

Switch OFF HCS of HPS9  
 File: H\_CRP\_TCS\_09H0.xls  
 Author: E. Picallo



## Procedure Summary

### Objectives

This procedure describes the steps needed to switch OFF a selected Heater Control Switch (HCS) of HPS9.

The location units of the HCSs belonging to HPS9 are the following:

- HCS1: Decontamination 8
- HCS2: Tank -Y
- HCS3: FCV C4A
- HCS4: FHLSU
- HCS5: STR 1 baffle
- HCS6: Tank +Y

Nominally the temperature control, and therefore the HCSs ON/OFF commanding, is managed by the CDMU ASW and it is driven through the Thermal Control Table (TCT).

### Summary of Constraints

The selected HCS is switched OFF through ASW TC(8,4,112,3); thus the status of the ASW function "PCDU Management" has to be "running".

### Spacecraft Configuration

#### Start of Procedure

CDMU in default configuration;  
 HPS9 ON;  
 HCS ON.

#### End of Procedure

CDMU in default configuration;  
 HPS9 ON;  
 HCS switched OFF.

### Reference File(s)

#### Input Command Sequences

#### Output Command Sequences

HRT09H0

### Referenced Displays

ANDs      GRDs      SLDs  
 WAHT2584

### Configuration Control Information

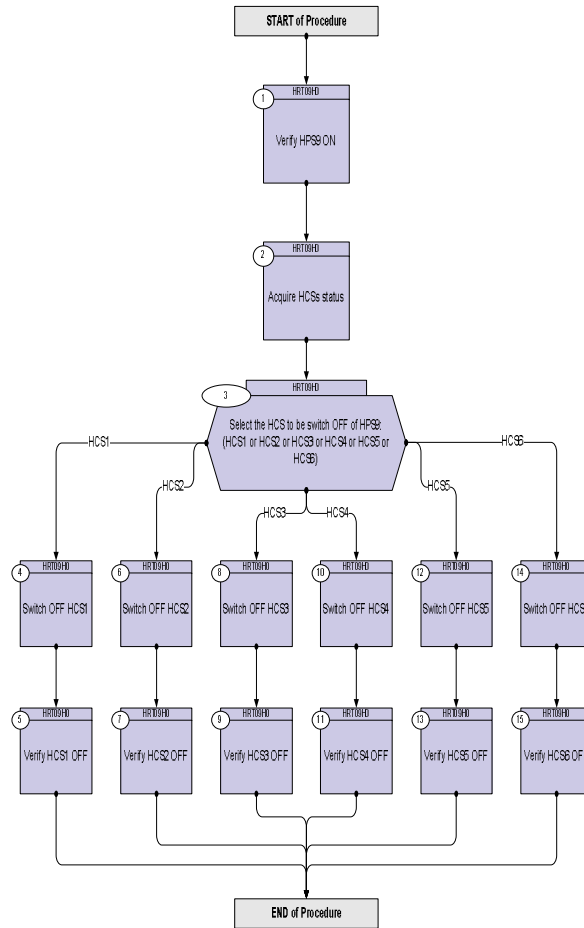
DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
16/02/09	2.1	1	Created	E. Picallo	

Status : Version 1 - Unchanged  
 Last Checkin: 16/02/09

Switch OFF HCS of HPS9  
 File: H\_CRP\_TCS\_09H0.xls  
 Author: E. Picallo



## Procedure Flowchart Overview



Switch OFF HCS of HPS9  
 File: H\_CRP\_TCS\_09H0.xls  
 Author: E. Picallo



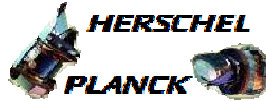
Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
<b>Beginning of Procedure</b>				
TC Seq. Name :HRT09H0 (Switch OFF HCS HPS9)				
TimeTag Type: N Sub Schedule ID:  □				
1		Verify HPS9 ON		Next Step: 2
		Verify Telemetry GRP9_HPS_STS WM52H565 = ON		AND=WAHT2584
2		Acquire HCSs status		Next Step: 3
		Verify Telemetry Decon8_G9H1_S WM51G565		AND=WAHT2584
		Verify Telemetry tank-Y_G9H2_S WM51H565		AND=WAHT2584
		Verify Telemetry FcvC4A_G9H3_S WM51J565		AND=WAHT2584
		Verify Telemetry FHLSU_G9H4_S WM51K565		AND=WAHT2584
		Verify Telemetry STR1baffG9H5_S WM51L565		AND=WAHT2584
		Verify Telemetry tank+Y_G9H6_S WM51M565		AND=WAHT2584
3		Select the HCS to be switch OFF of HPS9: (HCS1 or HCS2 or HCS3 or HCS4 or HCS5 or HCS6)		Next Step: HCS1 4 HCS2 6 HCS3 8 HCS4 10 HCS5 12 HCS6 14
4		Switch OFF HCS1		Next Step: 5
		Execute Telecommand SwOff_Decont_8_G9H1  TC Control Flags : GBM IL DSE --Y -- --  Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,3) switch Off Decontamination 8 Group 9 HCS 1	DCD93170	

Switch OFF HCS of HPS9  
 File: H\_CRP\_TCS\_09H0.xls  
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
5		Verify HCS1 OFF		Next Step: END
		Verify Telemetry Decon8_G9H1_S WM51G565	= OFF	AND=WAHT2584
6		Switch OFF HCS2		Next Step: 7
		Execute Telecommand SwOff_tank-Y_G9H2 TC Control Flags : Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,3) switch Off Tank -Y Group 9 HCS 2	DCD94170	
			GBM IL DSE --Y -- ---	
7		Verify HCS2 OFF		Next Step: END
		Verify Telemetry tank-Y_G9H2_S WM51H565	= OFF	AND=WAHT2584
8		Switch OFF HCS3		Next Step: 9
		Execute Telecommand SwOff_FCV_C4A_G9H3 TC Control Flags : Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,3) switch Off FCV C4A Group 9 HCS 3	DCD95170	
			GBM IL DSE --Y -- ---	
9		Verify HCS3 OFF		Next Step: END
		Verify Telemetry FcvC4A_G9H3_S WM51J565	= OFF	AND=WAHT2584
10		Switch OFF HCS4		Next Step: 11
		Execute Telecommand SwOff_FHLSU_G9H4 TC Control Flags : Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,3) switch Off FHLSU Group 9 HCS 4	DCD96170	
			GBM IL DSE --Y -- ---	

Switch OFF HCS of HPS9  
 File: H\_CRP\_TCS\_09H0.xls  
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
11		Verify HCS4 OFF		Next Step: END
		Verify Telemetry FHL SU_G9H4_S          WM51K565	= OFF	AND=WAHT2584
12		Switch OFF HCS5		Next Step: 13
		Execute Telecommand SwOff_STR1baffle_G9H5  TC Control Flags : GBM IL DSE --Y -- --  Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,3) switch Off STR1 baffle Group 9 HCS 5	DCD97170	
13		Verify HCS5 OFF		Next Step: END
		Verify Telemetry STR1baffG9H5_S          WM51L565	= OFF	AND=WAHT2584
14		Switch OFF HCS6		Next Step: 15
		Execute Telecommand SwOff_tank+Y_G9H6  TC Control Flags : GBM IL DSE --Y -- --  Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,3) switch Off Tank +Y Group 9 HCS 6	DCD98170	
15		Verify HCS6 OFF		Next Step: END
		Verify Telemetry tank+Y_G9H6_S          WM51M565	= OFF	AND=WAHT2584
<b>End of Procedure</b>				