

CONF_grating_SFTheII_OBS
 File: H_COP_PAC_G002.xls
 Author: R. Biggins



Procedure Summary

Objectives

The objective of this procedure is to home the grating mechanism

- Configure grating
- Switch on and enable grating controller
- Home grating mechanism
- Verify grating position

Based on the procedure:
 CONF_grating_SFTheII_OBS_28_07_2008_01

Summary of Constraints

This procedure should be executed as part of the Short Functional Test (HeII conditions)

RT Science must be enabled to receive the Diagnostic HK packets

Spacecraft Configuration

Start of Procedure

PACS is in NO_PRIME mode

- PACS is generating Spectroscopy HK
- PACS is generating Diagnostic HK

End of Procedure

PACS is in NO_PRIME mode

- PACS is generating Spectroscopy HK
- PACS is generating Diagnostic HK

Reference File(s)

Input Command Sequences

Output Command Sequences

HCPG002

Referenced Displays

ANDs	GRDs	SLDs
ZAZ98999		
PA016420		

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
24/07/08	1	1	Created	R. Biggins	

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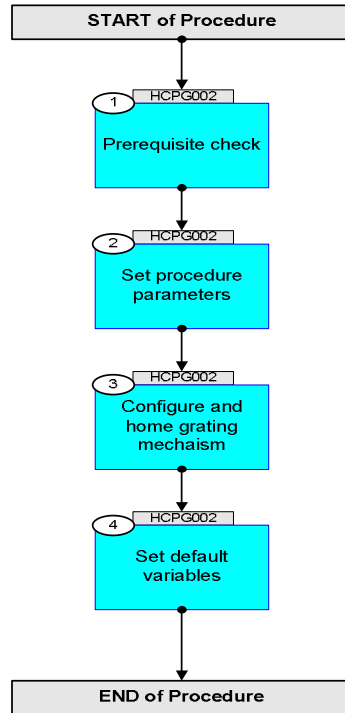


10/10/08		2	Updates due to new import files (version 2) <input type="checkbox"/> - Initial OBSID value updated <input type="checkbox"/> - TC parameters updated <input type="checkbox"/> - DMC_WRT_GRAT_CONF_FILTER TCs added	R. Biggins	
13/11/08	2	3	Updates due to initial testing <input type="checkbox"/> - New step (1) added for prerequisite check <input type="checkbox"/> - Initial OBSID value changed to FP	R. Biggins	
02/04/09	2.3	4	Final updates before flight <input type="checkbox"/> - Summary updated <input type="checkbox"/> - TC flags updated	R. Biggins	

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Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		TC Control Flags : GBM IL DSE --Y -- -- Subsch. ID : 90 Det. descr. : WRITE THE PARAMETERS TO CONFIGURE THE GRATING SERVO LOOP		
	ET=+00.00.00 UT=+00.00.00	Execute Telecommand DMC_WRT_GRAT_CONF_FILET Command Parameter(s) : DMC_4_BYTES_WORDS_DATA PP067420 DMC_4_BYTES_WORDS_DATA PP067420 DMC_4_BYTES_WORDS_DATA PP067420 DMC_4_BYTES_WORDS_DATA PP067420 DMC_4_BYTES_WORDS_DATA PP067420 DMC_CHECKSUM PP066420 Subsch. ID : 90 Det. descr. : WRITE THE PARAMETERS OF THE GRATING CONTROLLER FILTER	PC378420	
	ET=+00.00.01 UT=+00.00.01	DMC_WRT_GRAT_INDUC_AMPL DMC_WRT_GRAT_INDUC_AMPL Command Parameter(s) : DMC_4_BYTES_WORDS_DATA PP067420 DMC_CHECKSUM PP066420 Subsch. ID : 90 Det. descr. : WRITE THE AMPLITUDE OF THE INDUCTOSYN EXCITATION SIGNAL	PC203420	
	ET=+00.00.01 UT=+00.00.01	DMC_WRT_GRAT_HALLOFFSET DMC_WRT_GRAT_HALLOFFSET Command Parameter(s) : DMC_4_BYTES_WORDS_DATA PP067420 DMC_CHECKSUM PP066420 Subsch. ID : 90 Det. descr. : WRITE THE OFFSET OF THE HALL SENSORS OF THE GRATING	PC368420	
	ET=+00.00.01 UT=+00.00.01	DMC_WRT_GRAT_RANGE DMC_WRT_GRAT_RANGE Command Parameter(s) : DMC_4_BYTES_WORDS_DATA PP067420 DMC_CHECKSUM PP066420 Subsch. ID : 90 Det. descr. : WRITE THE NUMBER OF ENCODER STEPS OF THE HARDSTOPS	PC204420	
	ET=+00.03.01 UT=+00.03.01	DMC_SWON_GRAT_CONT DMC_SWON_GRAT_CONT Subsch. ID : 90 Det. descr. : SWITCH ON GRATING CONTROLLER	PC108420	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	DMC_ENABLE_GRAT_CONT DMC_ENABLE_GRAT_CONT Subsch. ID : 90 Det. descr. : ENABLE GRATING CONTROLLER	PC110420	
	ET=+00.00.01 UT=+00.00.01	DMC_HOME_GRAT DMC_HOME_GRAT Command Parameter(s) : HOMING_MODE PP077420 Subsch. ID : 90 Det. descr. : MOVE GRATING TO THE HOME POSITION	PC114420 NEGATIVE	
	ET=+00.01.10 UT=+00.01.10	DMC_WRT_GRAT_CONF_PAR DMC_WRT_GRAT_CONF_PAR Command Parameter(s) : DMC_4_BYTES_WORDS_DATA PP067420 4E2 <hex> DMC_4_BYTES_WORDS_DATA PP067420 445C <hex> DMC_4_BYTES_WORDS_DATA PP067420 A <hex> DMC_4_BYTES_WORDS_DATA PP067420 0 <hex> DMC_4_BYTES_WORDS_DATA PP067420 3 <hex> DMC_4_BYTES_WORDS_DATA PP067420 10E4311 <hex> DMC_4_BYTES_WORDS_DATA PP067420 452F <hex> DMC_4_BYTES_WORDS_DATA PP067420 579 <hex> DMC_4_BYTES_WORDS_DATA PP067420 5B06 <hex> DMC_CHECKSUM PP066420 603C <hex> Subsch. ID : 90 Det. descr. : WRITE THE PARAMETERS TO CONFIGURE THE GRATING SERVO LOOP	PC162420	
	ET=+00.00.00 UT=+00.00.00	Execute Telecommand DMC_WRT_GRAT_CONF_FILTER Command Parameter(s) : DMC_4_BYTES_WORDS_DATA PP067420 F4240 <hex> DMC_4_BYTES_WORDS_DATA PP067420 0 <hex> DMC_4_BYTES_WORDS_DATA PP067420 0 <hex> DMC_4_BYTES_WORDS_DATA PP067420 0 <hex> DMC_4_BYTES_WORDS_DATA PP067420 0 <hex> DMC_CHECKSUM PP066420 2F41 <hex> Subsch. ID : 90 Det. descr. : WRITE THE PARAMETERS OF THE GRATING CONTROLLER FILTER	PC378420	
		Verify Telemetry DM_GRAT_CUR_POS PM054420	= 500000 <dec>	AND=PA016420
		Verify Telemetry DM_GRAT_SETPOIN PM055420	= 500000 <dec>	AND=PA016420
		Verify Telemetry DM_GRAT_TARGET PM056420	= 500000 <dec>	AND=PA016420
4		Set default variables		Next Step: END

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.00 UT=+00.00.00	DMC_SET_OBSID Command Parameter(s) : OBSERVATION_ID PP069420 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 90 Det. descr. : SET OBSID IN DMC	PC078420 00000000 <hex>	
	ET=+00.00.00 UT=+00.00.00	DMC_SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID PP070420 Subsch. ID : 90 Det. descr. : SET BBID IN DMC	PC079420 40000000 <hex>	
		Verify Telemetry DM_OBSID PM028420	= 00000000 <hex>	AND=ZAZ98999
		Verify Telemetry DM_BBID PM029420	= 40000000 <hex>	AND=ZAZ98999
End of Procedure				