

Switch ON HCS of HPS5  
 File: H\_CRP\_TCS\_05H1.xls  
 Author: E. Picallo



## Procedure Summary

### Objectives

This procedure describes the steps needed to switch ON a selected Heater Control Switch (HCS) of HPS5.

The location units of the HCSs belonging to HPS5 are the following:

- HCS1: CRS 2
- HCS2: FHHRH
- HCS3: PHWEV/PHICU
- HCS4: FCV C3B
- HCS5: RCS piping
- HCS6: PT/LF/LV1/LV2

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 ON through ASW TC(8,4,112,5); thus the status of the ASW function "PCDU Management" has to be "running".

### Spacecraft Configuration

#### Start of Procedure

CDMU in default configuration;  
 HPS5 ON;  
 HCS OFF.

#### End of Procedure

CDMU in default configuration;  
 HPS5 ON;  
 HCS switched ON.

### Reference File(s)

#### Input Command Sequences

#### Output Command Sequences

HRT05H1

### Referenced Displays

ANDs      GRDs      SLDs  
 WAHT1584

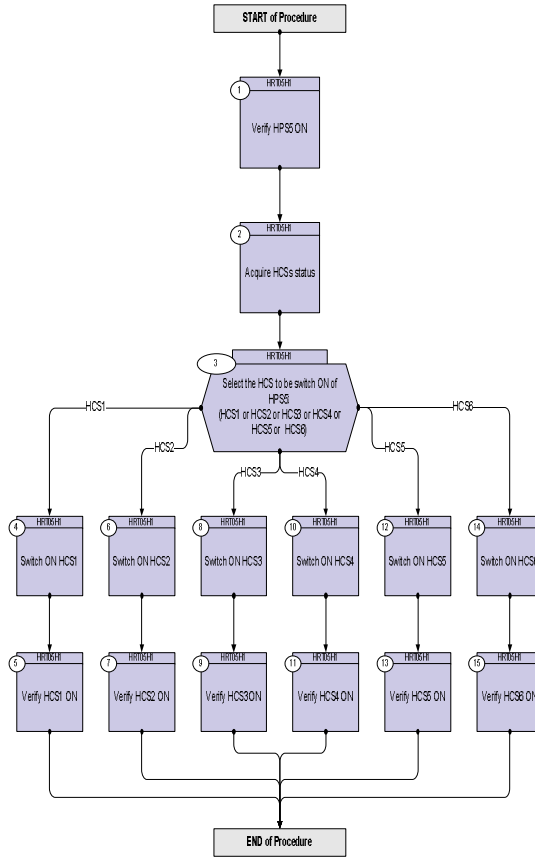
### Configuration Control Information

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

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## Procedure Flowchart Overview



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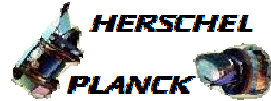
Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
<b>Beginning of Procedure</b>				
TC Seq. Name : HRT05H1 (Switch ON HCS HPS5)  TimeTag Type: N Sub Schedule ID:  <input type="checkbox"/>				
1		Verify HPS5 ON		Next Step: 2
		Verify Telemetry GRP5_HPS_STS WM32H565 = ON		AND=WAHT1584
2		Acquire HCSs status		Next Step: 3
		Verify Telemetry CRS2_G5H1_S WM31G565		AND=WAHT1584
		Verify Telemetry FHHRH_G5H2_S WM31H565		AND=WAHT1584
		Verify Telemetry FhWevIcuG5H3_S WM31J565		AND=WAHT1584
		Verify Telemetry Fcvc3B_G5H4_S WM31K565		AND=WAHT1584
		Verify Telemetry RCSpipG5H5_S WM31L565		AND=WAHT1584
		Verify Telemetry PtLflv12_G5H6_S WM31M565		AND=WAHT1584
3		Select the HCS to be switch ON of HPS5: (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 ON HCS1		Next Step: 5
		Execute Telecommand SwOn_CRS2_G5H1  TC Control Flags : GBM IL DSE --Y -- --  Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On CRS2 Group 5 HCS 1	DCC43170	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
5		Verify HCS1 ON		Next Step: END
		Verify Telemetry CRS2_G5H1_S WM31G565	= ON	AND=WAHT1584
6		Switch ON HCS2		Next Step: 7
		Execute Telecommand SwOn_FHHRH_G5H2 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On FHHRH Group 5 HCS 2	DCC44170	
7		Verify HCS2 ON		Next Step: END
		Verify Telemetry FHHRH_G5H2_S WM31H565	= ON	AND=WAHT1584
8		Switch ON HCS3		Next Step: 9
		Execute Telecommand SwOn_FHWEV/FHICU_G5H3 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On FHWEV/FHICU Group 5 HCS 3	DCC45170	
9		Verify HCS3 ON		Next Step: END
		Verify Telemetry FhWevIcuG5H3_S WM31J565	= ON	AND=WAHT1584
10		Switch ON HCS4		Next Step: 11
		Execute Telecommand SwOn_FCV_C3B_G5H4 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On FCV C3B Group 5 HCS 4	DCC46170	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
11		Verify HCS4 ON		Next Step: END
		Verify Telemetry <b>FcvC3B_G5H4_S</b> <b>WM31K565</b>	= ON	AND=WAHT1584
12		Switch ON HCS5		Next Step: 13
		Execute Telecommand <b>SwOn_RCSpip_G5H5</b> TC Control Flags : Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On RCS piping Group 5 HCS 5 GBM IL DSE --Y -- ---	<b>DCC47170</b>	
13		Verify HCS5 ON		Next Step: END
		Verify Telemetry <b>RCSpipG5H5_S</b> <b>WM31L565</b>	= ON	AND=WAHT1584
14		Switch ON HCS6		Next Step: 15
		Execute Telecommand <b>SwOn_PTLFLV1_2_G5H6</b> TC Control Flags : Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On PT/LF/LV1/LV2 Group 5 HCS 6 GBM IL DSE --Y -- ---	<b>DCC48170</b>	
15		Verify HCS6 ON		Next Step: END
		Verify Telemetry <b>PtLFLv12_G5H6_S</b> <b>WM31M565</b>	= ON	AND=WAHT1584
<b>End of Procedure</b>				