

CONF_grating_IST_OBS
 File: H_COP_PAC_GX10.xls
 Author: R. Biggins



Procedure Summary

Objectives

The objective of this procedure is to modify the grating parameters for:

- The amplitude of the inductosyn excitation signal
- The Hall sensory offset
- The number of encoder steps between grating hardstops

Based on procedure:
 CONF_grating_IST_OBS (v1)

Summary of Constraints

This procedure should be executed on PACS request only

Spacecraft Configuration

Start of Procedure

PACS in NO_PRIME (SAFE) mode

End of Procedure

PACS in NO_PRIME (SAFE) mode

Reference File(s)

Input Command Sequences

Output Command Sequences

HCPGX10

Referenced Displays

ANDs GRDs SLDs

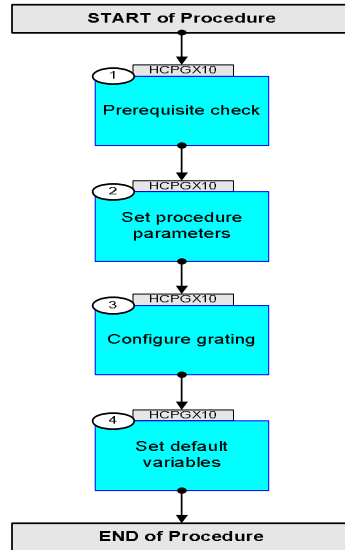
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
22/10/08	2	1	Created	R. Biggins	
15/04/09	2.3	2	Final updates before flight - Summary updated - TC flags updated - TM checks removed (not produced in SAFE mode)	R. Biggins	

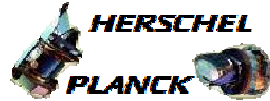
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Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
TC Seq. Name :HCPGX10 (Configure grating)				
TimeTag Type: B				
Sub Schedule ID:				
□				
1		Prerequisite check		Next Step: 2
		Verify that the HSC/ICC has supplied a valid OBSID value:		
		OBS_ID = 0xnnnn nnnn		
2		Set procedure parameters		Next Step: 3
	ET=+00.00.00 UT=+00.00.00	DMC_SET_OBSID Command Parameter(s) : OBSERVATION_ID PP069420 TC Control Flags : Subsch. ID : 90 Det. descr. : SET OBSID IN DMC	DMC_SET_OBSID OBS_ID GBM IL DSE --Y -- ---	PC078420 OBS_ID
3		Configure grating		Next Step: 4
	ET=+00.00.01 UT=+00.00.01	DMC_WRT_GRAT_CONF_PAR Command Parameter(s) : DMC_4_BYTES_WORDS_DATA PP067420 CB2 <hex> DMC_4_BYTES_WORDS_DATA PP067420 15F90 <hex> DMC_4_BYTES_WORDS_DATA PP067420 1C <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 62E8 <hex>	DMC_WRT_GRAT_CONF_PAR DMC_CHECKSUM	PC162420 CB2 <hex> 15F90 <hex> 1C <hex> 0 <hex> 3 <hex> 10E4311 <hex> 452F <hex> 579 <hex> 5B06 <hex> 62E8 <hex>
		Subsch. ID : 90 Det. descr. : WRITE THE PARAMETERS TO CONFIGURE THE GRATING SERVO LOOP		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.00 UT=+00.00.00	DMC_WRT_GRAT_CONF_FILT DMC_WRT_GRAT_CONF_FILT 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 F4240 <hex> 0 <hex> 0 <hex> 0 <hex> 0 <hex> 2F41 <hex>	
	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 960 <hex> 52FE <hex>	
	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 F3C <hex> 6321 <hex>	
	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 100000 <hex> C7A3 <hex>	
	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	
	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	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	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 CB2 <hex> DMC_4_BYTES_WORDS_DATA PP067420 15F90 <hex> DMC_4_BYTES_WORDS_DATA PP067420 1C <hex> DMC_4_BYTES_WORDS_DATA PP067420 0 <hex> DMC_4_BYTES_WORDS_DATA PP067420 C <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 9756 <hex> Subsch. ID : 90 Det. descr. : WRITE THE PARAMETERS TO CONFIGURE THE GRATING SERVO LOOP	PC162420	
	ET=+00.00.00 UT=+00.00.00	DMC_WRT_GRAT_CONF_FILTER 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	
4		Set default variables		Next Step: END
	ET=+00.00.01 UT=+00.00.01	DMC_SET_OBSID DMC_SET_OBSID Command Parameter(s) : OBSERVATION_ID PP069420 00000000 <hex> Subsch. ID : 90 Det. descr. : SET OBSID IN DMC	PC078420	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	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>	
End of Procedure				