	9/01/06	A 13	
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation SIH-SS-05

CICode	Bundle Iss.	Bundle Model	Length Model
121432-03-325	~~04~~06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-05)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312100 - P02	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24 ~~06~~07	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122300 - P17	Conexión:										
Connector:	40100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P18	Conexión:										
Connector:	40100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P19	Conexión:										
Connector:	40100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-06	121432-03-326	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-06)

Documentary Support

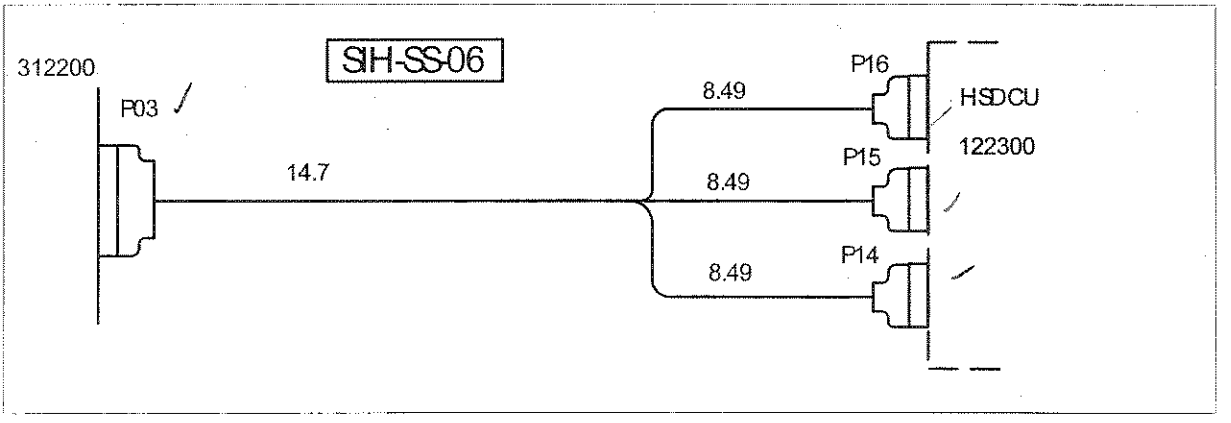
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2306	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-06)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 06 ----------
CHANGES wrt Bundle Issue 05:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity of cable, CASA takes WL.

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. General review based on TN-0085 Is. 03

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. Updated backshells for destination connectors.

REMARKS to Bundle Issue 04:
1. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to outlet direction problems) for:
   122300 P14: old CA-42-50 - new CA-45-50
   122300 P15: old CA-42-50 - new CA-45-50
   122300 P16: old CA-42-50 - new CA-45-50

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-06	121432-03-326	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-06)

2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   122300 P14: old CA-34-50 - new CA-42-50
   122300 P15: old CA-34-50 - new CA-42-50
   122300 P16: old CA-34-50 - new CA-42-50
   312200 P03: old 380FS007M2405 - new 380FS007M2409

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312200	P03	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 08 L 3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122300	P14	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P15	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P16	340100201B D D MA-50S-NMB-FO	CA-45-50

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312200	P03	122300	P14	T01C0-26	3901019 03B	1	PFM	965	N.A.
				TS2CC-28	3901019 57B3	16	PFM	965	N.A.
			P15	T01C0-26	3901019 03B	1	PFM	878	N.A.
				TS2CC-28	3901019 57B3	16	PFM	878	N.A.
			P16	T01C0-26	3901019 03B	1	PFM	966	N.A.
				TS2CC-28	3901019 57B3	16	PFM	966	N.A.

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-326** Pág. 1 / 2

MAZO:	**SIH-SS-06**	Indice mazo: 06 ~~0304~~	MODELO:	PFM
CI Code:	**121432-03-326**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**	

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	1	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	**02**		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición:	05 ~~DRAFT3,0~~		
		Plano de montaje(Routing): HP200CK2306	Edición:	**P00**		
		Otros (PM's....):				
Kit		Preparación del Kit necesario para la fabricación del mazo				

	Conectores: Código Eléctrico	Tipo + Backshell	N°Lote	N°Lote
1	122300-P14	340100201B D D MA-50S-NMB-FO + CA-45 50		
	122300-P15	340100201B D D MA-50S-NMB-FO + CA-45 50		
	122300-P16	340100201B D D MA-50S-NMB-FO + CA-45 50		
	312200-P03	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24 08	0335	0541

	Cables:	REF.	Cantidad(m)	N°Lote
2	S-1CC26	3901019 03B	7,40	813100
	TS-2CC28	3901019 57B3	59,30	0242A

	Otros materiales:	REF.	Cantidad	N°Lote
3	Malla	DWQ-575-2-019/021/032 (según necesidad)		59092
	Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
	Cinta Gore	Cinta Gore GTS3 (según necesidad)		1007539
	BORNAS	3401 045 028		0324

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-326** Pág. 2 / 2

MAZO:	**SIH-SS-06**	Indice mazo:	~~03~~ **06**	MODELO:	PFM
CI Code:	**121432-03-326**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	01	4/07/05	A A-13	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	01	7/07/05	A A-13	
	2	Retención de contactos según RC-100-F/Q	01	7/07/05	A A-13	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	5/01/06	A 13	
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation SIH-SS-06

CICode	Bundle Iss.	Bundle Model	Length Model
121432-03-326	04 06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-06)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312200 - P03	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24 05 08	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122300 - P14	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P15	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P16	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-07	121432-03-327	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-07)

Documentary Support

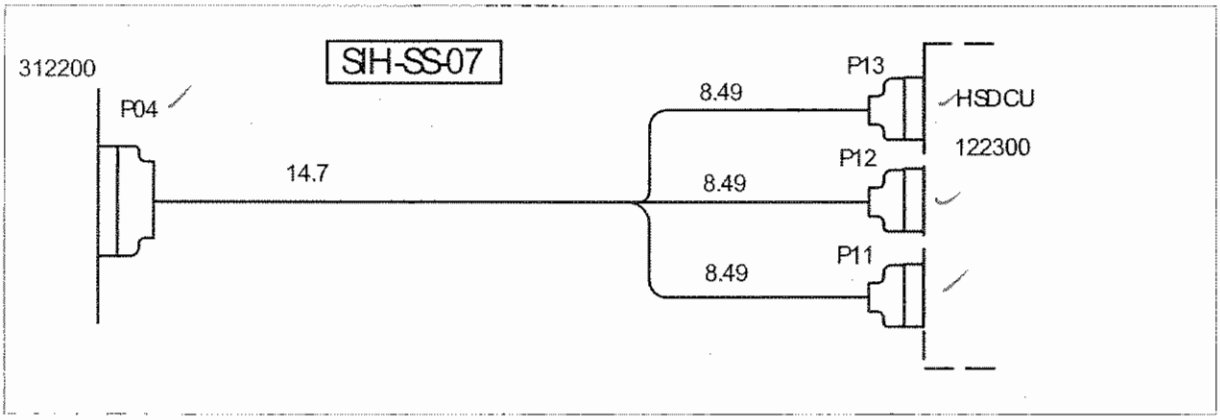
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2307	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-07)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 06 ----------
CHANGES wrt Bundle Issue 05:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity of cable, CASA takes WL.

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. General review based on TN-0085 Is. 3.0

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. Updated backshells for destination connectors.

REMARKS to Bundle Issue 04:
1. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to outlet direction problems) for:
   122300 P11: old CA-42-50 - new CA-45-50
   122300 P12: old CA-42-50 - new CA-45-50
   122300 P13: old CA-42-50 - new CA-45-50

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-07	121432-03-327	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-07)

2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   122300 P11: old CA-34-50 - new CA-42-50
   122300 P12: old CA-34-50 - new CA-42-50
   122300 P13: old CA-34-50 - new CA-42-50
   312200 P04: old 380FS007M2405 - new 380FS007M2409

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312200	P04	340104401B 06 G 24-35 S N - L	380 F S 007 M 2409 08 L3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122300	P11	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P12	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P13	340100201B D D MA-50S-NMB-FO	CA-45-50

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312200	P04	122300	P11	T01C0-26	3901019 03B	1	PFM	851	N.A.
				TS2CC-28	3901019 57B3	16	PFM	851	N.A.
			P12	T01C0-26	3901019 03B	1	PFM	942	N.A.
				TS2CC-28	3901019 57B3	16	PFM	942	N.A.
			P13	T01C0-26	3901019 03B	1	PFM	856	N.A.
				TS2CC-28	3901019 57B3	16	PFM	856	N.A.

EADS CASA ESPACIO

HERSCHEL CRYO HARNESS
Hoja de seguimiento de mazo

Doc: 121432-03-327

MAZO:	SIH-SS-07	Indice mazo:	06 ~~03~~	MODELO:	PFM
CI Code:	121432-03-327	Conjunto:	PFM SIH SVM Harness (121432-03) - SPIRE		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	1	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	02		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición:	06 ~~DRAFT 3,0~~		
		Plano de montaje(Routing): HP200CK2307	Edición:	P00		
		Otros (PM's....):				

Kit — Preparación del Kit necesario para la fabricación del mazo

1

Conectores: Código Eléctrico	Tipo + Backshell	N°Lote	N°Lote
122300-P11	340100201B D D MA-50S-NMB-FO + CA-45-50		
122300-P12	340100201B D D MA-50S-NMB-FO + CA-45-50		
122300-P13	340100201B D D MA-50S-NMB-FO + CA-45-50		
312200-P04	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24	0335	0541

2

Cables:	REF.	Cantidad(m)	N°Lote
S-1CC26	3901019 03B	2,30	813100
TS-2CC28	3901019 57B3	56,80	813123

3

Otros materiales:	REF.	Cantidad	N°Lote
Malla	DWQ-575-2-019/021/032 (según necesidad)		07767/97
Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
Cinta Gore	Cinta Gore GTS3 (según necesidad)		
BOOKS	3401 045 028		0324

EADS CASA ESPACIO	HERSCHEL CRYO HARNESS Hoja de seguimiento de mazo	Doc: 121432-03-327 Pág. 2 / 2

MAZO:	SIH-SS-07		Indice mazo:	0306	MODELO:	PFM
CI Code:	121432-03-327		Conjunto:	PFM SIH SVM Harness (121432-03) - SPIRE		
Fase	**OP.**	**DESCRIPCION**	**REALIZADO**	**FECHA**	**CONTROL**	**HRM/NCR**
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	06	7/07/05	A-10	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	03	26/07/05	A-12	
	2	Retención de contactos según RC-100-F/Q	03	26/07/05	A-12	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	5/01/06	A-13	
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation SIH-SS-07

CICode	Bundle Iss.	Bundle Model	Length Model
121432-03-327	~~04~~06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-07)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312200 - P04	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24 ~~09~~08	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122300 - P11	Conexión:										
Connector:	10100201B D D MA-50S-NMB-P	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P12	Conexión:										
Connector:	10100201B D D MA-50S-NMB-P	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P13	Conexión:										
Connector:	10100201B D D MA-50S-NMB-P	Tipo:										
Backshell:	CA-45-50	Desconexión:										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-08	121432-03-328	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-08)

Documentary Support

Documentary Support Area: **Electrical**

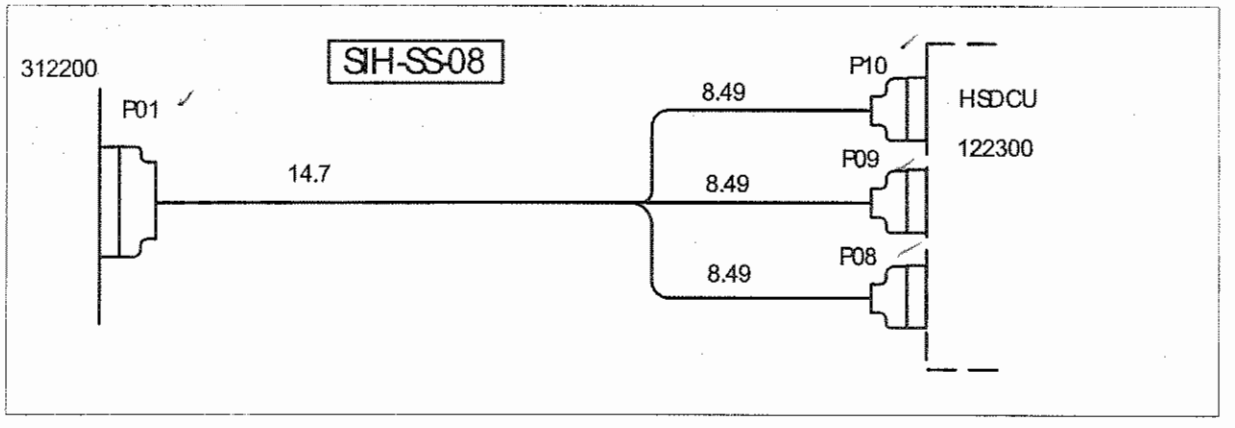
Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B)
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2308	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-08)

Sketch

Last update: 08/11/2005



Remarks

---------- Bundle Issue 06 ----------
CHANGES wrt Bundle Issue 05:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity and type of cable, CASA takes WL.
2. Error in WL, updated cable type acc. To email:"HP-ASED-EM-0516-05: Answer to HP-CASA-EM-0043-05"

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. General review based on TN-0085 Is. 3.0

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. Updated backshells for destination connectors.

REMARKS to Bundle Issue 04:
1. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to outlet direction problems) for:
   122300 P08: old CA-42-50 - new CA-45-50
   122300 P09: old CA-42-50 - new CA-45-50
   122300 P10: old CA-42-50 - new CA-45-50

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-08	121432-03-328	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-08)

1. General review based on TN-0085 Is 2.2
2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   - 122300 P08: old CA-34-50 - new CA-42-50
   - 122300 P09: old CA-34-50 - new CA-42-50
   - 122300 P10: old CA-34-50 - new CA-42-50
   - 312200 P01: old 380FS007M2405 - new 380FS007M2409

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312200	P01	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 08 L3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122300	P08	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P09	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P10	340100201B D D MA-50S-NMB-FO	CA-45-50

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312200	P01	122300	P08	T01C0-26	3901019 03B	1	PFM	1072	N.A.
				TS-2CC28	3901019 57B3	16	PFM	1072	N.A.
			P09	T01C0-26	3901019 03B	1	PFM	979	N.A.
				TS-2CC28	3901019 57B3	16	PFM	979	N.A.
			P10	T01C0-26	3901019 03B	1	PFM	1070	N.A.
				TS2CC-28	3901019 57B3	16	PFM	1070	N.A.

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-328** Pág. 1 / 2

MAZO:	**SIH-SS-08**	Indice mazo: 06 ~~0304~~	MODELO:	PFM
CI Code:	**121432-03-328**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**	

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	1	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	**02**		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición:	06 DRAFT ~~3,0~~		
		Plano de montaje(Routing): HP200CK2308	Edición:	**P00**		
		Otros (PM's....):				
Kit		Preparación del Kit necesario para la fabricación del mazo				

		Conectores: Código Eléctrico	Tipo + Backshell	N°Lote	N°Lote
		122300-P08	340100201B D D MA-50S-NMB-FO + CA-4550		
		122300-P09	340100201B D D MA-50S-NMB-FO + CA-4550		
		122300-P10	340100201B D D MA-50S-NMB-FO + CA-4550		
		312200-P01	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24 08	80335	0541

		Cables:	REF.	Cantidad(m)	N°Lote
		S-1CC26	3901019 03B	8,00	813100
		TS-2CC28	3901019 57B3	64,30	813123

		Otros materiales:	REF.	Cantidad	N°Lote
		Malla	DWQ-575-2-019/021/032 (según necesidad)		59092
		Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
		Cinta Gore	Cinta Gore GTS3 (según necesidad)		1007539
		BODAS	3401045028		0342

EADS CASA ESPACIO	HERSCHEL CRYO HARNESS Hoja de seguimiento de mazo	Doc: 121432-03-328 Pág. 2 / 2

MAZO:	SIH-SS-08		Indice mazo:	~~03~~ 06	MODELO:	PFM
CI Code:	121432-03-328		Conjunto:	PFM SIH SVM Harness (121432-03) - SPIRE		
Fase	**OP.**	**DESCRIPCION**	**REALIZADO**	**FECHA**	**CONTROL**	**HRM/NCR**
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	06	7/07/05	A-79	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	06	27/07/05	A-	
	2	Retención de contactos según RC-100-F/Q	06	27/07/05	A-79	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	5/01/06	A 13	
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				
		10/11/05 INCLUIDA MODIFICACION SEGUN: HP-ASED-ETI-516-05	01			

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation SIH-SS-08

CICode	Bundle Iss.	Bundle Model	Length Model
121432-03-328	0406	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-08)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312200 - P01	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24 0508	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122300 - P08	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P09	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P10	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-09	121432-03-329	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-09)

Documentary Support

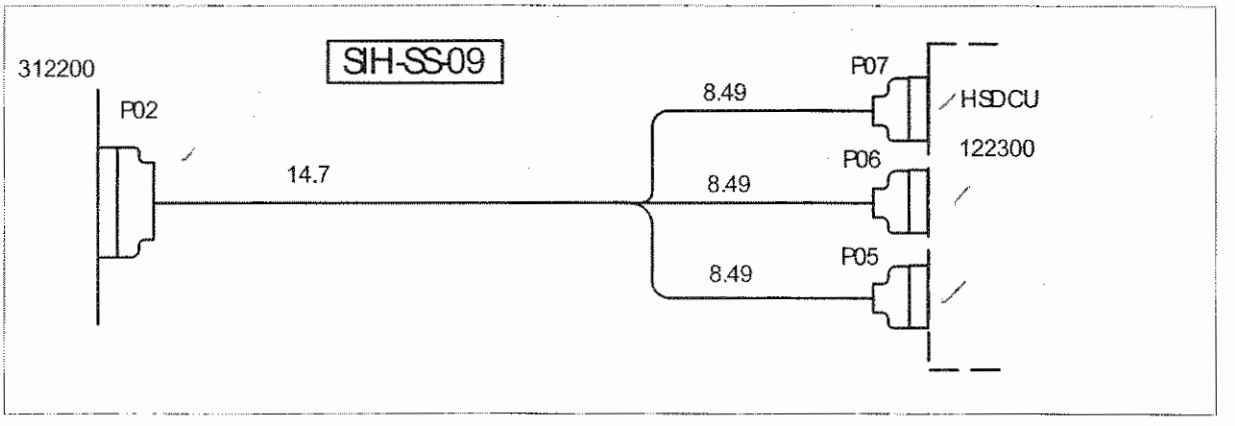
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2309	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-09)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 06 ----------
CHANGES wrt Bundle Issue 05:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity of cable, CASA takes WL.

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. General review based on TN-0085 Is. 3.0

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. Updated backshells for destination connectors.

REMARKS to Bundle Issue 04:
1. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to outlet direction problems) for:
   122300 P05: old CA-42-50 - new CA-45-50
   122300 P06: old CA-42-50 - new CA-45-50
   122300 P07: old CA-42-50 - new CA-45-50

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation		Bundle CICode	B. Issue	B. Model	Length Model
	SIH-SS-09	121432-03-329	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-09)

2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   122300 P05: old CA-34-50 - new CA-42-50
   122300 P06: old CA-34-50 - new CA-42-50
   122300 P07: old CA-34-50 - new CA-42-50
   312200 P02: old 380FS007M2405 - new 380FS007M2409

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312200	P02	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 09 08 L3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122300	P05	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P06	340100201B D D MA-50S-NMB-FO	CA-45-50
122300	P07	340100201B D D MA-50S-NMB-FO	CA-45-50

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312200	P02	122300	P05	TS2CC-28	3901019 57B3	16	PFM	955	N.A.
				010B0-30	GSC-05-82207-00	1	PFM	955	N.A.
			P06	TS2CC-28	3901019 57B3	16	PFM	1045	N.A.
				010B0-30	GSC-05-82207-00	1	PFM	1045	N.A.
			P07	S-1CC26	3901019 03B	21	PFM	952	N.A.
				TS-2CC28	3901019 57B3	16	PFM	952	N.A.

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-329** Pág. 1 / 2

MAZO:	**SIH-SS-09**	Indice mazo:	~~0306~~	MODELO:	PFM
CI Code:	**121432-03-329**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	1	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	**02**		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición: 06 DRAFT ~~05~~ ~~3,0~~ A			
		Plano de montaje(Routing): HP200CK2309	Edición:	**P00**		
		Otros (PM's....):				
Kit		Preparación del Kit necesario para la fabricación del mazo				

	Conectores: Código Eléctrico	Tipo + Backshell	N°Lote	N°Lote
1	122300-P05	340100201B D D MA-50S-NMB-FO + CA-4550		
	122300-P06	340100201B D D MA-50S-NMB-FO + CA-4550		
	122300-P07	340100201B D D MA-50S-NMB-FO + CA-4550		
	312200-P02	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24 08	0335	0541

	Cables:	REF.	Cantidad(m)	N°Lote
2	S-1CC26	3901019 03B	7,70	813100
	TS-2CC28	3901019 57B3	61,60	813123
		3901-019-12B		813106

	Otros materiales:	REF.	Cantidad	N°Lote
3	Malla	DWQ-575-2-019/021/032 (según necesidad)		07767/97
	Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
	Cinta Gore	Cinta Gore GTS3 (según necesidad)		1007539
	BORNAS	3401-045-02B		0324

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-329** Pág. 2 / 2

MAZO:	**SIH-SS-09**		Indice mazo:	03 06	MODELO:	PFM
CI Code:	**121432-03-329**		Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		
Fase	**OP.**	**DESCRIPCION**	**REALIZADO**	**FECHA**	**CONTROL**	**HRM/NCR**
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	06	7/07/05	A-79	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	03	06/09/05	A-12	
	2	Retención de contactos según RC-100-F/Q	03	06/09/05	A-12	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	5/01/06	A-13	
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation	CICode	Bundle Iss.	Bundle Model	Length Model
SIH-SS-09	121432-03-329	04 05	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-09)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312200 - P02	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24 05 08	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122300 - P05	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P06	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										
Interface:	122300 - P07	Conexión:										
Connector:	10100201B D D MA-50S-NMB-F	Tipo:										
Backshell:	CA-45-50	Desconexión:										

Conexión - esconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-10	121432-03-32A	05	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-10)

Documentary Support

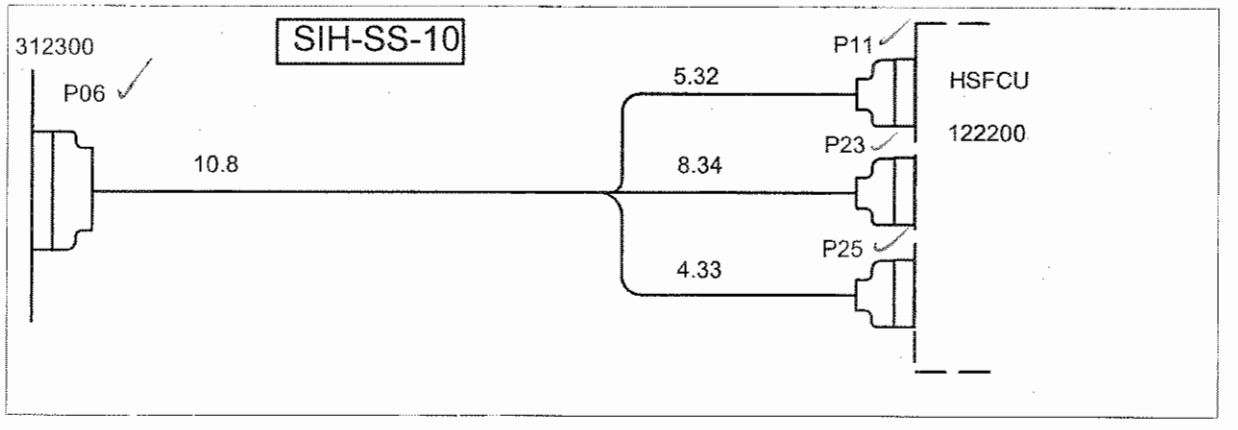
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2310	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-10)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity and type of cable, CASA takes WL.

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. General review based on TN-0085 Is. 3.0

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2
2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   122200 P11: old CA-68-25 - new CA-71-25
   122200 P23: old CA-36-50 - new CA-44-50
   122200 P25: old CA-33-15 - new CA-58-15
   312300 P06: old 380FS007M2404 - new 380FS007M2408

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-10	121432-03-32A	05	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-10)

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312300	P06	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 05 L3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122200	P11	340100201B D B MA-25P-NMB-FO	CA-71-25
122200	P23	340100201B D D MA-50P-NMB-FO	CA-44-50
122200	P25	340100201B D A MA-15P-NMB-FO	CA-58-15

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312300	P06	122200	P11	T04C0-28	3901019 26B3	5	PFM	1465	N.A.
				TS4CC-28	3901019 73B3	1	PFM	1465	N.A.
			P23	TS4CC-28	3901019 73B3	11	PFM	1484	N.A.
			P25	TS4CC-28	3901019 73B3	3	PFM	1576	N.A.

EADS CASA ESPACIO

HERSCHEL CRYO HARNESS
Hoja de seguimiento de mazo

Doc: **121432-03-32A**

MAZO:	**SIH-SS-10**	Indice mazo:	05 ~~03~~ ~~04~~	MODELO:	PFM
CI Code:	**121432-03-32A**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	1	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	~~02~~		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición:	06 DRAFT ~~04~~ ~~3,0~~		
		Plano de montaje(Routing): HP200CK2310	Edición:	**P00**		
		Otros (PM's....):				
Kit		Preparación del Kit necesario para la fabricación del mazo				

1 — Conectores

Código Eléctrico	Tipo + Backshell	N°Lote	N°Lote
122200-P11	340100201B D B MA-25P-NMB-FO + CA-71-25		
122200-P23	340100201B D D MA-50P-NMB-FO + CA-44-50		
122200-P25	340100201B D A MA-15P-NMB-FO + CA-58-15		
312300-P06	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24	05 0335	0343

2 — Cables

Cables:	REF.	Cantidad(m)	N°Lote
S-1CC26	3901019 03B	1,80	813100
T-4CC28	3901019 26B3	8,80	0242A
TS-4CC28	3901019 73B3	27,00	0242A

3 — Otros materiales

Otros materiales:	REF.	Cantidad	N°Lote
Malla	DWQ-575-2-019/021/032 (según necesidad)		5902
Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
Cinta Gore	Cinta Gore GTS3 (según necesidad)		1007539
BORNAS 340104502B			0324

EADS CASA ESPACIO	HERSCHEL CRYO HARNESS **Hoja de seguimiento de mazo**	Doc: **121432-03-32A** Pág. 2 / 2

MAZO:	**SIH-SS-10**		Indice mazo:	05 ~~0304~~	MODELO:	PFM
CI Code:	**121432-03-32A**		Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		
Fase	**OP.**	**DESCRIPCION**	**REALIZADO**	**FECHA**	**CONTROL**	**HRM/NCR**
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	01	28/07/05	A A-13	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	01	19/07/05	A A-13	
	2	Retención de contactos según RC-100-F/Q	01	19/07/05	A A-13	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	9/01/06	A 13	
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation	CICode	Bundle Iss.	Bundle Model	Length Model
SIH-SS-10	121432-03-32A	05 ~~03~~ 04	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-10)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312300 - P06	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24 ~~08~~ 05	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122200 - P11	Conexión:										
Connector:	40100201B D B MA-25P-NMB-F	Tipo:										
Backshell:	CA-71-25	Desconexión:										
Interface:	122200 - P23	Conexión:										
Connector:	40100201B D D MA-50P-NMB-F	Tipo:										
Backshell:	CA-44-50	Desconexión:										
Interface:	122200 - P25	Conexión:										
Connector:	40100201B D A MA-15P-NMB-F	Tipo:										
Backshell:	CA-58-15	Desconexión:										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-11	121432-03-32B	07	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-11)

Documentary Support

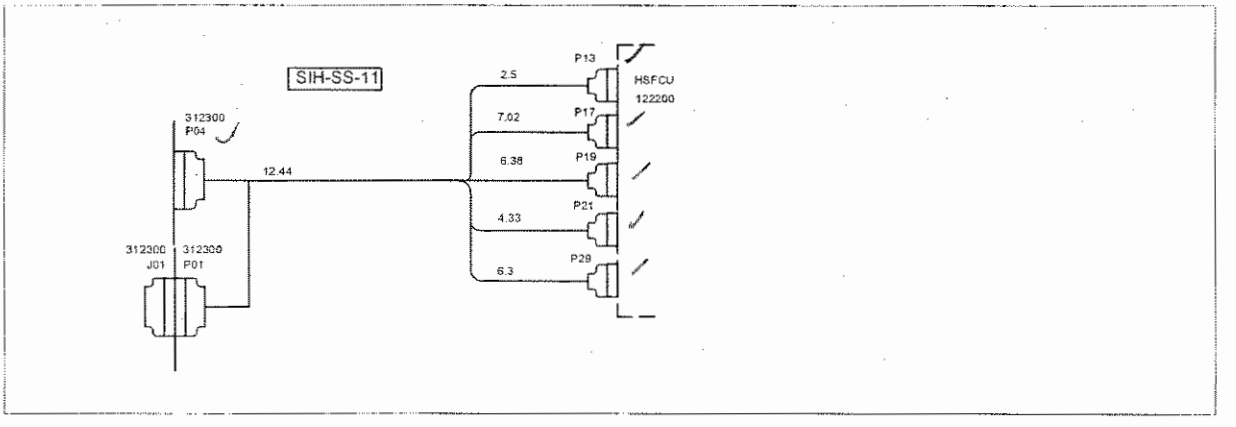
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2311	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-11)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 07 ----------
CHANGES wrt Bundle Issue 06:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity and type of cable, CASA takes WL.

---------- Bundle Issue 06 ----------
CHANGES wrt Bundle Issue 05:
1. General review based on TN-0085 Is.3.0

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. Addition of connector and backshell acc. To HP-ASED-MN-1079:
312300 J01 and backshell 380 F S 001 M 10 2 N.

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. Addition of 312300 P01 acc.to WL IC-0016 Is 2 and Block Diagram ID-0091-01-0B.
DISCREPANCIES: This connector is missing in TN-0085 Is 2.2
2. Defined backshells by E.A.D.S.-C.A.S.A. for:
312300 P01: old TBD/TBC - new 380 F S 007 M 10 02 L3

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-11	121432-03-32B	07	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-11)

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2
2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   122200 P17: old CA-43-37 - new CA-48-37
   122200 P19: old CA-43-37 - new CA-48-37
   122200 P29: old CA-43-37 - new CA-47-37
   312300 P04: old 380FS007M2405 - new 380FS007M2408

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312300	J01	340104401B 03 - 10-35 P N	340 F S 001 M 10 2 N
312300	P04	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 0809 L3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122200	P13	340100201B D E MA-09P-NMB-FO	~~CA-04-09~~ XE-01
122200	P17	340100201B D C MA-37P-NMB-FO	CA-48-37
122200	P19	340100201B D C MA-37P-NMB-FO	CA-48-37
122200	P21	340100201B D A MA-15P-NMB-FO	CA-01-15
122200	P29	340100201B D C MA-37S-NMB-FO	CA-47-37
312300	P01	340104401B 06 G 10-35 S B - L	380 F S 007 M 10 02 L3

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312300	P04	122200	P13	TS4CC-28	3901019 73B3	1	PFM	1721	N.A.
			P17	TS2CC-28	3901019 57B3	11	PFM	1561	N.A.
			P19	TS-2CC28	3901019 57B3	3	PFM	1558	N.A.
				TS-3CC28	3901019 65B3	2	PFM	1558	N.A.
				TS-4CC28	3901019 73B3	2	PFM	1558	N.A.
			P21	TS-4CC28	3901019 73B3	3	PFM	1747	N.A.
			P29	TS-2CC28	3901019 57B3	7	PFM	1682	N.A.
		312300	P01	TS-2CC28	3901019 57B3	3	PFM	745	N.A.

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-32B** Pág. 1 / 2

MAZO:	**SIH-SS-11**	Indice mazo:	07 ~~03~~ ~~06~~	MODELO:	PFM
CI Code:	**121432-03-32B**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	**1**	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	**02**		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición: 06 DRAFT ~~04~~ ~~3,0~~			
		Plano de montaje(Routing): HP200CK2311	Edición:	**P00**		
		Otros (PM's....):				
Kit	Preparación del Kit necesario para la fabricación del mazo					

1	Conectores: Código Eléctrico	Tipo + Backshell	N°Lote	N°Lote
	122200-P13	340100201B D E MA-09P-NMB-FO + CA-04-09		
	122200-P17	340100201B D C MA-37P-NMB-FO + CA-48-37		
	122200-P19	340100201B D C MA-37P-NMB-FO + CA-48-37		
	122200-P21	340100201B D A MA-15P-NMB-FO + CA-01-15		
	122200-P29	340100201B D C MA-37S-NMB-FO + CA-47-37		
	312300-P04	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24 0[illegible]	0310335	0541
	312300-P01	MS27484T 10F 35 S+380FS007410021B		

2	Cables:	REF.	Cantidad(m)	N°Lote
	S-1CC26	3901019 03B	1,90	813100
	TS-2CC28	3901019 57B3	42,00	0242A
	TS-3CC28	3901019 65B3	3,70	0242
	TS-4CC28	3901019 73B3	9,80	0242A

3	Otros materiales:	REF.	Cantidad	N°Lote
	Malla	DWQ-575-2-019/021/032 (según necesidad)		59092
	Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
	Cinta Gore	Cinta Gore GTS3 (según necesidad)		1007539
	BOBINAS 3401 04T02B			0324

EADS CASA ESPACIO	HERSCHEL CRYO HARNESS **Hoja de seguimiento de mazo**	Doc: **121432-03-32B** Pág. 2 / 2

MAZO:	**SIH-SS-11**		Indice mazo:	07 ~~0306~~	MODELO:	PFM
CI Code:	**121432-03-32B**		Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		
Fase	**OP.**	**DESCRIPCION**	**REALIZADO**	**FECHA**	**CONTROL**	**HRM/NCR**
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	01	27/06/05	A A-13	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	01	18/07/05	A A-13	
	2	Retención de contactos según RC-100-F/Q	01	18/07/05	A A-13	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	9/01/06		
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation	CICode	Bundle Iss.	Bundle Model	Length Model
SIH-SS-11	121432-03-32B	07/04/06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-11)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312300 - P04	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24,8609	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122200 - P13	Conexión:										
Connector:	40100201B D E MA-09P-NMB-F	Tipo:										
Backshell:	CA-04-09	Desconexión:										
Interface:	122200 - P17	Conexión:										
Connector:	40100201B D C MA-37P-NMB-F	Tipo:										
Backshell:	CA-48-37	Desconexión:										
Interface:	122200 - P19	Conexión:										
Connector:	40100201B D C MA-37P-NMB-F	Tipo:										
Backshell:	CA-48-37	Desconexión:										
Interface:	122200 - P21	Conexión:										
Connector:	40100201B D A MA-15P-NMB-F	Tipo:										
Backshell:	CA-01-15	Desconexión:										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation SIH-SS-11

CICode	Bundle Iss.	Bundle Model	Length Model
121432-03-32B	04	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-11)

Interface:	122200 - P29	**Conexión:**										
Connector:	10100201B D C MA-37S-NMB-F	**Tipo:**										
Backshell:	CA-47-37	**Desconexión:**										
Interface:	312300 - P01	**Conexión:**										
Connector:	MS27484T 10 F 35 S	**Tipo:**										
Backshell:	380 F S 007 M 10 02 L3	**Desconexión:**										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation SIH-SS-12

Bundle CICode	B. Issue	B. Model	Length Model
121432-03-32C	05	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-12)

Documentary Support

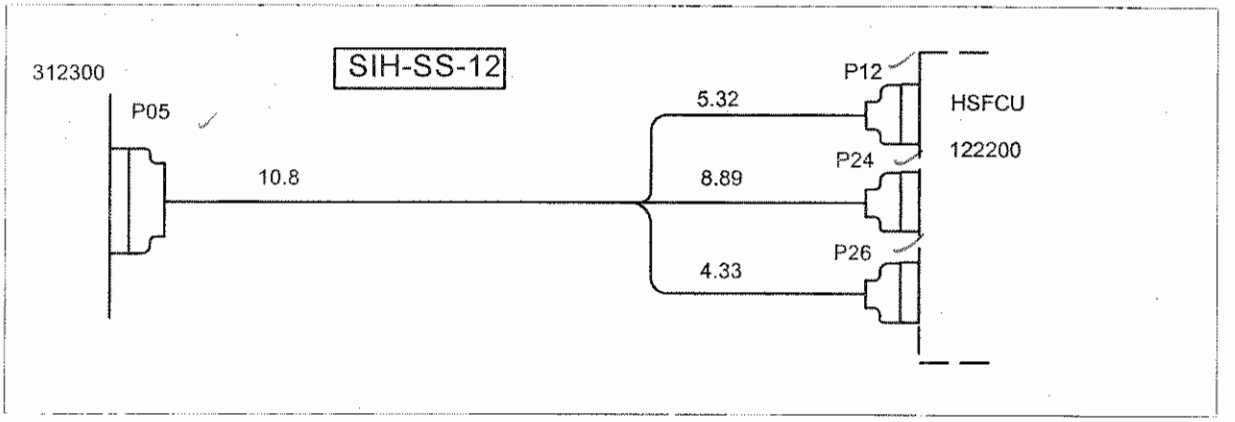
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B)
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2312	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-12)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. Discrepancies between TN 85 3.0 and WL 2.0, quantity and type of cable, CASA takes WL.

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. General review based on TN-0085 Is. 3.0

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2
2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   122200 P12: old CA-68-25 - new CA-71-25
   122200 P24: old CA-36-50 - new CA-44-50
   312300 P05: old 380FS007M2404 - new 380FS007M2408

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-12	121432-03-32C	05	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-12)

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312300	P05	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 06 L3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122200	P12	340100201B D B MA-25P-NMB-FO	CA-71-25
122200	P24	340100201B D D MA-50P-NMB-FO	CA-44-50
122200	P26	340100201B D A MA-15P-NMB-FO	CA-58-15

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312300	P05	122200	P12	T-4CC28	3901019 26B3	5	PFM	1394	N.A.
				TS-4CC28	3901019 73B3	1	PFM	1394	N.A.
			P24	TS-4CC28	3901019 73B3	11	PFM	1417	N.A.
			P26	TS-4CC28	3901019 73B3	3	PFM	1499	N.A.

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-32C** Pág. 1 / 2

MAZO:	**SIH-SS-12**	Indice mazo:	~~03~~ 05	MODELO:	PFM
CI Code:	**121432-03-32C**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	1	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0016	Edición:	**02**		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición: 06 ~~DRAFT 4~~ ~~3,0~~			
		Plano de montaje(Routing): HP200CK2312	Edición:	**P00**		
		Otros (PM's....):				

Kit — Preparación del Kit necesario para la fabricación del mazo

1	Conectores: Código Eléctrico	Tipo + Backshell	N°Lote	N°Lote
	122200-P12	340100201B D B MA-25P-NMB-FO + CA-71-25		
	122200-P24	340100201B D D MA-50P-NMB-FO + CA-44-50		
	122200-P26	340100201B D A MA-15P-NMB-FO + CA-58-15		
	312300-P05	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24 05	6 03/35	0518

2	Cables:	REF.	Cantidad(m)	N°Lote
	~~S-1CC26~~	~~3901019 03B~~	~~1,70~~	~~813100~~
	T-4CC28	3901019 26B3	8,50	813113
	TS-4CC28	3901019 73B3	26,00	813128

3	Otros materiales:	REF.	Cantidad	N°Lote
	Malla	DWQ-575-2-019/021/032 (según necesidad)		59093
	Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
	Cinta Gore	Cinta Gore GTS3 (según necesidad)		0324.
	BORNAS	340104502B		1007539

EADS CASA ESPACIO	HERSCHEL CRYO HARNESS Hoja de seguimiento de mazo	Doc: 121432-03-32C Pág. 2 / 2

MAZO:	SIH-SS-12	Indice mazo:	0305	MODELO:	PFM
CI Code:	121432-03-32C	Conjunto:	PFM SIH SVM Harness (121432-03) - SPIRE		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	OG	27/07/05	A-79	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	IE4J2	[illegible]	A-60	
	2	Retención de contactos según RC-100-F/Q	IE4J2	[illegible]	A-60	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	OA	9/01/06	13	
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation	CICode	Bundle Iss.	Bundle Model	Length Model
SIH-SS-12	121432-03-32C	03 05	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-12)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312300 - P05	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24 08	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122200 - P12	Conexión:										
Connector:	10100201B D B MA-25P-NMB-F	Tipo:										
Backshell:	CA-71-25	Desconexión:										
Interface:	122200 - P24	Conexión:										
Connector:	10100201B D D MA-50P-NMB-F	Tipo:										
Backshell:	CA-44-50	Desconexión:										
Interface:	122200 - P26	Conexión:										
Connector:	10100201B D A MA-15P-NMB-F	Tipo:										
Backshell:	CA-58-15	Desconexión:										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-13	121432-03-32D	07	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-13)

Documentary Support

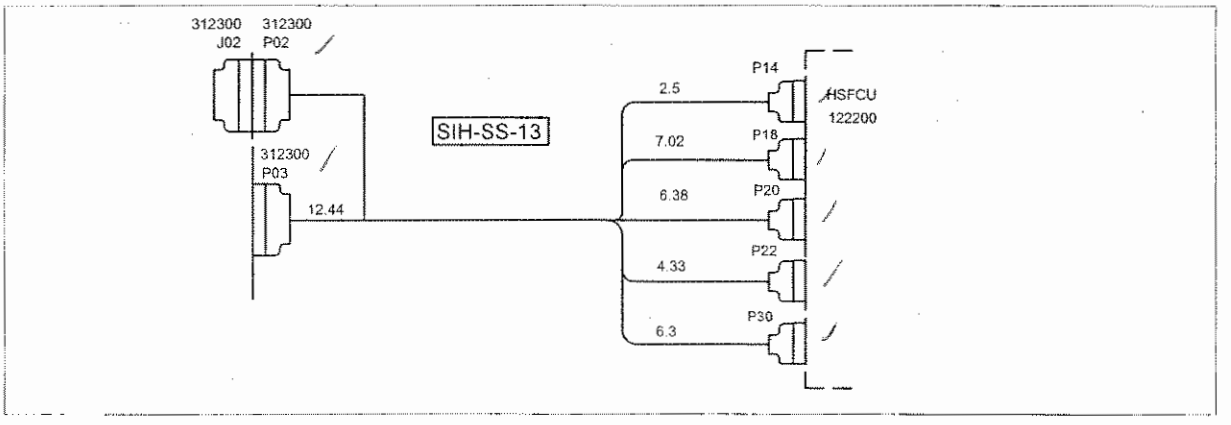
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2313	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-13)

Sketch **Last update:** 08/11/2005



Remarks

---------- Bundle Issue 06 ----------
CHANGES wrt Bundle Issue 05:
1. General review based on TN-0085 Is. 03.
 1.1- Discrepancies between TN-0085 3.0 and WL 2.0, CASA takes WL:
  1.1.1- Cable type for interconnection:
   312300 P03 to 122200 P14: TS-2CC28 (TN 85 3.0) - TS-4CC28 (WL 2.0)
  1.1.2- Cable S-1CC26 (Qty.=1, TN 85 3.0) for interconnection 312300 P03 to 122200 P18 is missing in WL. 2.0

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. Addition of connector and backshell acc. To HP-ASED-MN-1079:
 312300 J02 and backshell 380 F S 001 M 10 2 N.

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. Addition of 312300 P02 acc.to WL IC-0016 Is 2 and Block Diagram ID-0091-01-0B.
 DISCREPANCIES: This connector is missing in TN-0085 Is 2.2
2. Defined backshells by E.A.D.S.-C.A.S.A. for:
 312300 P02: old TBD/TBC - new 380 F S 007 M 10 02 L3

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

EADS CASA ESPACIO	**HERSCHEL CRYO HARNESS** **Hoja de seguimiento de mazo**	Doc: **121432-03-32D** Pág. 1 / 2

MAZO:	**SIH-SS-13**	Indice mazo: ~~04 03~~ 07	MODELO:	PFM
CI Code:	**121432-03-32D**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**	

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Doc	1	Documentación aplicable (Completar Referencia y edición):				
		WIRING LIST: HP-2-ASED-IC-0001	Edición:	**3.0**		
		Doc. Definición Mazos: HP-2-CASA-TN-0003	Edición:	06 ~~DEAF 13,0~~		
		Plano de montaje(Routing): HP200CK2313	Edición:	**P00**		
		Otros (PM's....):				

Kit — Preparación del Kit necesario para la fabricación del mazo

1

Conectores: Código Eléctrico	Tipo + Backshell	N°Lote	N°Lote
122200-P14	340100201B D E MA-09P-NMB-FO + CA-04-09		
122200-P18	340100201B D C MA-37P-NMB-FO + CA-48-37		
122200-P20	340100201B D C MA-37P-NMB-FO + CA-48-37		
122200-P22	340100201B D A MA-15P-NMB-FO + CA-01-15		
122200-P30	340100201B D C MA-37S-NMB-FO + CA-47-37		
312300-P03	340104401B 06 G 24-35 S N - L + 380 F S 007 M 24 05	6 03 / 35	0518
312300-P02	MS27484T 10F 35S+380F007M10023		

2

Cables:	REF.	Cantidad(m)	N°Lote
S-1CC26	3901019 03B	1,90	813100
TS-2CC28	3901019 57B3	43,00	813193
TS-3CC28	3901019 65B3	4,00	813124
TS-4CC28	3901019 73B3	10,30	813128

3

Otros materiales:	REF.	Cantidad	N°Lote
Malla	DWQ-575-2-019/021/032 (según necesidad)		59093
Cinta Al	Cinta Al 99,5%-12,7/19,05/25,4mm (s/ necesidad)		
Cinta Gore	Cinta Gore GTS3 (según necesidad)		1007539
BORUAS 3401 045 02B			0324

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-13	121432-03-32D	07	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-13)

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2
2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   122200 P18: old CA-43-37 - new CA-48-37
   122200 P20: old CA-43-37 - new CA-48-37
   122200 P30: old CA-43-37 - new CA-47-37
   312300 P03: old 380FS007M2405 - new 380FS007M2408

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312300	J02	340104401B 03 - 10-35 P N	340 F S 001 M 10 2 N
312300	P03	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 ~~08~~ 06 L3

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122200	P14	340100201B D E MA-09P-NMB-FO	~~CA-04-09~~ XE-01
122200	P18	340100201B D C MA-37P-NMB-FO	CA-48-37
122200	P20	340100201B D C MA-37P-NMB-FO	CA-48-37
122200	P22	340100201B D A MA-15P-NMB-FO	CA-01-15
122200	P30	340100201B D C MA-37S-NMB-FO	CA-47-37
312300	P02	340104401B 06 G 10-35 S B - L	380 F S 007 M 10 02 L3

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312300	P03	122200	P14	TS-4CC28	3901019 73B3	1	PFM	1761	N.A.
			P18	TS-2CC28	3901019 57B3	11	PFM	1596	N.A.
			P20	TS-2CC28	3901019 57B3	3	PFM	1715	N.A.
				TS-3CC28	3901019 65B3	2	PFM	1715	N.A.
				TS-4CC28	3901019 73B3	2	PFM	1715	N.A.
			P22	TS-4CC28	3901019 73B3	3	PFM	1781	N.A.
			P30	TS-2CC28	3901019 57B3	7	PFM	1715	N.A.
		312300	P02	TS-2CC28	3901019 57B3	3	PFM	685	N.A.

MAZO:	**SIH-SS-13**	Indice mazo:	07 ~~03~~ 06	MODELO:	PFM
CI Code:	**121432-03-32D**	Conjunto:	**PFM SIH SVM Harness (121432-03) - SPIRE**		

Fase	OP.	DESCRIPCION	REALIZADO	FECHA	CONTROL	HRM/NCR
Corte	1	Corte de Cables a longitud requerida (según wiring list, medido en maqueta o de modelo CATIA)	06	27/07/05	A-[illegible]	
Con1	1	Preparación y cableado de Conector/es de ORIGEN	16452	[illegible]	A-80	
	2	Retención de contactos según RC-100-F/Q	16452	[illegible]	A-80	
	3	Rutear el mazo sobre maqueta, conformado, atado y montaje de fijaciones de acuerdo con el plano de montaje aplicable.	01	10/01/06	A 13	
	4	Verificar ruteado.				
	5	Cortar los Cables a longitud definitiva hacia todos los conectores de destino.				
	6	Preparación y cableado de Conector/es de DESTINO				
	7	Retención de contactos según RC-100-F/Q				
	8	Completar sobre-apantallado y/o protecciones exteriores, según wiring list y documento de definición del mazo.				
Test	1	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, ANTES de encintar				
	2	Encintado del mazo según CB-000-F				
Test	3	Realizar test de continuidad, aislamiento y medida de resistencia del mazo, adjuntando hojas de resultados, DESPUÉS de encintar				
	4	Verificación final y pesado Peso obtenido (gr):				
	5	Realizar un ciclo en cámara de vacío, antes de introducir el mazo, par verificar los parámetros.				
	6	REALIZAR MIP				
	7	Protección y embalado para envío.				

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation SIH-SS-13

CICode	Bundle Iss.	Bundle Model	Length Model
121432-03-32D	~~04~~07	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-13)

Conectores de Origen

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	312300 - P03	Conexión:										
Connector:	340104401B 06 G 24-35 S N - L	Tipo:										
Backshell:	380 F S 007 M 24~~06~~	Desconexión:										

Conectores de Destino

	INTERFACE	OPERACIÓN	Conexión 1	Conexión 2	Conexión 3	Conexión 4	Conexión 5	Conexión 6	Conexión 7	Conexión 8	Conexión 9	INSPECCIÓN Conexión 10
Interface:	122200 - P14	Conexión:										
Connector:	40100201B D E MA-09P-NMB-P	Tipo:										
Backshell:	CA-04-09	Desconexión:										
Interface:	122200 - P18	Conexión:										
Connector:	40100201B D C MA-37P-NMB-P	Tipo:										
Backshell:	CA-48-37	Desconexión:										
Interface:	122200 - P20	Conexión:										
Connector:	40100201B D C MA-37P-NMB-P	Tipo:										
Backshell:	CA-48-37	Desconexión:										
Interface:	122200 - P22	Conexión:										
Connector:	40100201B D A MA-15P-NMB-P	Tipo:										
Backshell:	CA-01-15	Desconexión:										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

BUNDLES MATING-DEMATING RECORD

PFM/EQM SIH SVM Harness / SPIRE

Bundle Designation SIH-SS-13

CICode	Bundle Iss.	Bundle Model	Length Model
121432-03-32D	0407	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-13)

Interface:	122200 - P30	**Conexión:**										
Connector:	10100201B D C MA-37S-NMB-F	**Tipo:**										
Backshell:	CA-47-37	**Desconexión:**										
Interface:	312300 - P02	**Conexión:**										
Connector:	MS27484T 10 F 35 S	**Tipo:**										
Backshell:	380 F S 007 M 10 02 L3	**Desconexión:**										

Conexión - Desconexión: Rellenar con la fecha de CONEXIÓN y/o DESCONEXIÓN. Tras cada conexión, se deberá hacer una inspección visual del estado del conector y sus contactos. Al final de las 10 conexiones, deberá realizarse una inspección mediante microscopio.

Tipo: Durante la CONEXIÓN, se indicará el TIPO de la misma de acuerdo con los códigos siguientes:

A = Conexión a Saver (HI-REL Saver)
B = Conexión a Adaptador de Ensayos (HI-REL Test Adaptor)
C = Otros conectores CON CALIDAD DE VUELO (other HI-REL Connectors)
D = Otros conectores SIN CALIDAD DE VUELO (other NO-HI-REL Connectors)

HN1148 Annex 4-1 Comparison TN0003 Iss.05 with logsheet Iss.06 Draft.

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-01	121432-03-321	04	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-01)

Documentary Support

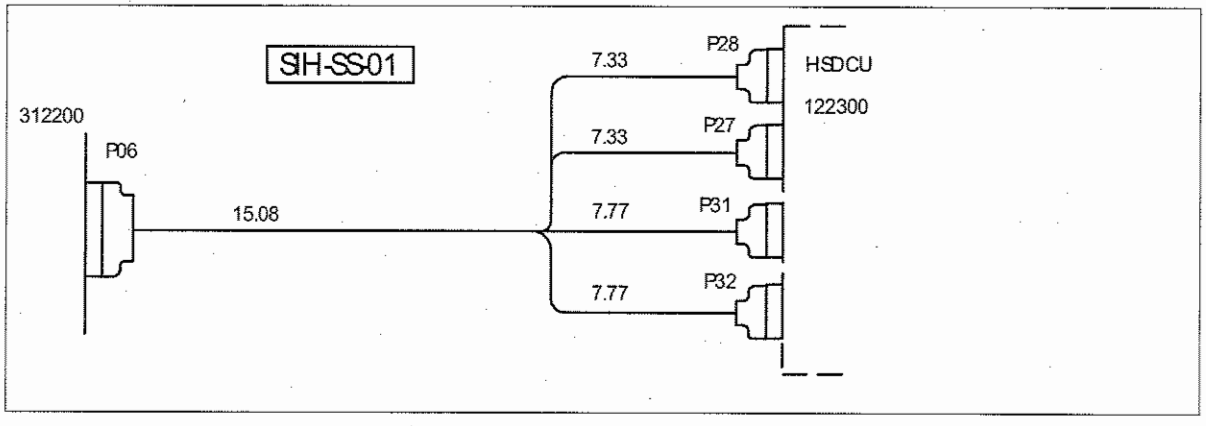
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B)
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2301	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-01)

Sketch **Last update:** 25/10/2005



Remarks

——————— Bundle Issue 04 ———————
CHANGES wrt Bundle Issue 03:
1. General review based on TN-0085 3.0

——————— Bundle Issue 03 ———————
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2
2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:
   122300 P027: old CA-43-37 - new CA-48-37
   122300 P028: old CA-43-37 - new CA-48-37
   122300 P031: old CA-43-37 - new CA-48-37
   122300 P032: old CA-43-37 - new CA-48-37
   312200 P06: old 380FS007M2405 - new 380FS007M2409

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-01	121432-03-321	04	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-01)

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312200	P06	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 09

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122300	P27	340100201B D C MA-37S-NMB-FO	CA-48-37
122300	P28	340100201B D C MA-37S-NMB-FO	CA-48-37
122300	P31	340100201B D C MA-37P-NMB-FO	CA-48-37
122300	P32	340100201B D C MA-37P-NMB-FO	CA-48-37

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312200	P06	122300	P27	S-1CC26 *	3901019 03B	1	PFM	915	N.A.
				TS-2CC28	3901019 57B3	12	PFM	915	N.A.
			P28	S-1CC26 *	3901019 03B	1	PFM	1018	N.A.
				TS-2CC28	3901019 57B3	12	PFM	1018	N.A.
			P31	S-1CC26 *	3901019 03B	3	PFM	945	N.A.
				TS-2CC28	3901019 57B3	13	PFM	945	N.A.
			P32	S-1CC26 *	3901019 03B	3	PFM	931	N.A.
				TS-2CC28	3901019 57B3	13	PFM	931	N.A.

Scc 3901019 03B = S-1CO26 not S-1CC26 !

On H/W a S-1CO26 have been used. ok ✓

MN-1148 Annex 4-3

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-02	121432-03-322	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-02)

Documentary Support

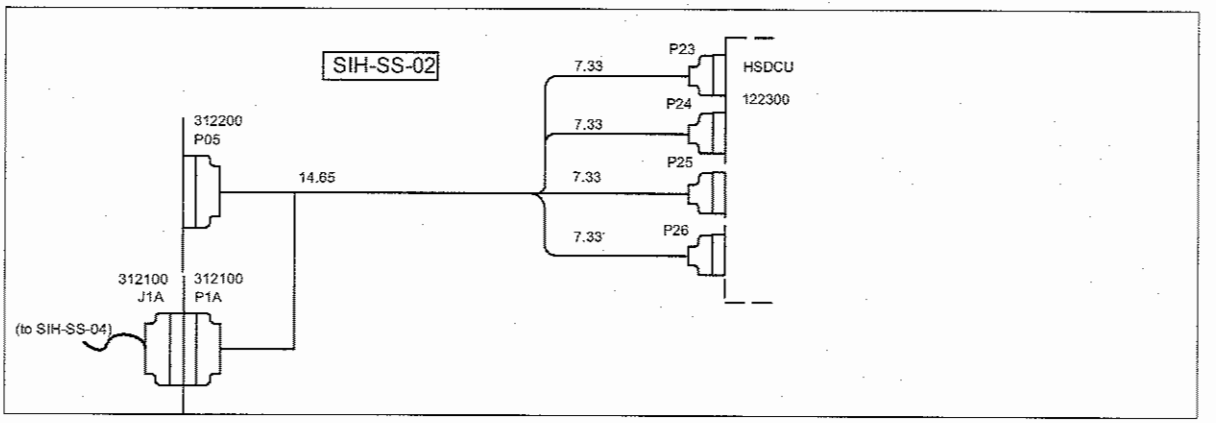
Documentary Support Area: **Electrical**

Document Reference	*Issue*	*Document Designation*
HP-2-ASED-IC-0016	02	PFM EPLM SPIRE SIH ICD
HP-2-ASED-ID-0091-01-0B	B	PFM SPIRE Cryo-Harness Interconnection Diagram (2547-121430-030-01-0B)
HP-2-ASED-TN-0085	3.0	PFM Cryo-Harness Branch Characteristics

Documentary Support Area: **Mechanical**

Document Reference	*Issue*	*Document Designation*
HP200CK2302	P00	Herschel Cryo-Harness - SVM Ext Routing (SIH-SS-02)

Sketch **Last update:** 25/10/2005



Remarks

Definition TN-0003 Iss. 5 is based on TN-0085 Iss. 3.0

---------- Bundle Issue 06 ----------
CHANGES wrt Bundle Issue 05:
1. General review based on TN-0085 Is. 3.0
   1.1- The connector 312100 P1A is missing.

---------- Bundle Issue 05 ----------
CHANGES wrt Bundle Issue 04:
1. Updated backshell for 312100 P01A acc. To HP-ASED-MN-1079:
   312100 P01A: old 507 T 196 M 9 - new CA-04-09
2. Addition of connector and backshell acc. To HP-ASED-MN-1079:
   312200 J01A and backshell CA-04-09.

---------- Bundle Issue 04 ----------
CHANGES wrt Bundle Issue 03:
1. Addition of 312100 P1A acc.to WL IC-0016 Is 2 and Block Diagram ID-0091-01-0B.
   DISCREPANCIES: This connector is missing in TN-0085 Is 2.2

---------- Bundle Issue 03 ----------
CHANGES wrt Bundle Issue 02:
1. Updated backshells for destination connectors.
2. Updated theoretical lenghts.

REMARKS to Bundle Issue 03:
1. General review based on TN-0085 Is 2.2
2. Defined new backshells (different to the ones defined in TN-85 Is2.2, due to size problems) for:

BUNDLES "As Design" CONFIGURATION - PFM/EQM SIH SVM Harness - SPIRE

Bundle Designation	Bundle CICode	B. Issue	B. Model	Length Model
SIH-SS-02	121432-03-322	06	PFM	PFM

Description: PFM Cryo-SIH SPIRE SVM int (Branch SIH-SS-02)

122300 P023: old CA-43-37 - new CA-48-37
122300 P024: old CA-43-37 - new CA-48-37
122300 P025: old CA-43-37 - new CA-48-37
122300 P026: old CA-43-37 - new CA-48-37
312200 P05: old 380FS007M2405 - new 380FS007M2409

"From" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
312100	J01A	340100201B D E MA-09P-NMB-FO	CA-04-09
312200	P05	340104401B 06 G 24-35 S N - L	380 F S 007 M 24 09

"To" Connectors and Backshells List

Unit Code	*Conn.*	*Connector Part Nbr.*	*BackshellComponentId*
122300	P23	340100201B D C MA-37S-NMB-FO	CA-48-37
122300	P24	340100201B D C MA-37S-NMB-FO	CA-48-37
122300	P25	340100201B D C MA-37S-NMB-FO	CA-48-37
122300	P26	340100201B D C MA-37S-NMB-FO	CA-48-37
312100	P01A	340100201B D E MA-09S-NMB-FO	CA-04-09

Cables List

From (Unit)	*Conn.*	*To (Unit)*	*Conn.*	*Cable Original Ref*	*Cable Component Part Nbr.*	*Qty*	*Length Model*	*Theorical Length*	*Real Length*
312200	P05	122300	P23	S-1CC26 *	3901019 03B	1 I	PFM	903	N.A.
				TS-2CC28	3901019 57B3	12	PFM	903	N.A.
			P24	S-1CC26 *	3901019 03B	1	PFM	1006	N.A.
				TS-2CC28	3901019 57B3	12	PFM	1006	N.A.
			P25	S-1CC26 *	3901019 03B	1 I	PFM	906	N.A.
				TS-2CC28	3901019 57B3	12	PFM	906	N.A.
			P26	S-1CC26 *	3901019 03B	1	PFM	1006	N.A.
				TS-2CC28	3901019 57B3 (6)	12 II	PFM	1006	N.A.
		312100	P01A	TS-2CC28	3901019 57B3	3	PFM	960	N.A.

* Editorial failure } S-1CC26 shall be S-1CO26 = single wire without shield

I ≙ cable deleted based on HP-2-ASED-TN-0085 Iss. 3.0

II ≙ cable quantity changed based on II

NCR's AFFECTING SPIRE BUNDLES				
NCR Number	**NCR Title**	**Model**	**Status**	**Disposition**
HP-121432-CASA-NC-1741	Changed backshell list in SIH SVM PFM Harness	PFM	Open	Modify

HS-1148 Annex 5.0

MN-1148 Annex 5.1

Thursday January 12 2006 9:0 AM

Company	Project Name	NCR-No: HP-121432-ASED-NC-1297
ASTRIUM FRIEDRICHSHAFEN	HERSCHEL-PLANCK	Related internal NCR-No:
		Critical Item:Yes [X] No [ ] Revision 0
		Page 1 of 1

Nonconformance Report

NCR **Title** Missing definition in SPIRE HDD an IID-B w.r.t. launch latch configuration	
NC Item **Identification** Scientific instrument Harness	
Next Higher Assembly PLM Cryostat Harness	
Drawing No	Sr No.
Procedure No	
Supplier CASA	Purchase Order
Subsystem	Model PFM
NC Observation Date: 27-JUL-05 Location: ASED-FN	NC Detected During Design

Description of Nonconformance	Requirements Violated
ASED recognized during an internal NCR review that the definition of the SPIRE HDD and IID-B w.r.t. the launch latch configuration and bridging J22 interlink is missing. SPIRE to provide requirements. Refer to CASA-NC-1146	missing definition

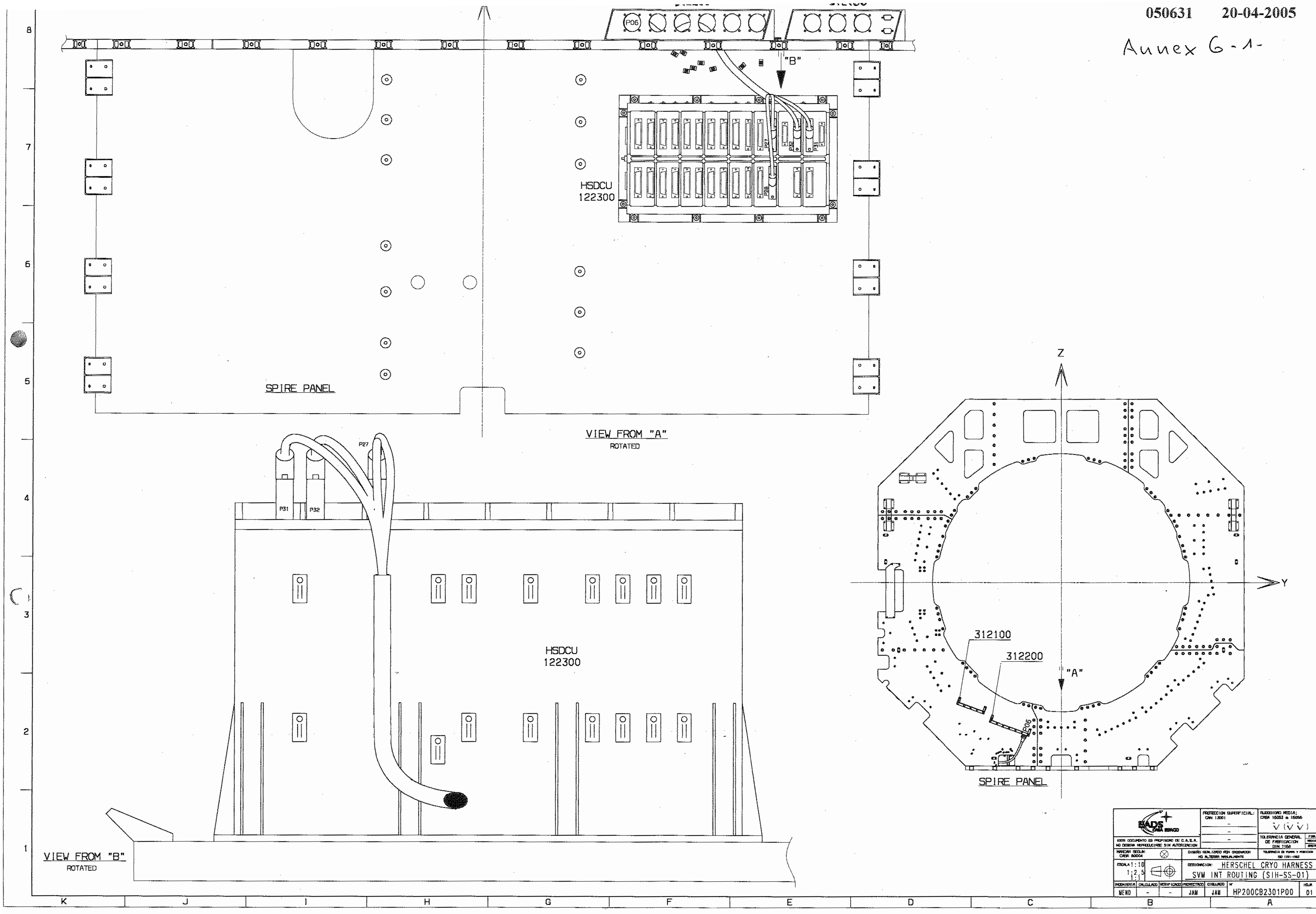
Initiator: Date, Name and Signature 27-JUL-05 Stritter

Date:
Name:
Signature:

- Content to be implemented in HP-2-ASED-IC-0016 Iss. 2.1 (next update).
  - Wiring list content is available at CASA already!
  - CASA to manufacture 312100 J1A+J1B interlink accordingly. ⇒ § 6 OPN. (as defined in logsheets)

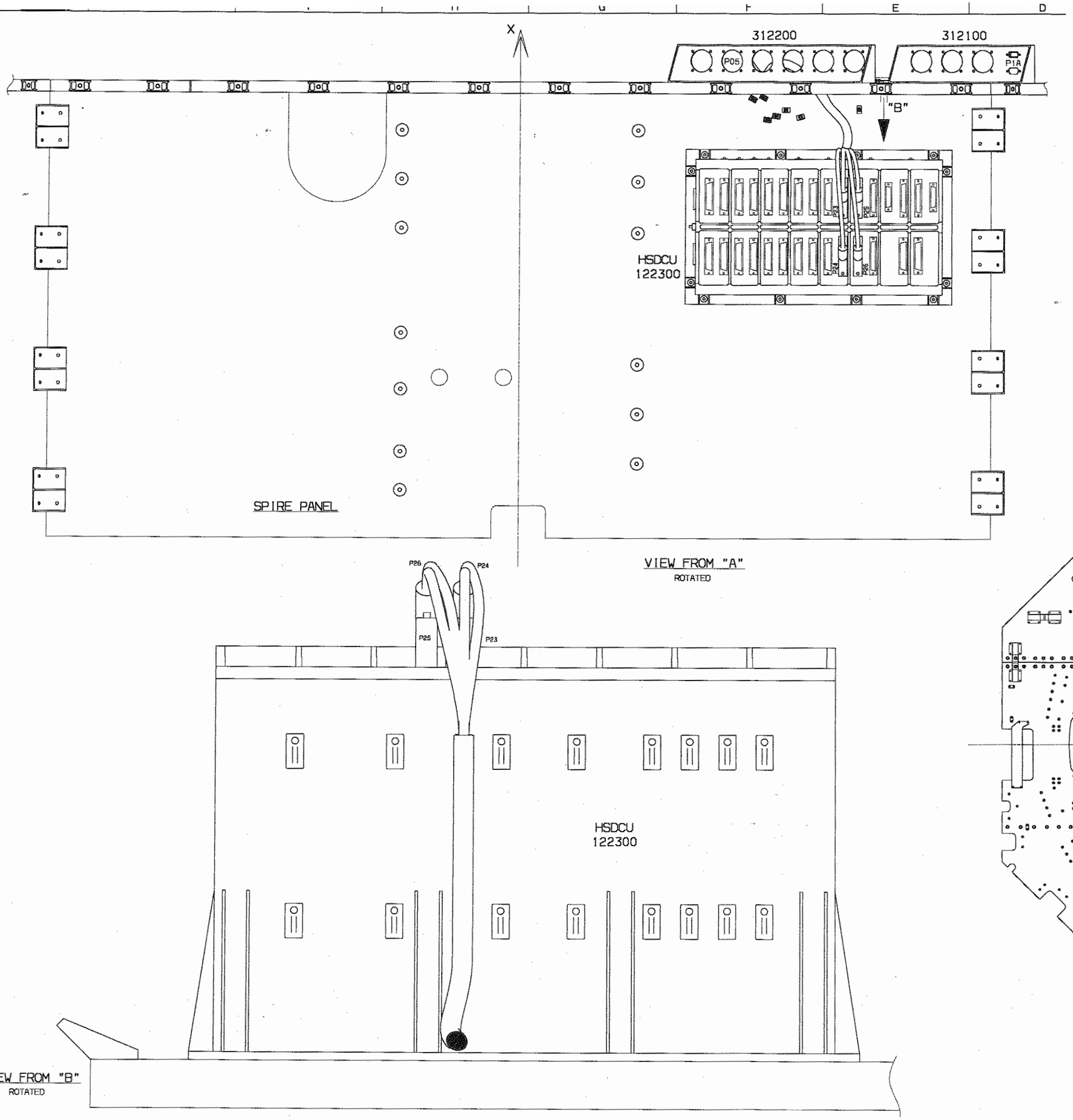
050631 20-04-2005

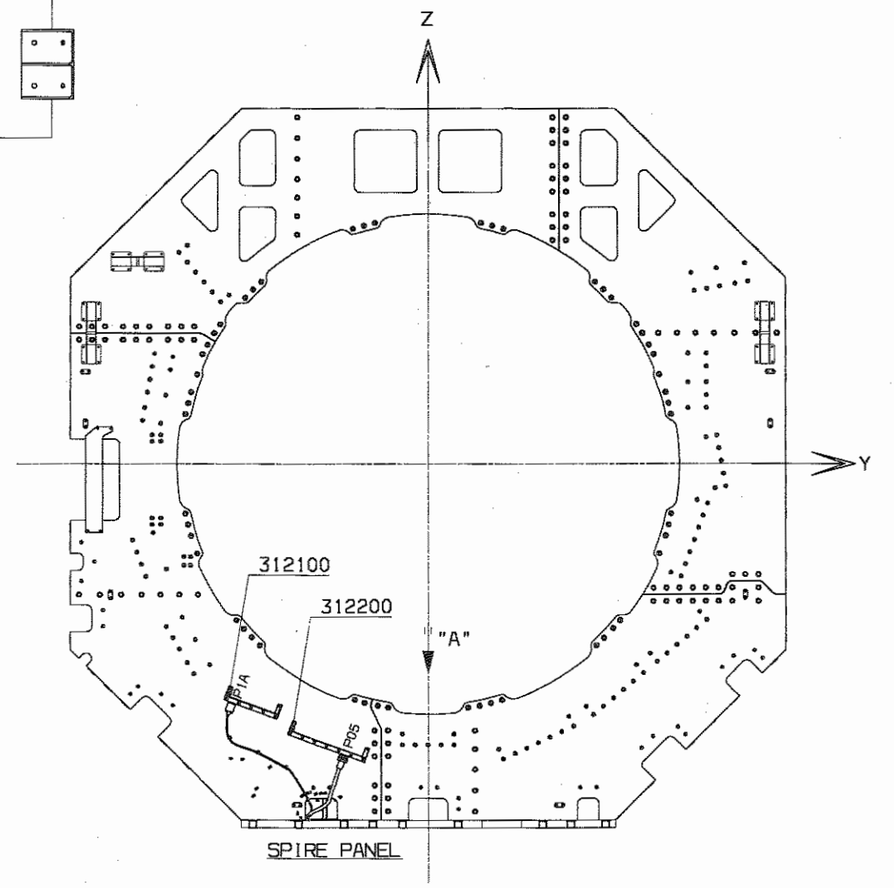
Annex 6-1-



050631 20-04-2005

Annex 6-2

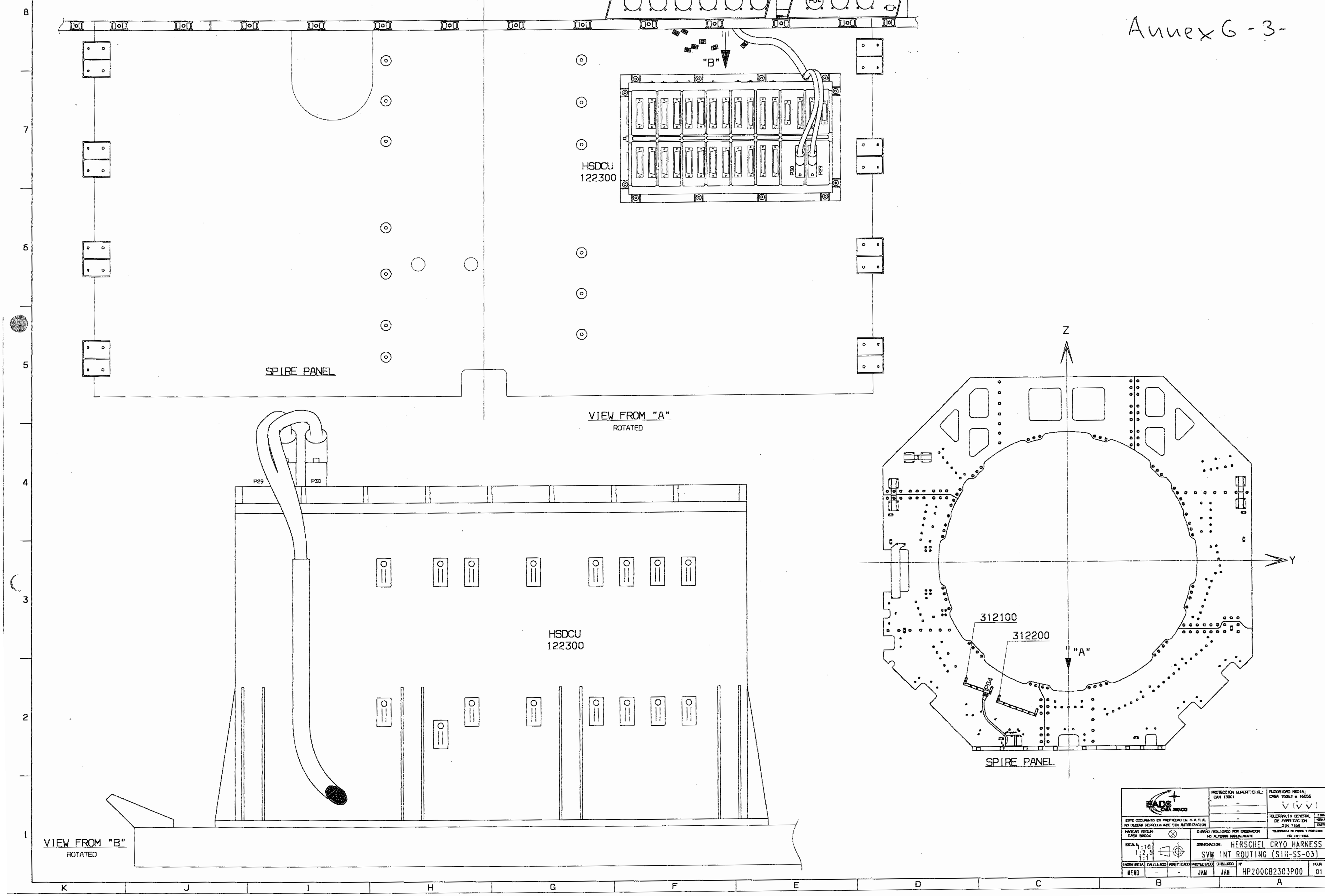




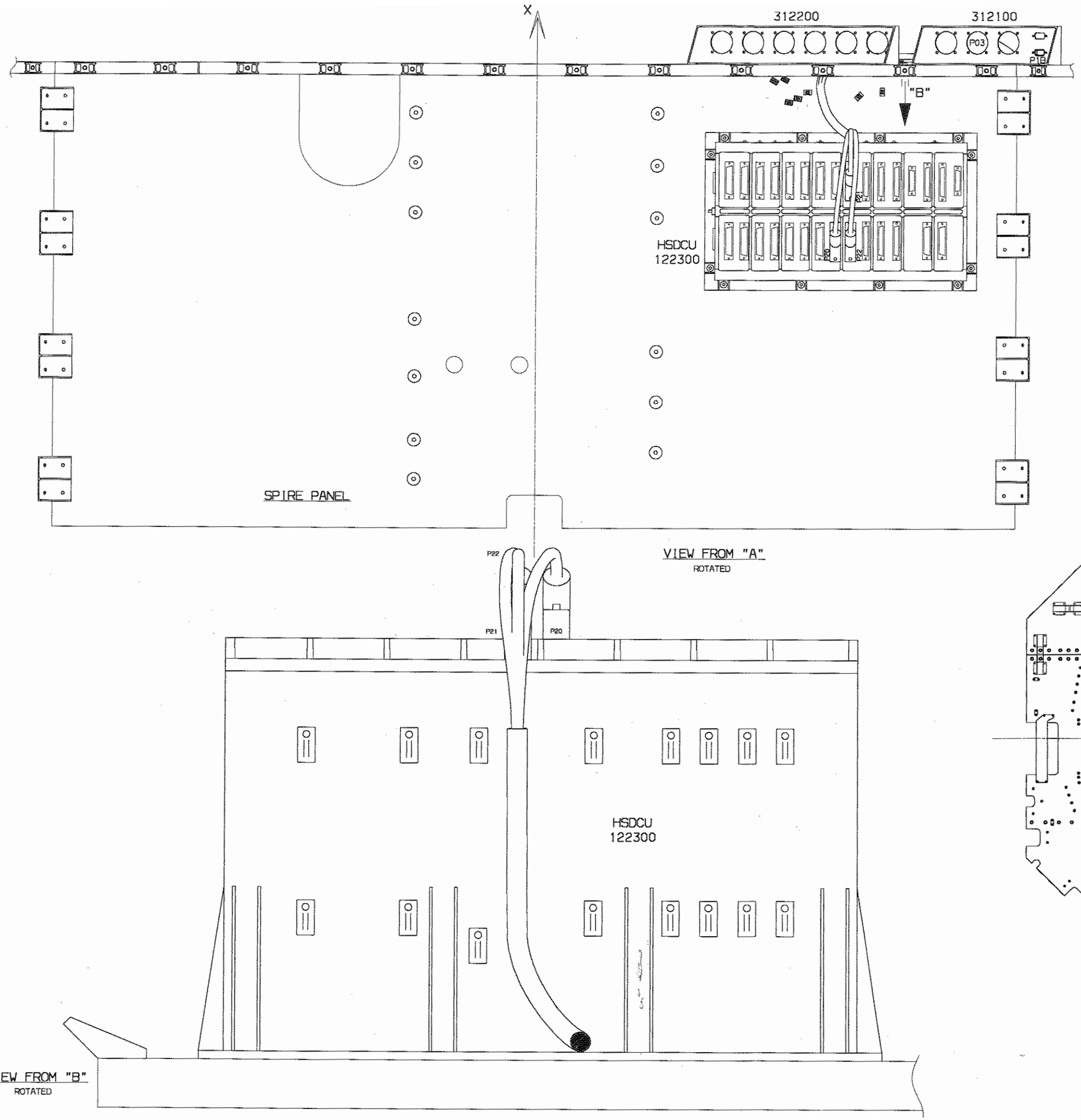
ESTE DOCUMENTO ES PROPIEDAD DE C.A.S.A. NO DEBERA REPRODUCIRSE SIN AUTORIZACION			PROTECCION SUPERFICIAL: CAN 13001		RUGOSIDAD MEDIA: CASA 15053 o 15056		
MARCAR SEGUN CASA 80004			DISEÑO REALIZADO POR ORDENADOR NO ALTERAR MANUALMENTE		TOLERANCIA GENERAL DE FABRICACION DIN 7168		
ESCALA 1:10 1:2.5			DESIGNACION: HERSCHEL CRYO HARNESS SVM INT ROUTING (SIH-SS-02)				
INGENIERIA	CALCULADO	VERIFICADO	PROYECTADO	DIBUJADO	Nº		HOJA
MENO	-	-	JAM	JAM	HP200CB2302P00		01

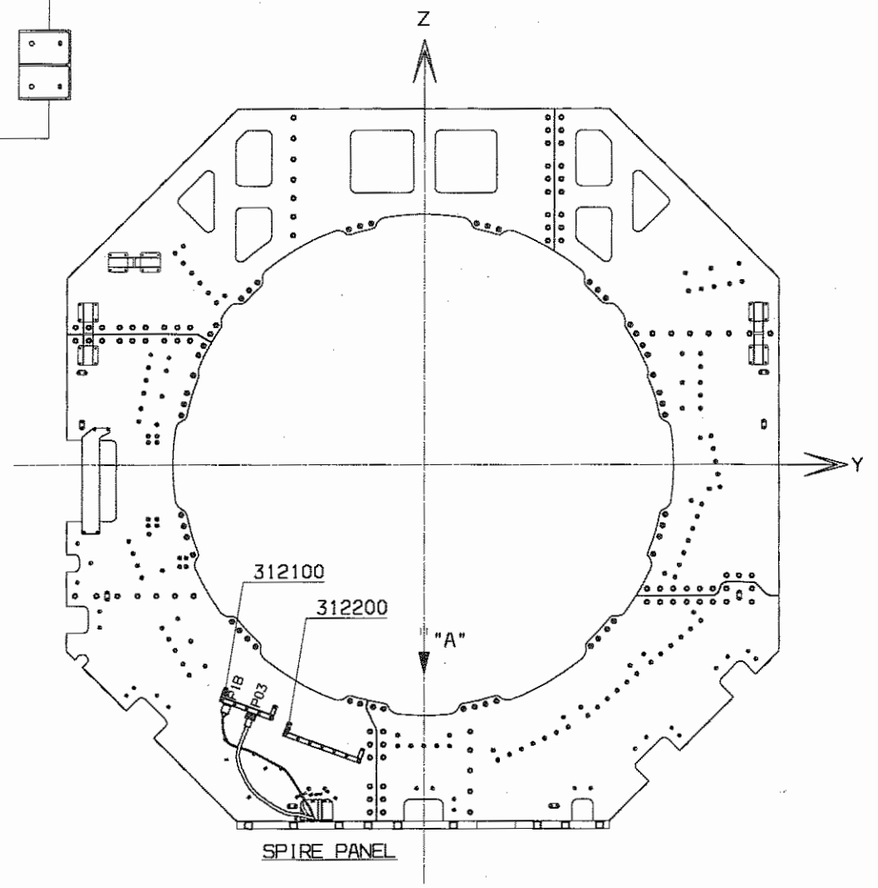
050631 20-04-2005

Annex 6 -3-



Annex 6 - 4 -





PROTECCION SUPERFICIAL: CAN 13001

RUGOSIDAD MEDIA; CASA 15053 a 15056

TOLERANCIA GENERAL DE FABRICACION DIN 2768

MATERIAL SEGUN CASA 80004

DISEÑO REALIZADO POR ORDENADOR NO ALTERAR MANUALMENTE

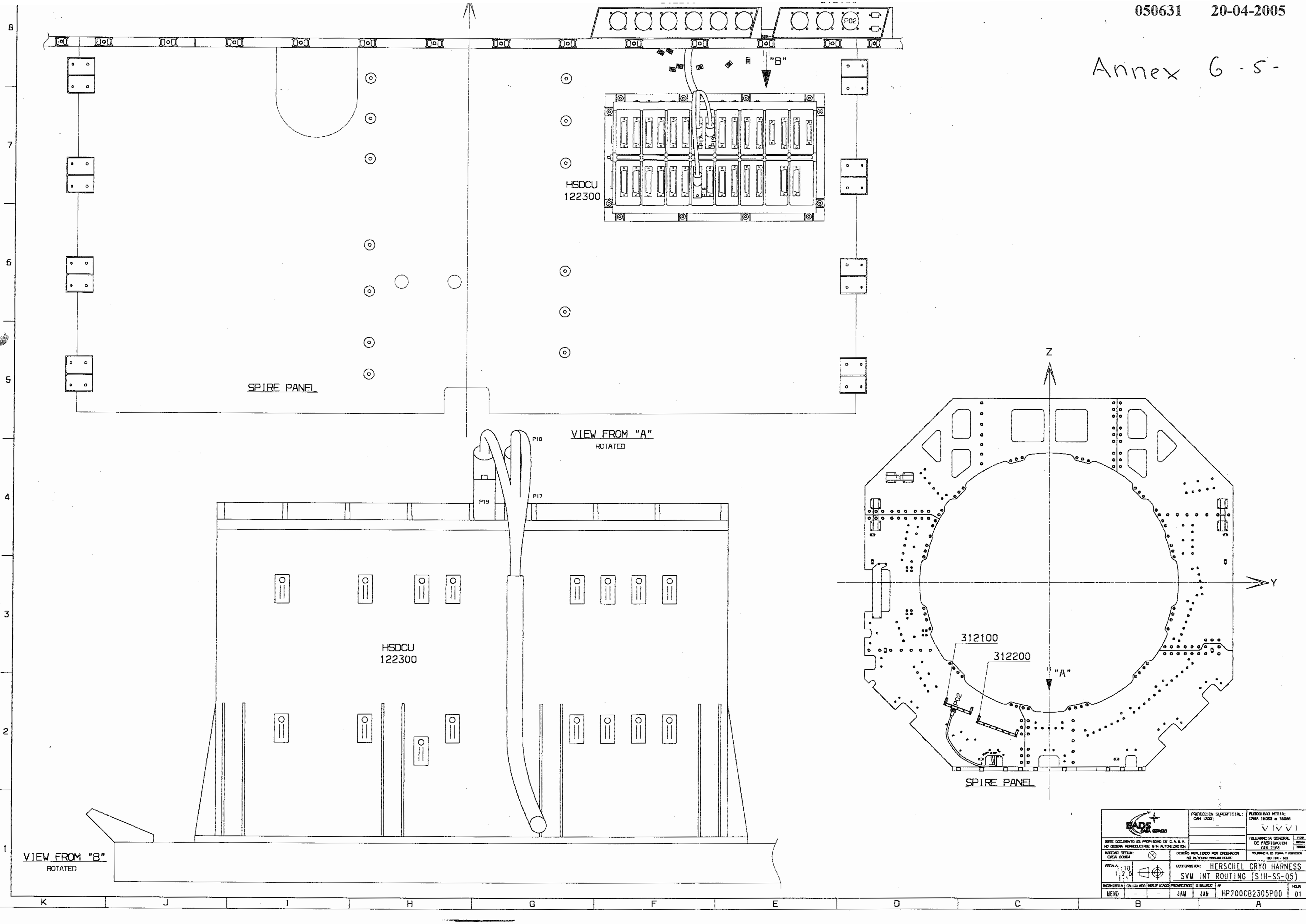
ESCALA 1:10 1:2.5 1:1

DESIGNACION: HERSCHEL CRYO HARNESS
SVM INT ROUTING (SIH-SS-04)

INGENIERIA	CALCULADO	VERIFICADO	PROYECTADO	DIBUJADO	Nº	HOJA
MENO	-	-	JAM	JAM	HP200CB2304P00	01

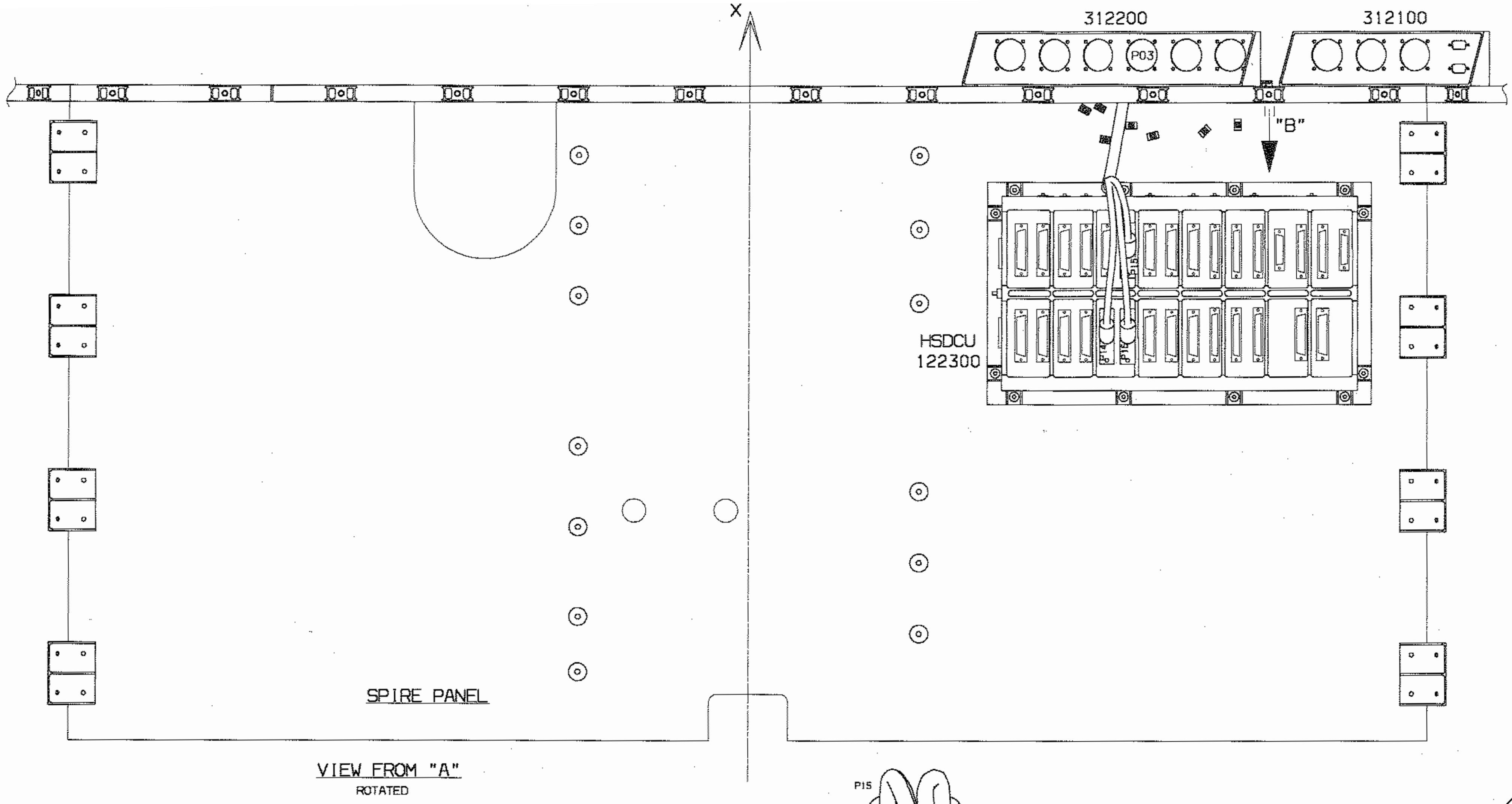
050631 20-04-2005

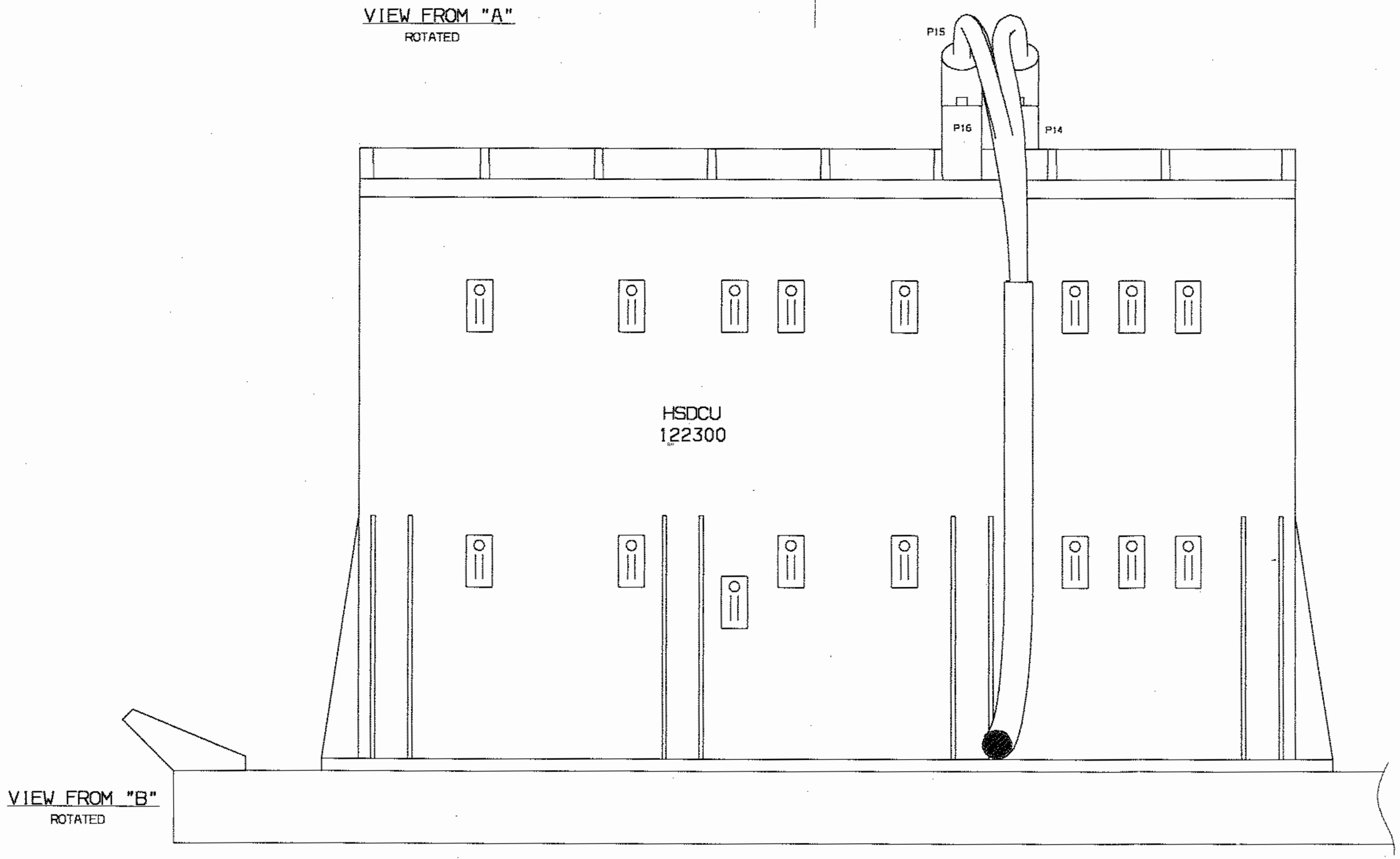
Annex 6.5-

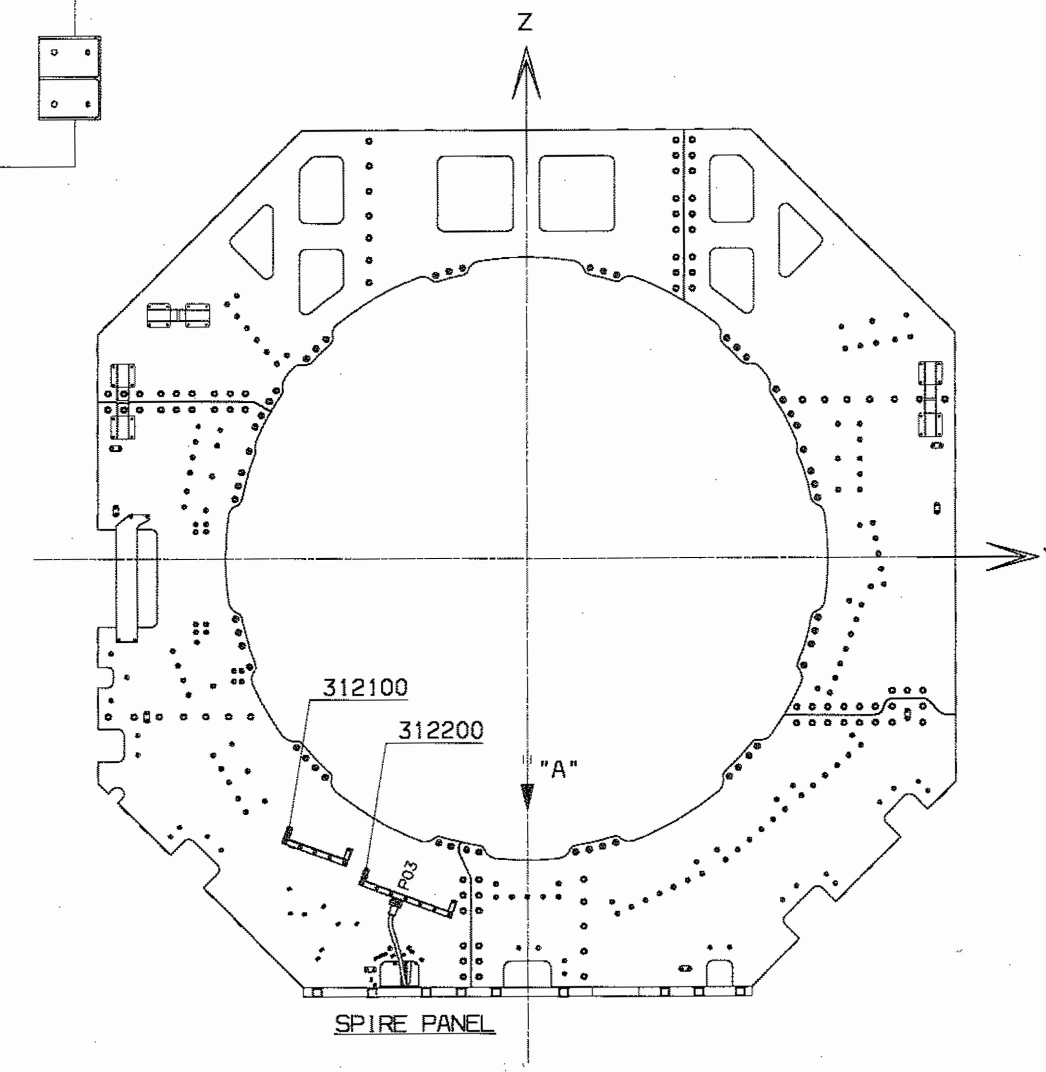


050631 **20-04-2005**

Annex 6.6-







EADS CASA ESPACIO

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PROTECCION SUPERFICIAL: CAN 13001

RUGOSIDAD MEDIA: CASA 15053 a 15055

TOLERANCIA GENERAL DE FABRICACION DIN 7168

TOLERANCIA DE FORMA Y POSICION ISO 1101-1983

MARCAR SEGUN: CASA 50004

DISEÑO REALIZADO POR ORDENADOR NO ALTERAR MANUALMENTE

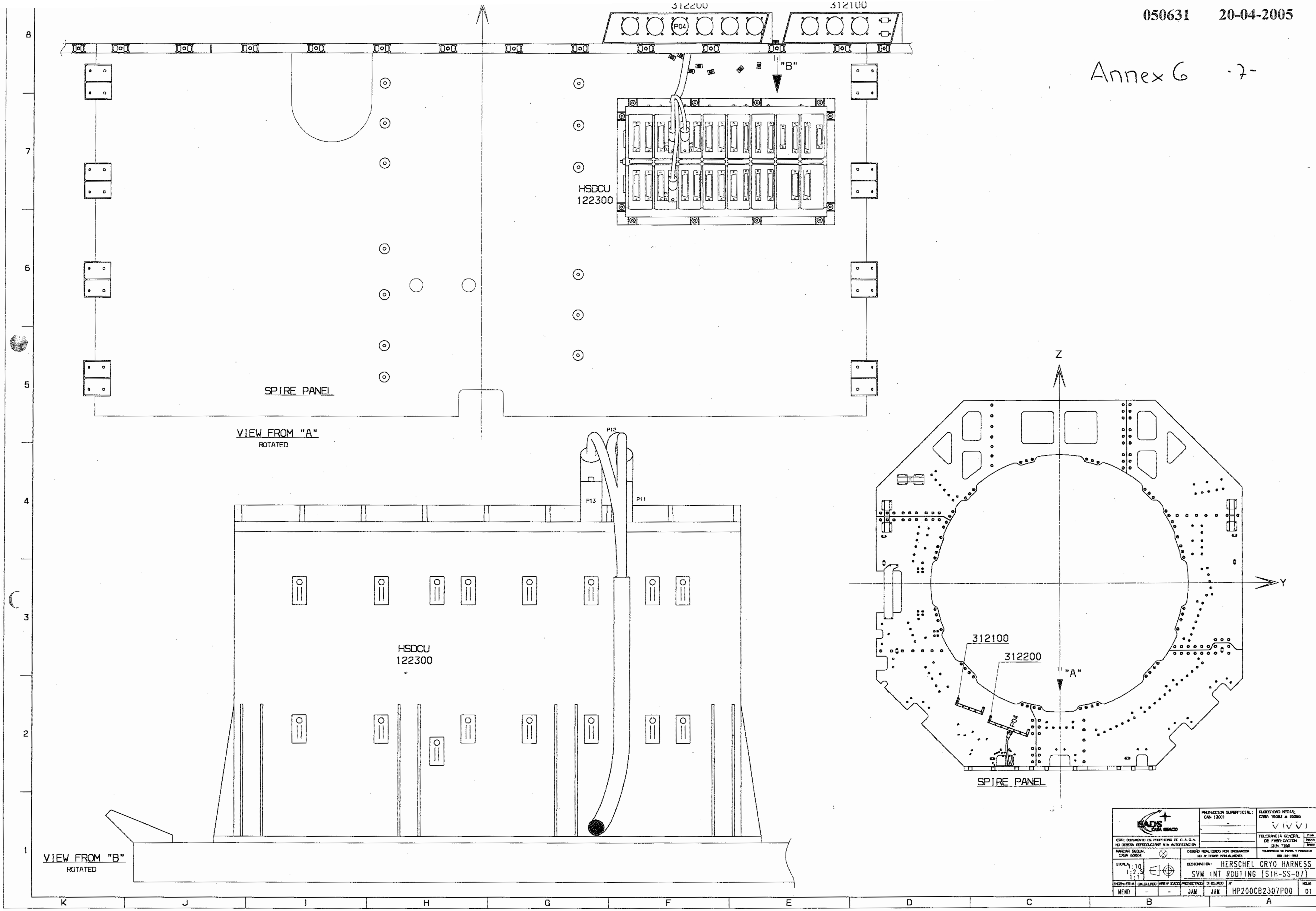
ESCALA 1:10 1:2,5 1:1

DESIGNACION: HERSCHEL CRYO HARNESS SVM INT ROUTING (SIH-SS-06)

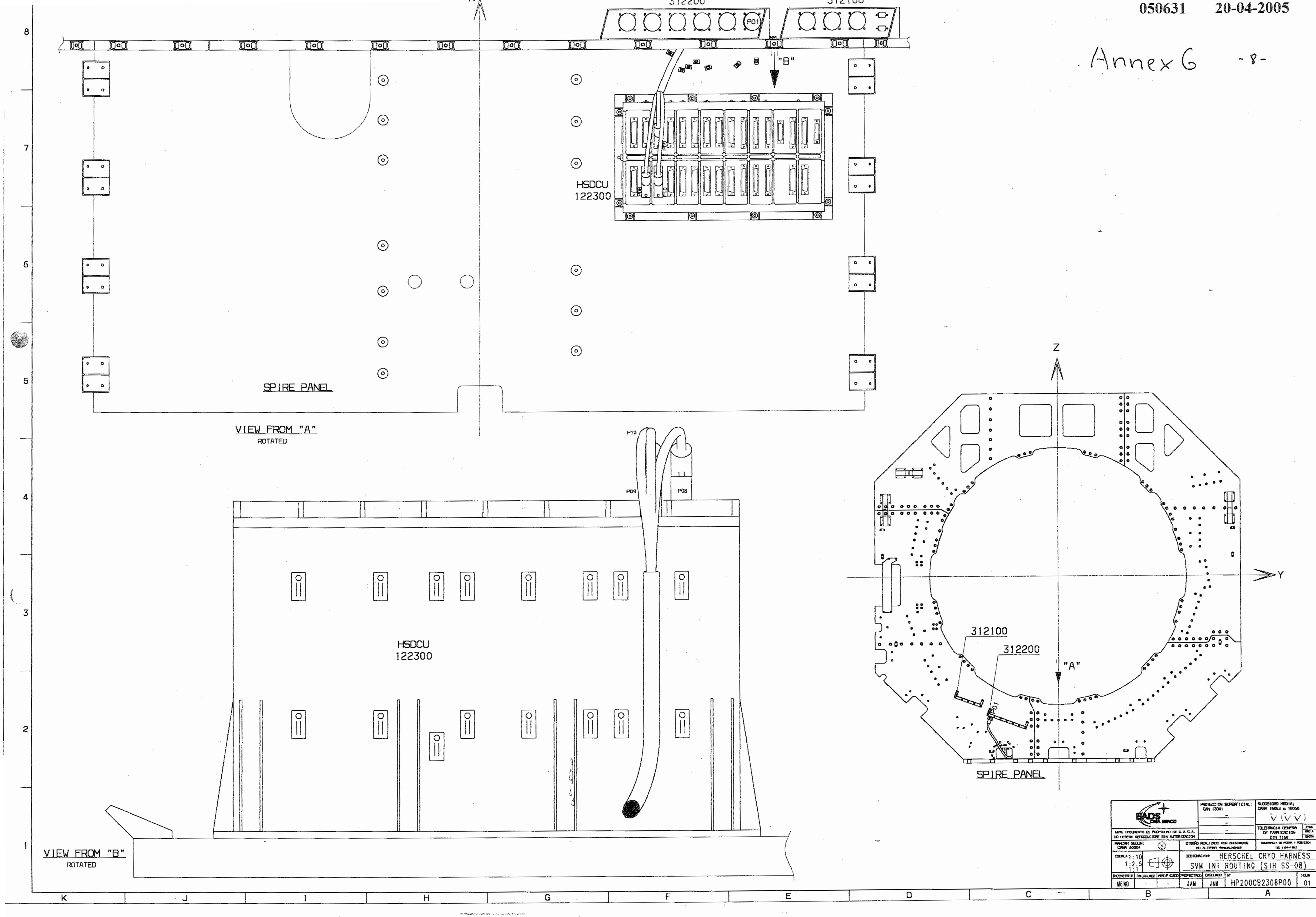
INGENIERIA	CALCULADO	VERIFICADO	PROYECTADO	DIBUJADO	Nº	HOJA
MENO	-	-	JAM	JAM	HP200C82306P00	01

050631 20-04-2005

Annex 6 -7-

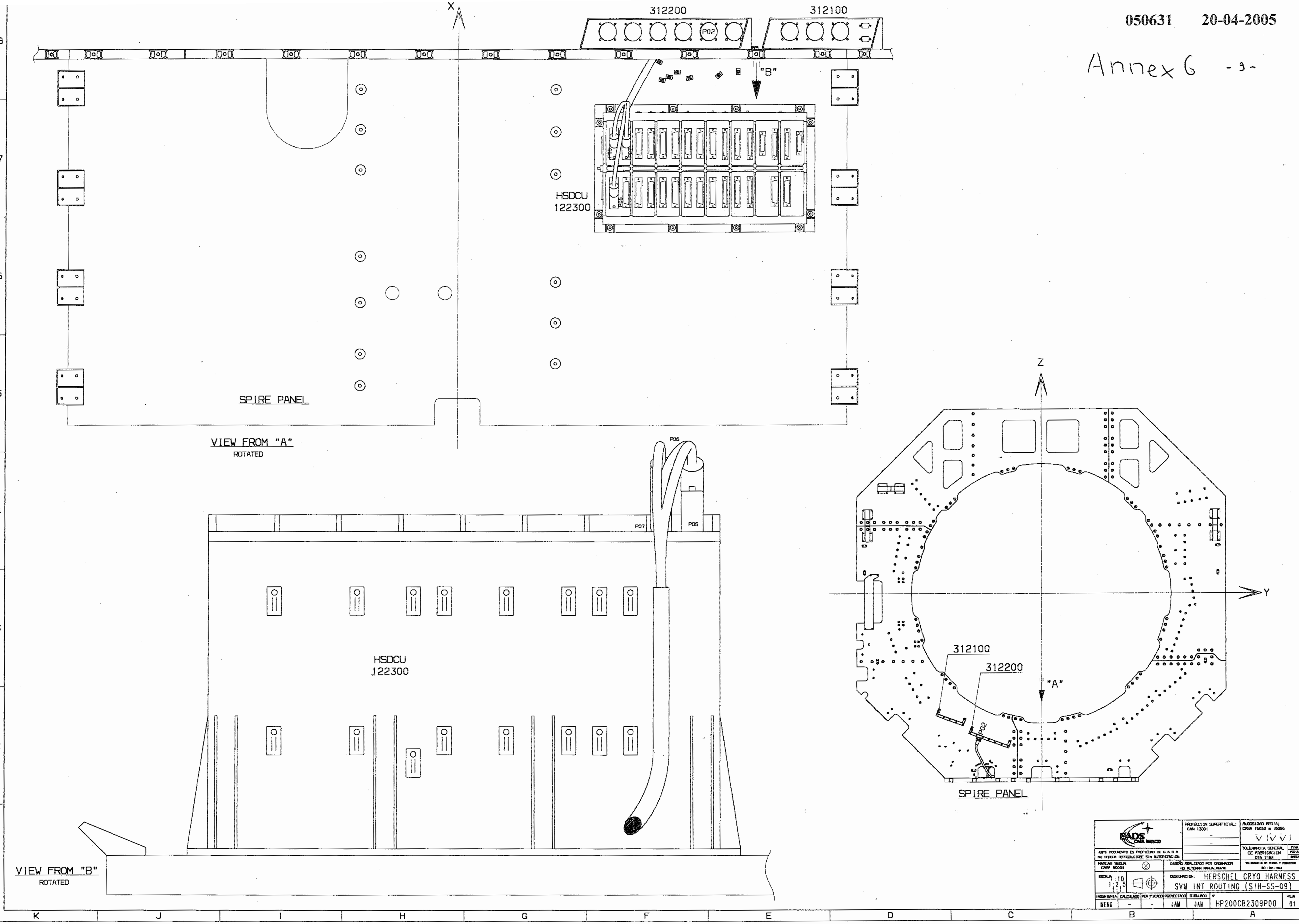


Annex G -8-


312200
312100
P01
"B"
HSDCU
122300
P08
P09
P10
SPIRE PANEL
VIEW FROM "A"
ROTATED
Z
Y
"A"
312100
312200
P01
SPIRE PANEL
HSDCU
122300
VIEW FROM "B"
ROTATED
EADS CASA ESPACIO
PROTECCION SUPERFICIAL: CAN 13001
RUGOSIDAD MEDIA; CASA 15053 a 15056
TOLERANCIA GENERAL DE FABRICACION DIN 7168
ESTE DOCUMENTO ES PROPIEDAD DE C.A.S.A. NO DEBERA REPRODUCIRSE SIN AUTORIZACION
MARCAR SEGUN: CASA 50004
DISEÑO REALIZADO POR ORDENADOR NO ALTERAR MANUALMENTE
ESCALA 1:10 1:2.5 1:1
DESIGNACION: HERSCHEL CRYO HARNESS SVM INT ROUTING (SIH-SS-08)
INGENIERIA MEND
PROYECTADO JAM
DIBUJADO JAM
Nº HP200CB2308P00
HOJA 01
K J I H G F E D C B A
8 7 6 5 4 3 2 1

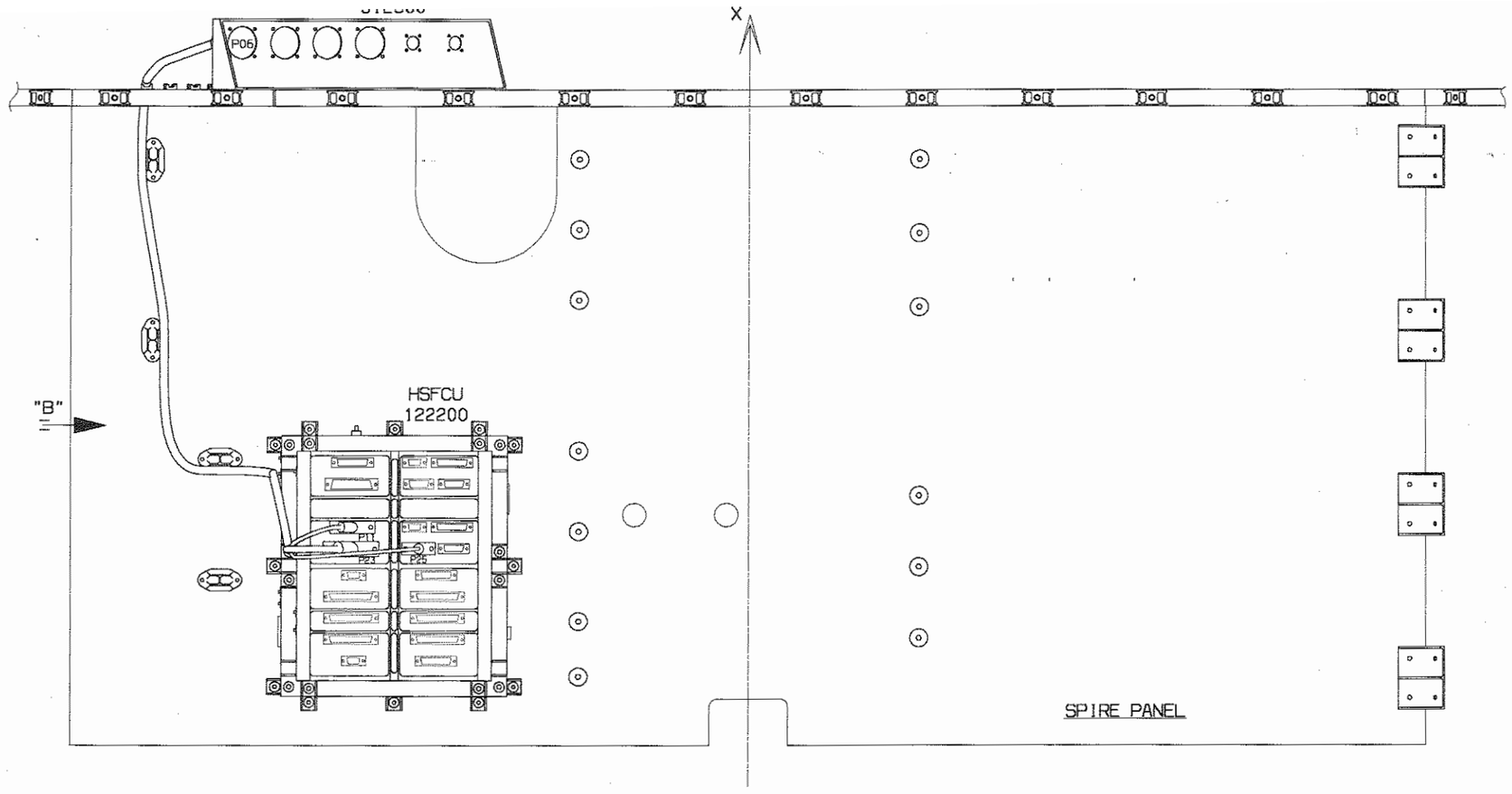
050631 20-04-2005

Annex 6 -9-



EADS CASA ESPACIO	PROTECCION SUPERFICIAL: CAN 13001	RUGOSIDAD MEDIA: CASA 15053 a 15056
ESTE DOCUMENTO ES PROPIEDAD DE C.A.S.A. NO DEBERA REPRODUCIRSE SIN AUTORIZACION		TOLERANCIA GENERAL DE FABRICACION DIN 7168
MARCAR SEGUN CASA 80004	DISEÑO REALIZADO POR ORDENADOR NO ALTERAR MANUALMENTE	TOLERANCIA DE FORMA Y POSICION ISO 1101-1983
ESCALA 1:10 1:2,5 1:1	DESIGNACION: HERSCHEL CRYO HARNESS SVM INT ROUTING (SIH-SS-09)	

INGENIERIA	CALCULADO	VERIFICADO	PROYECTADO	DIBUJADO	Nº	HOJA
MEND	-	-	JAM	JAM	HP200CB2309P00	01



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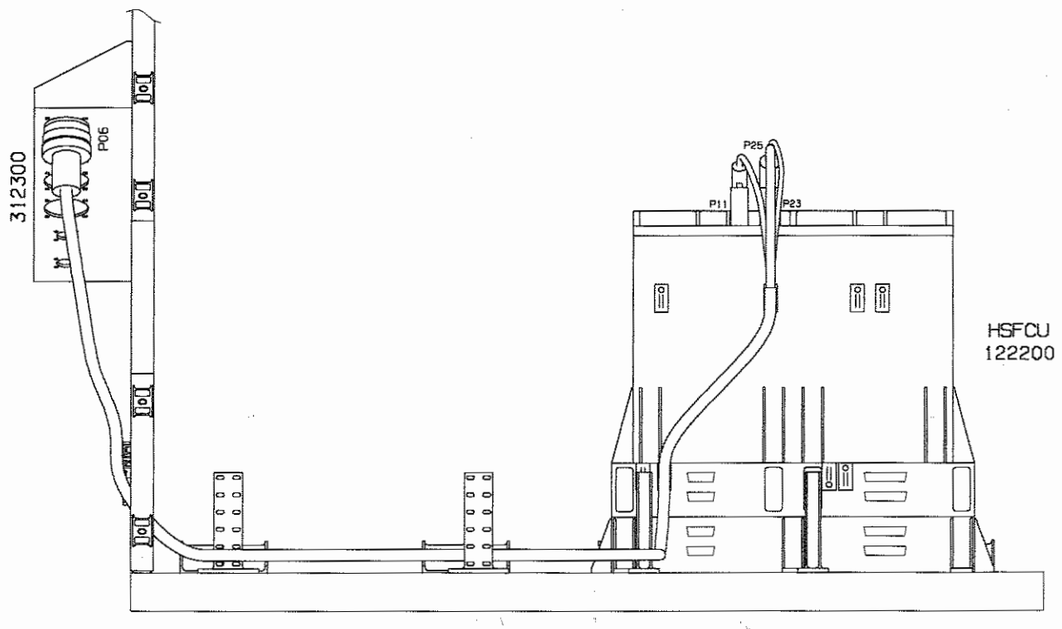
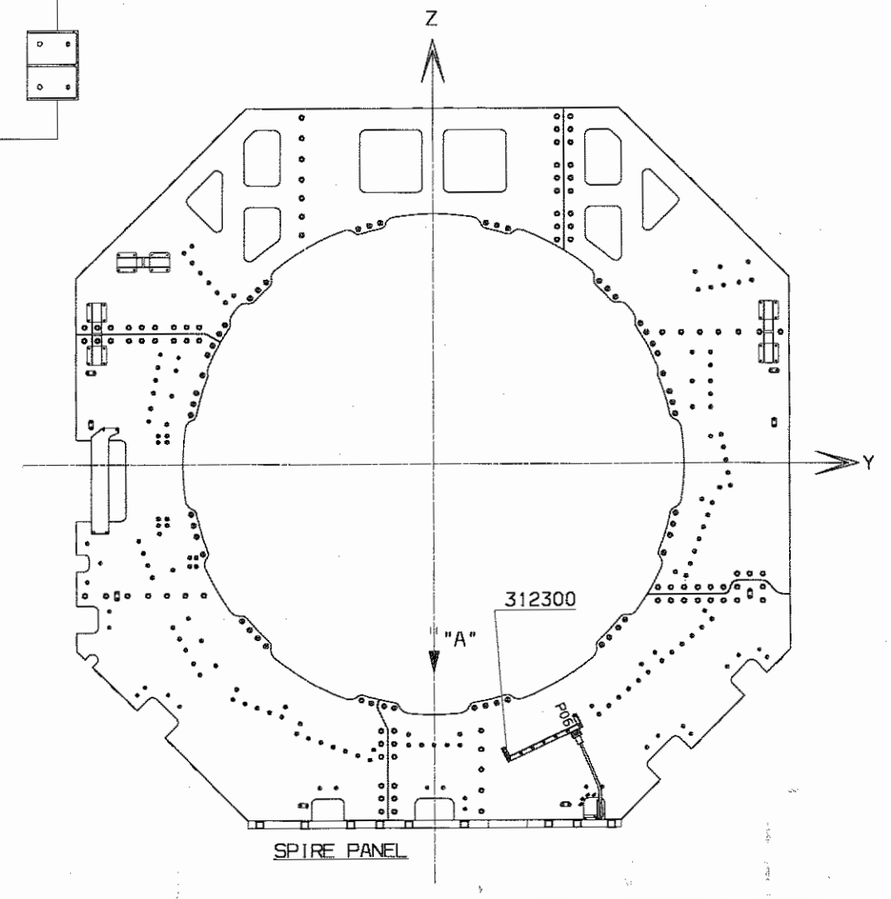
ROTATED

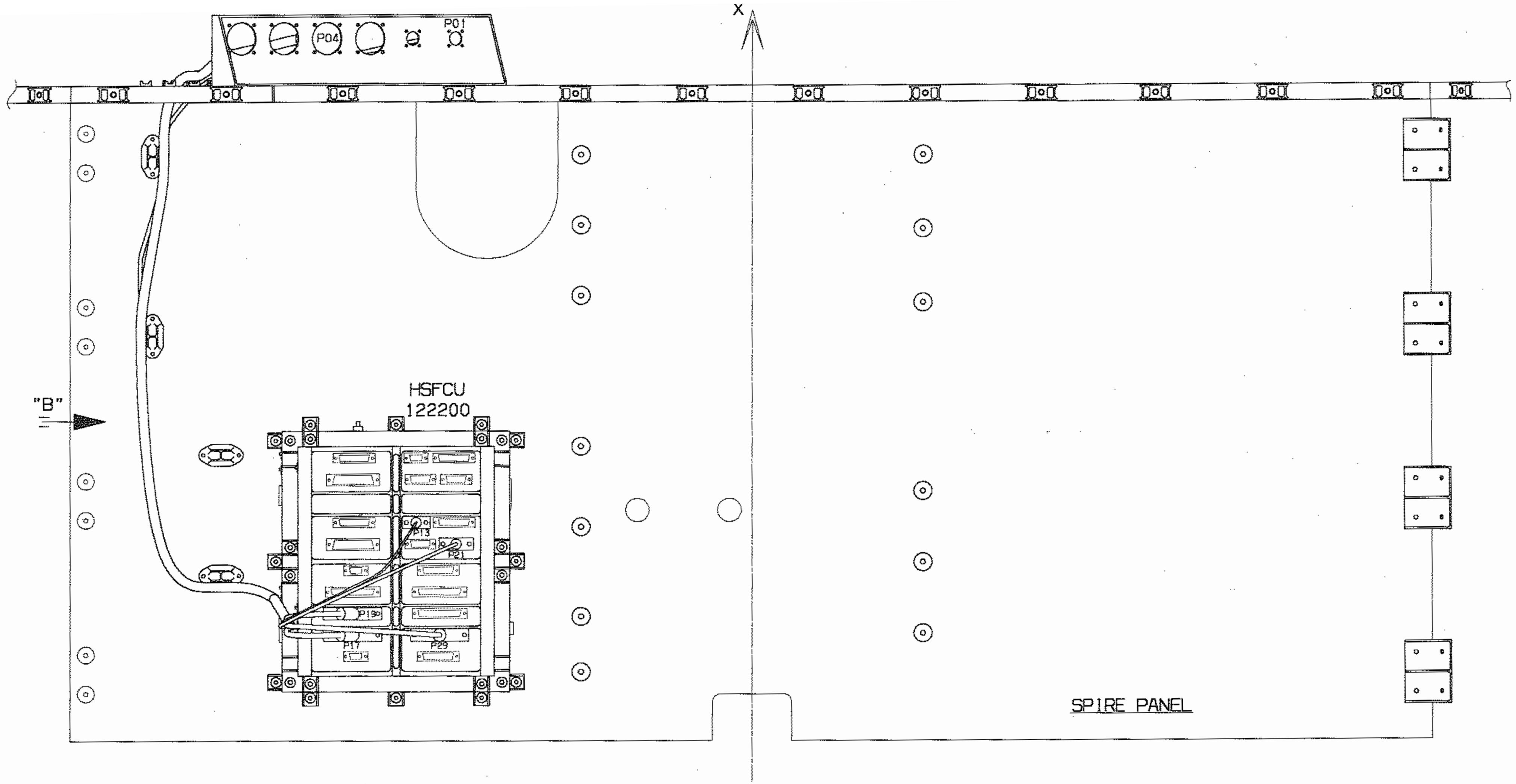


VIEW FROM "B"
ROTATED



EADS CASA ESPACIO	PROTECCION SUPERFICIAL: DIN 13001	RUGOSIDAD MEDIA: CASA 15053 o 15056	
ESTE DOCUMENTO ES PROPIEDAD DE C.A.S.A. NO DEBERA REPRODUCIRSE SIN AUTORIZACION		TOLERANCIA GENERAL DE FABRICACION DIN 7168	FINA MEDIA BASTA
MARCAR SEGUN CASA 30004	DISEÑO REALIZADO POR ORDENADOR NO ALTERAR MANUALMENTE	TOLERANCIA DE FORMA Y POSICION ISO 1101-1983	
ESCALA 1:10 1:2,5 1:2	DESIGNACION: HERSCHEL CRYO HARNESS SVM INT ROUTING (SIH-SS-10)		
INGENIERIA / MEMO: CALCULADO – VERIFICADO –	PROYECTADO: JAM DIBUJADO: JAM	Nº: HP200CB2310P00	HOJA 01

Annex6 -11-



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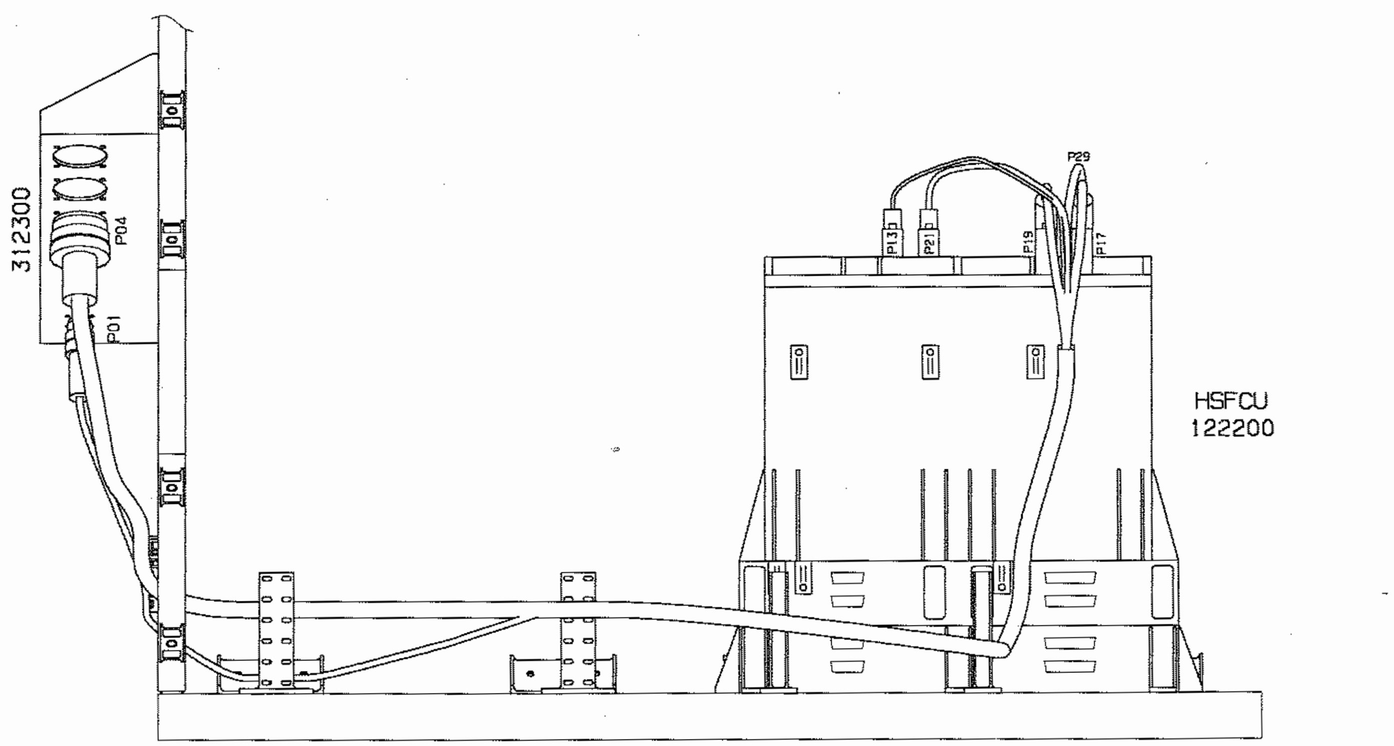

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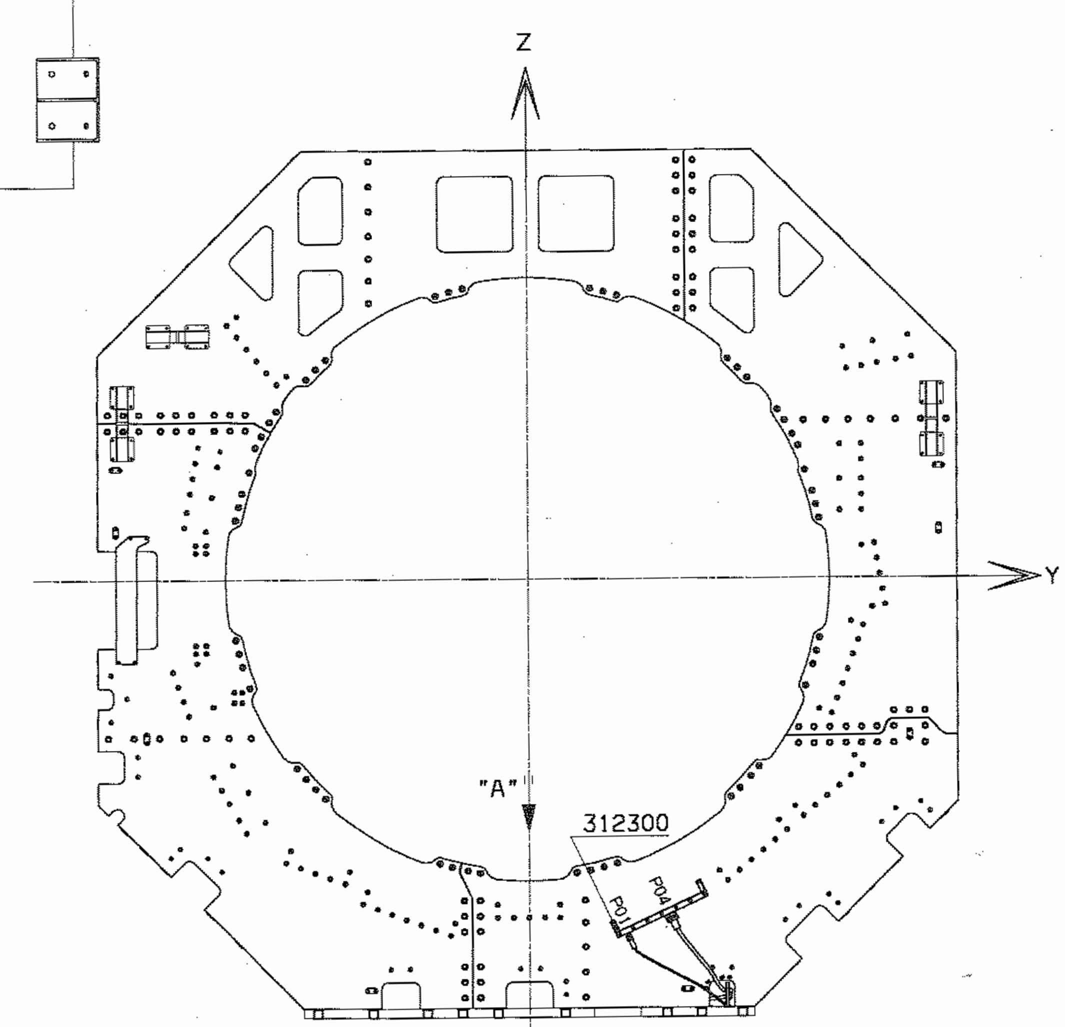

SPIRE PANEL

EADS CASA ESPACIO

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PROTECCION SUPERFICIAL: CAN 13001

RUGOSIDAD MEDIA: CASA 16053 o 16055

TOLERANCIA GENERAL DE FABRICACION DIN 7168

MARCAR SEGUN CASA 60004

DISEÑO REALIZADO POR ORDENADOR NO ALTERAR MANUALMENTE

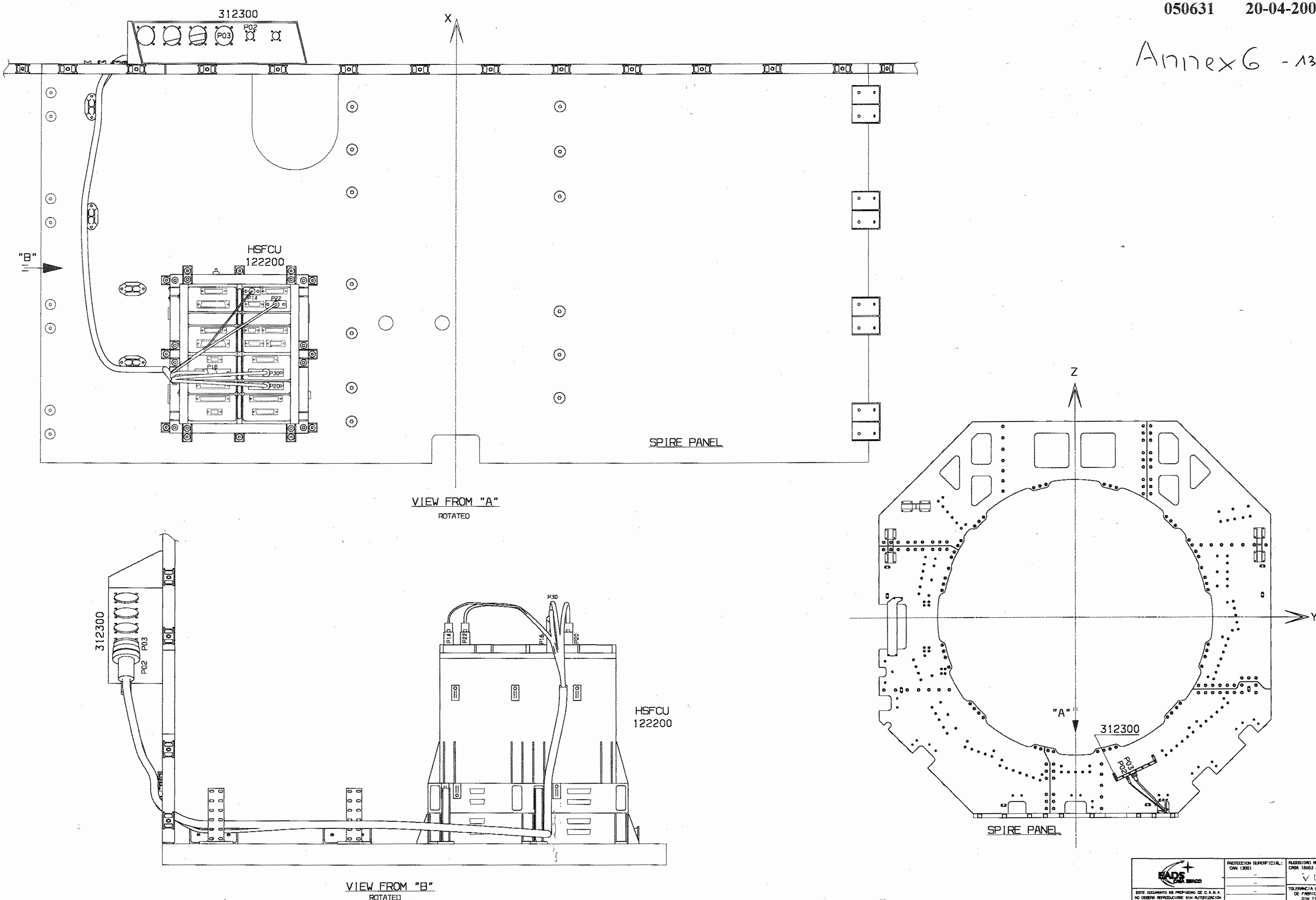
TOLERANCIA DE FORMA Y POSICION ISO 1101-1983

ESCALA 1:10 1:2,5 1:2

DESIGNACION: HERSCHEL CRYO HARNESS SVM INT ROUTING (SIH-SS-11)

INGENIERIA	CALCULADO	VERIFICADO	PROYECTADO	DIBUJADO	Nº	HOJA
MEND	-	-	JAM	JAM	HP200CB2311P00	01

Annex 6 -13-



EADS CASA ESPACIO

ESTE DOCUMENTO ES PROPIEDAD DE C.A.S.A. NO DEBERA REPRODUCIRSE SIN AUTORIZACION

PROTECCION SUPERFICIAL: CAN 13001

RUGOSIDAD MEDIA: CASA 15063 a 15065

TOLERANCIA GENERAL DE FABRICACION DIN 7168

MARCAR SEGUN: CASA 80004

DISEÑO REALIZADO POR ORDENADOR NO ALTERAR MANUALMENTE

TOLERANCIA DE FORMA Y POSICION ISO 1101-1983

ESCALA 1:10 1:2,5 1:2

DESIGNACION: HERSCHEL CRYO HARNESS SVM INT ROUTING (SIH-SS-13)

INGENIERIA	CALCULADO	VERIFICADO	PROYECTADO	DIBUJADO	Nº	HOJA
MEND	-	-	JAM	JAM	HP200CB2313P00	01

K J I H G F E D C B A

HP-2-ASED-MN-1148 Annex 7-1

Monday July 4 2005 10:52 AM

Company	Project Name	NCR-No: HP-151432-CASA-NC-1153
CASA	HERSCHEL-PLANCK	Related internal NCR-No:
		Critical Item:Yes [X] No [ ] Revision 0
		Page 1 of 2

Nonconformance Report

NCR **Title** Interconnection between inner&outer oversh at SIH-SS-01&03

NC Item **Identification** SIH SVM Internal Harness

Next Higher Assembly Scientific instrument Harness

Drawing No | Sr No.

Procedure No HP-2-ASED-IC-0016 Iss 2.0

Supplier | Purchase Order

Subsystem | Model EQM

NC Observation
Date: 13-MAY-05 Location: EADS CASA | NC Detected During Manufact

Description of Nonconformance — Requirements Violated

There is a short circuit between inner and outer overshield at EQM SVM SPIRE bundles 1 and 3. The inner
overshield (alumium) is connected to FCR pins. The outer overshield (aluminium)is connected to the connector
backshell (G1).The shields of some shielded heater cables is connected from FCR pins to the connector chassis, therefore the inner and outer aluminium overshields are in contact.
This fact occurs at the following connections (according to wiring list HP-2-ASED-IC-0016):
SPIRE Bundle 01:
From 312200 P006 pin 22 To 122300 P031 G1
From 312200 P006 pin 39 To 122300 P032 G1

SPIRE Bundle 03:
From 312100 P004 pin 105 To 122300 P029 G1
From 312100 P004 pin 114 To 122300 P029 G1
From 312100 P004 pin 005 To 122300 P030 G1
From 312100 P004 pin 065 To 122300 P030 G1

Initiator: Date, Name and Signature 02-JUN-05 E. Fernandez

Internal NRB Dispositions

This contact is removed in the following way:
The wire shields are disconnected from the connector backshell(G1) and it is connected to a terminal. This terminal can be connected/disconnected to the conector backshell in order to have or not to have contact between inner and outer overshields and BS ground.
Solution proposed, already discussed with SPIRE(27.05.05) Mr. D. Griffin and performed and performed on EQM SIH H/W accordingly.

Ref. to MoMs HP-2-ASED-MN-0974

Classification:
Major [X] **Minor** [ ]

Customer Notification
02-JUN-05

Cause of NC Ref to Failure Report	Corrective/Preventative Actions	Verification

	PA		
Date:	02-JUN-05	02-JUN-05	
Name:	E.FERNANDEZ	J. LANG	
Signature:			

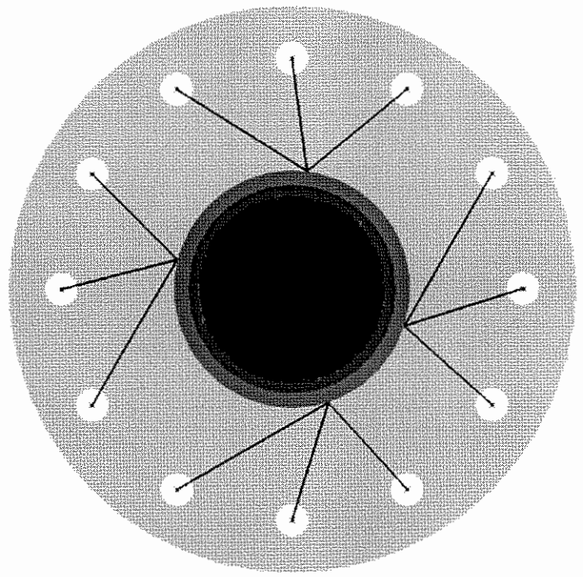
Monday July 4 2005 10:52 AM

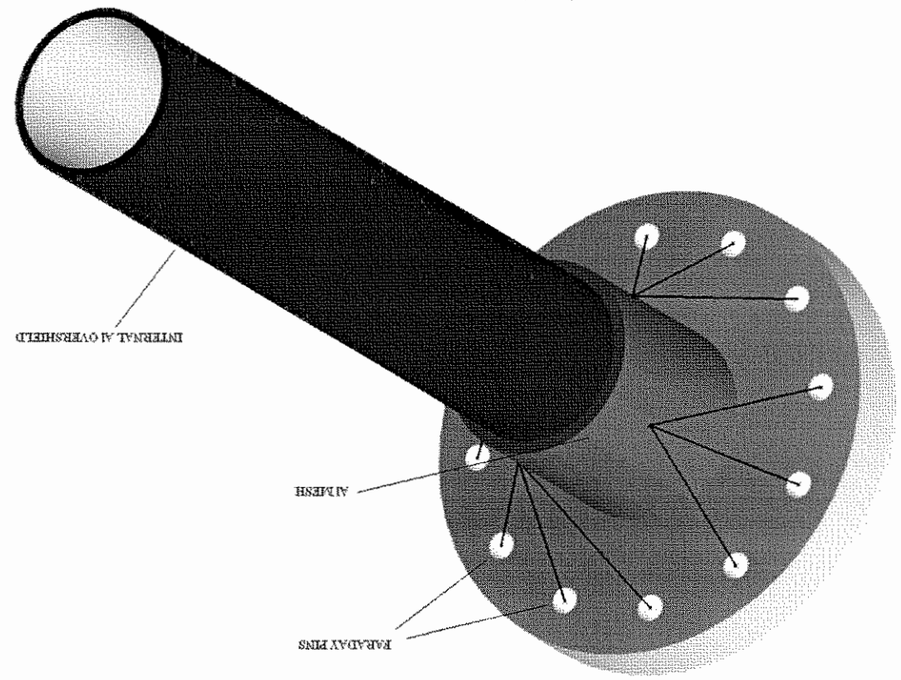
Company	Project Name	NCR-No: HP-151432-CASA-NC-1153
CASA	HERSCHEL-PLANCK	Related internal NCR-No:
		Critical Item: Yes [X] No [ ] Revision 0
		Page 2 of 2

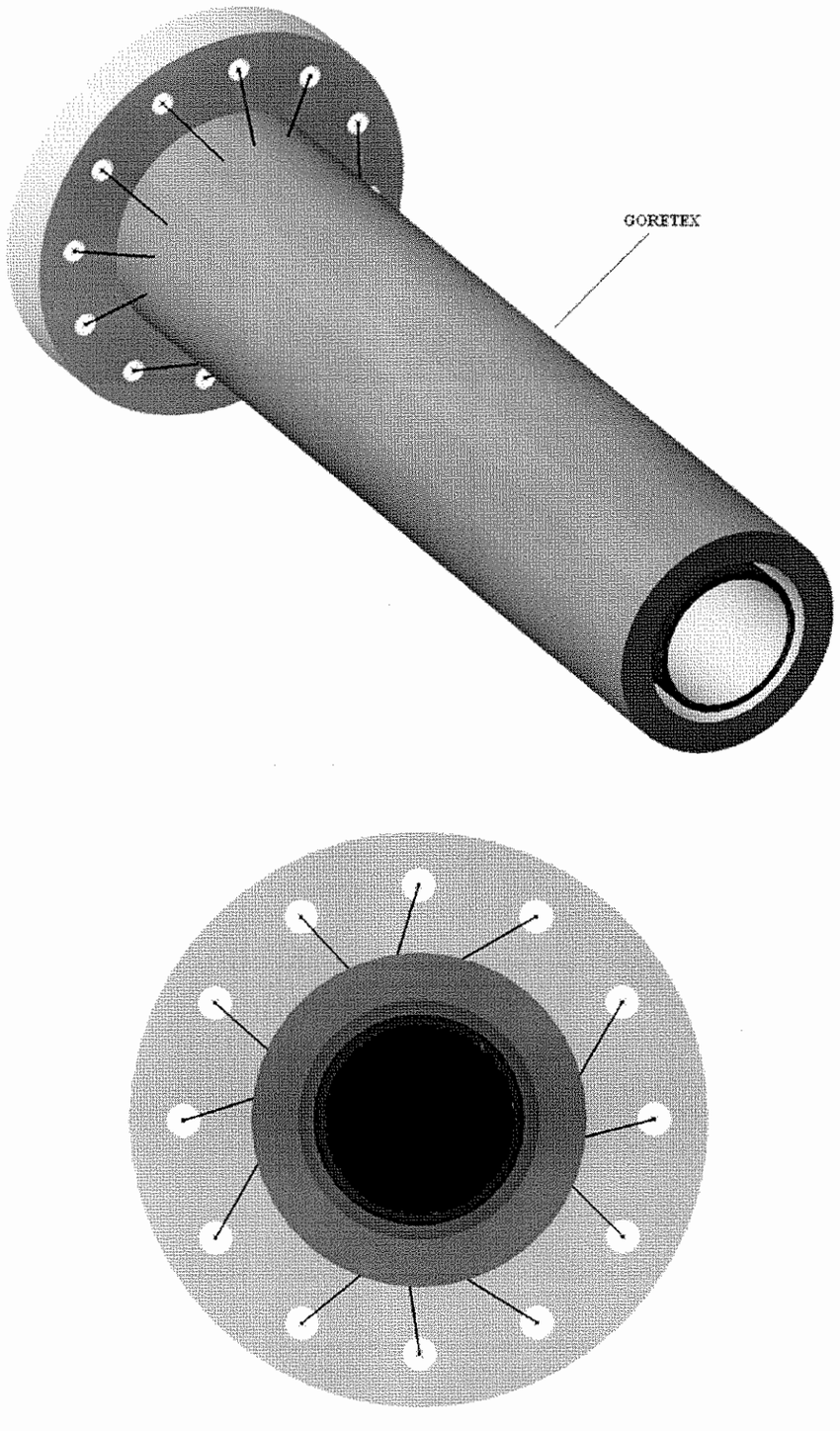
Nonconformance Report - Continuation Sheet -

NCR/NRB Attachments

	Description	Filename	Last Updated
1	Inner&outer overshield interconnection	Annex1_NC_1153.pdf	27-JUN-05 11:26:23



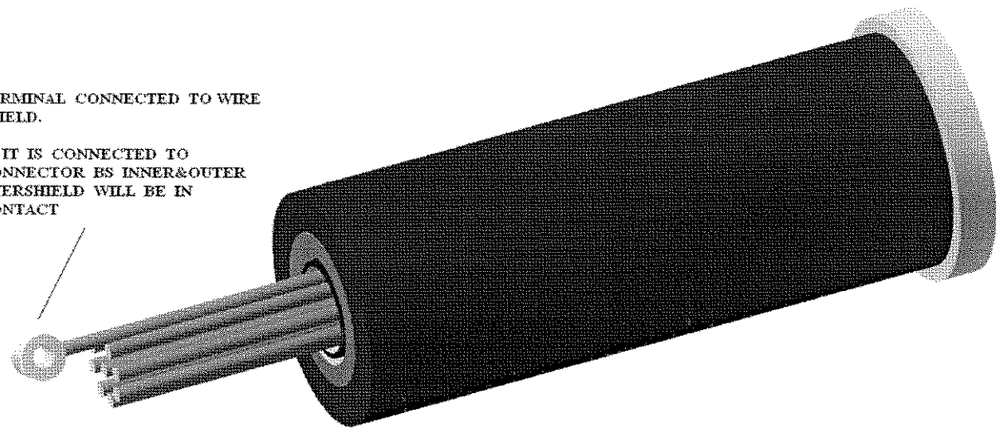

INTERNAL Al OVERSHIELD
Al MESH
FARADAY PINS


GORETEX

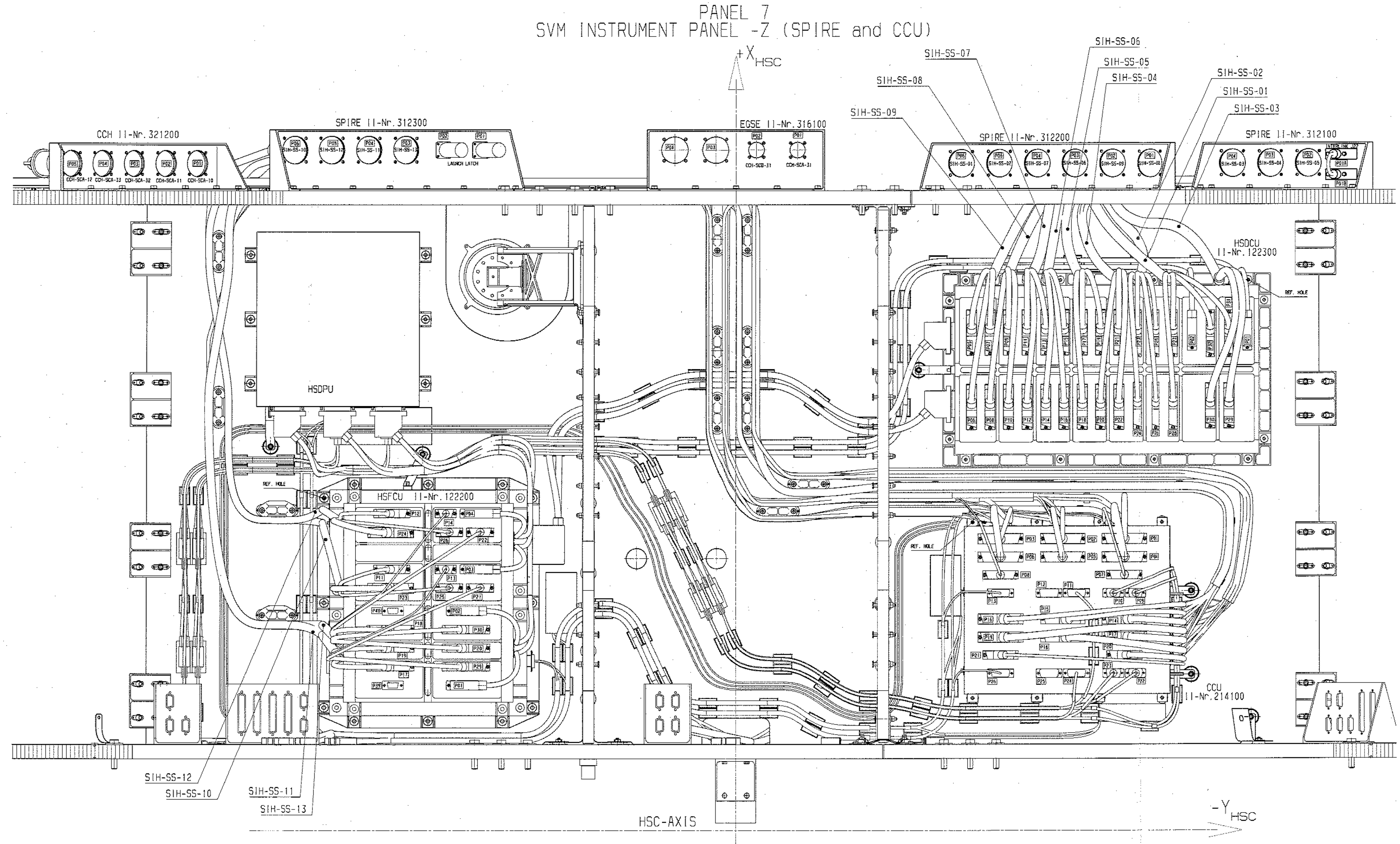

EXTERNAL Al OVERSHIELD

TERMINAL CONNECTED TO WIRE SHIELD.

IF IT IS CONNECTED TO CONNECTOR BS INNER&OUTER OVERSHIELD WILL BE IN CONTACT



Annex 8



FREIGABE:	FESTIGKEIT:	VERTEILER:	DATUM:
HP-2-ASED-ID-0083-04-0B		CK-121430	
FREIGABE AUSGABE:		UM:	
	ZUL. ABW.:	OBERFL.:	MASSTAB 1:2
		WERKSTOFF:	GEW.:
B 14.11.05 Fehringer	Bearb. 22.06.04 Fehr.	Herschel PFM CRYOSTAT HARNESS SVM INTERNAL CCH & SIH	
A 22.06.04 Fehringer	EADS Astrium GmbH Friedrichshafen	2547-121430-300-04-0B	BLATT 4 / 5 BL
AUSG. AEND. NR. DATUM NAME	URSPR.:	ERS.F.:	ERS.D.: