

Start/Stop Decontamination heating function
File: H_CRP_SYS_DECM.xls
Author: E. Picallo



Procedure Summary

Objectives

This procedure describes the steps needed to switch ON or OFF the ASW function "Decontamination Heating".

It manages the decontamination heating of the mirrors.

Summary of Constraints

Default status of the function: "Stopped".

Even when the function is stopped, all telecommands are accepted, apart from the Stop Function TC(8,2,113). In particular the Modify Decontamination Heating Parameters TC(8,4,113,1) can be sent irrespectively of the status of the function.

Herschel decontamination function uses thermistors that are provided by the CCU. Therefore before start the decontamination function is required: CCU switch ON and CCU monitoring mode active.

Spacecraft Configuration

Start of Procedure

CDMU in default configuration, that is:

- PM A or B ON (nominally A)
- TM Encoder/OBT A or B active (nominally A)
- RM A and B enabled
- MM A and B ON

End of Procedure

CDMU in default configuration, that is:

- PM A or B ON (nominally A)
- TM Encoder/OBT A or B active (nominally A)
- RM A and B enabled
- MM A and B ON

Reference File(s)

Input Command Sequences

Output Command Sequences

HRYDECM1
HRYDECM2

Referenced Displays

ANDs GRDs SLDs
ZAZ9J999

Configuration Control Information

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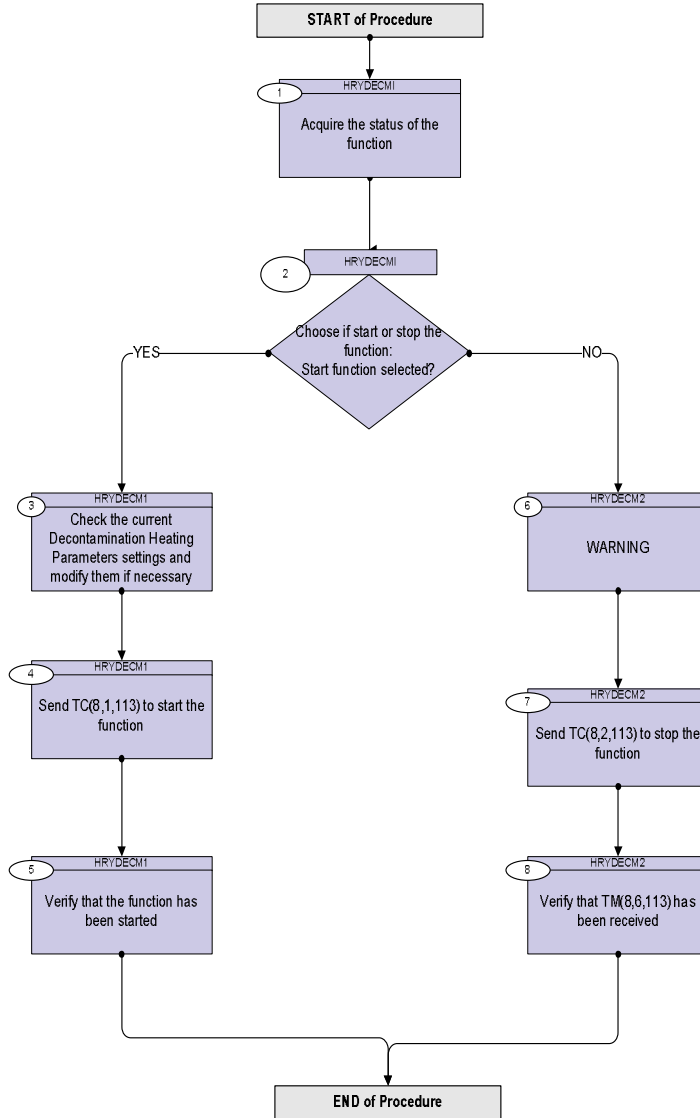


DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
23/02/09	2.1	1	Created	E. Picallo	
21/04/09	2.3	2	sequence name correction	E. Picallo	

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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 : HRYDECM1 (Start/Stop Dec Mgmt) Start/Stop decontamination Management function TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>				
1		Acquire the status of the function		Next Step: 2
		Verify Telemetry DhSts DEG17170		AND=ZAZ9J999
2		Choose if start or stop the function: Start function selected?		Next Step: YES 3 NO 6
		Warning: If the function is running sending the TC "Start Payload Management" will cause a TC Acceptance failure TM(1,2) "Function Already Started".		
		Warning: If the function is Stopped sending the TC "Stop Decontamination Heating" will cause a TC Acceptance failure TM(1,2) "Function Already Stopped".		
TC Seq. Name : HRYDECM1 (Start Decont Mgmt) TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>				
3		Check the current Decontamination Heating Parameters settings and modify them if necessary		Next Step: 4
		Execute Procedure: H_LEO_SYS_DECS Decontamination Heating Status Report		
4		Send TC(8,1,113) to start the function		Next Step: 5

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		<p>This will start the decontamination heating algorithm. It is therefore advisable to first check the current settings and change them if necessary.</p> <p>Herschel decontamination function uses thermistors that are provided by the CCU. Therefore requires CCU switch ON and CCU monitoring mode active.</p>		
		<p>Execute Telecommand</p> <p style="text-align: right;">StartDecontHeat</p> <p>TC Control Flags :</p> <p style="text-align: right;">GBM IL DSE --Y -- ---</p> <p>Subsch. ID : 10 Det. descr. : Start Decontamination Heating TC(8,1,113)</p>	DC13M170	
5		Verify that the function has been started		Next Step: END
		<p>Verify Telemetry</p> <p style="text-align: center;">DhSts DEG17170</p> <p style="text-align: center;">= Running</p>		AND=ZAZ9J999
<p>TC Seq. Name : HRYDECM2 (Stop Decont Mgmt)</p> <p>TimeTag Type: N Sub Schedule ID:</p> <p style="text-align: center;">□</p>				
6		WARNING		Next Step: 7
		<p>When the function is stopped, it still accepts all telecommands apart from the Stop Function TC.</p> <p>Stopping the function will result in switching OFF all the M1 and M2 heaters that the function currently manages .</p>		
7		Send TC(8,2,113) to stop the function		Next Step: 8
		Stop Decontamination Heating telecommand is used for switching off the function.		
		<p>Execute Telecommand</p> <p style="text-align: right;">StopDecontHeat</p> <p>TC Control Flags :</p> <p style="text-align: right;">GBM IL DSE --Y -- ---</p> <p>Subsch. ID : 10 Det. descr. : Stop Decontamination Heating TC(8,2,113)</p>	DC14M170	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
8		Verify that <i>TM(8,6,113)</i> has been received		Next Step: END
		Verify Telemetry DhSts DEG17170	= Stopped	AND=ZAZ9J999
End of Procedure				