

Switch ON HCS of HPS1
 File: H_CRP_TCS_01H1.xls
 Author: E. Picallo



Procedure Summary

Objectives

This procedure describes the steps needed to switch ON a selected Heater Control Switch (HCS) of HPS1.

The location unit of the HCSs belonging to HPS1 are the following:

- HCS1: Decontamination 1
- HCS2: XPND2
- HCS3: FCV A1B
- HCS4: FCV C2B
- HCS5: RCS piping
- HCS6: XPND1

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;
 HPS1 ON;
 HCS OFF.

End of Procedure

CDMU in default configuration;
 HPS1 ON;
 HCS switched ON.

Reference File(s)

Input Command Sequences

Output Command Sequences

HRT01H1

Referenced Displays

ANDs GRDs SLDs
 WAHT1584

Configuration Control Information

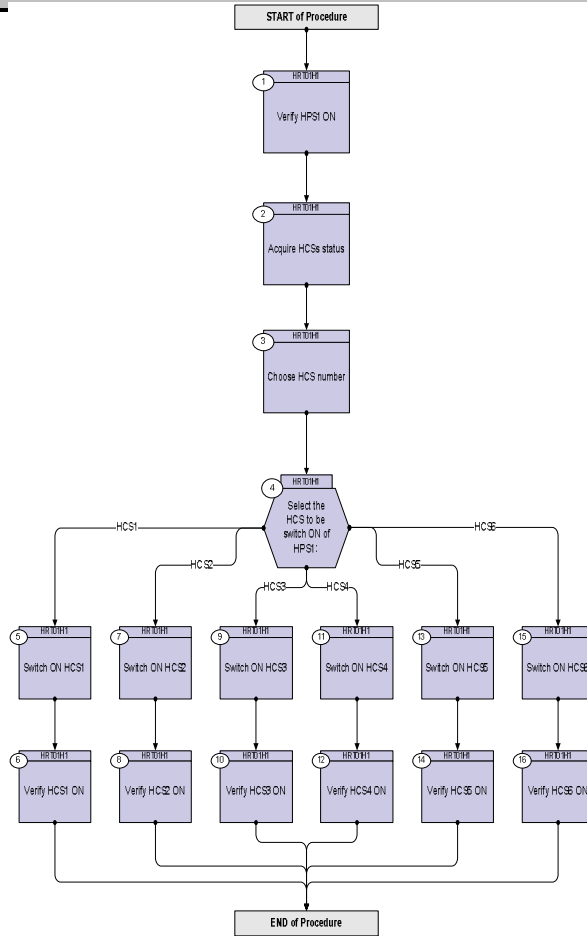
DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
16/02/09	2.1	1	Created	E. Picallo	

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

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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 :HRT01H1 (Switch ON HCS HPS01)				
TimeTag Type: N				
Sub Schedule ID:				
□				
1		Verify HPS1 ON		Next Step: 2
		Verify Telemetry GRP1_HPS_STS WM12G565	= ON	AND=WAHT1584
2		Acquire HCSs status		Next Step: 3
		Verify Telemetry Decon1_G1H1_S WM11A565		AND=WAHT1584
		Verify Telemetry Xpnd2_G1H2_S WM11B565		AND=WAHT1584
		Verify Telemetry FcvA1B_G1H3_S WM11C565		AND=WAHT1584
		Verify Telemetry FcvC2B_G1H4_S WM11D565		AND=WAHT1584
		Verify Telemetry RCSpipG1H5_S WM11E565		AND=WAHT1584
		Verify Telemetry Xpnd1_G1H6_S WM11F565		AND=WAHT1584
3		Choose HCS number		Next Step: 4
4		Select the HCS to be switch ON of HPS1:		Next Step: HCS1 5 HCS2 7 HCS3 9 HCS4 11 HCS5 13 HCS6 15
5		Switch ON HCS1		Next Step: 6

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand <p style="text-align: right;">SwOn_Decont_1_G1H1</p> TC Control Flags : <p style="text-align: right;">GBM IL DSE ---Y ---</p> Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On Decontamination 1 Group 1 HCS 1	DCC19170	
6		Verify HCS1 ON		Next Step: END
		Verify Telemetry <p style="text-align: center;">Decon1_G1H1_S WM11A565</p>	= ON	AND=WAHT1584
7		Switch ON HCS2		Next Step: 8
		Execute Telecommand <p style="text-align: right;">SwOn_XPND2_G1H2</p> TC Control Flags : <p style="text-align: right;">GBM IL DSE ---Y ---</p> Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On XPND2 Group 1 HCS 2	DCC20170	
8		Verify HCS2 ON		Next Step: END
		Verify Telemetry <p style="text-align: center;">Xpnd2_G1H2_S WM11B565</p>	= ON	AND=WAHT1584
9		Switch ON HCS3		Next Step: 10
		Execute Telecommand <p style="text-align: right;">SwOn_FCV_A1B_G1H3</p> TC Control Flags : <p style="text-align: right;">GBM IL DSE ---Y ---</p> Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On FCV A1B Group 1 HCS 3	DCC21170	
10		Verify HCS3 ON		Next Step: END
		Verify Telemetry <p style="text-align: center;">FcvA1B_G1H3_S WM11C565</p>	= ON	AND=WAHT1584

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
11		Switch ON HCS4		Next Step: 12
		Execute Telecommand <p style="text-align: right;">SwOn_FCV_C2B_G1H4</p> TC Control Flags : <p style="text-align: right;">GBM IL DSE --Y -- --</p> Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On FCV C2B Group 1 HCS 4	DCC22170	
12		Verify HCS4 ON		Next Step: END
		Verify Telemetry <p style="text-align: center;">FcvC2B_G1H4_S WM11D565</p> <p style="text-align: right;">= ON</p>		AND=WAHT1584
13		Switch ON HCS5		Next Step: 14
		Execute Telecommand <p style="text-align: right;">SwOn_RCSpip_G1H5</p> TC Control Flags : <p style="text-align: right;">GBM IL DSE --Y -- --</p> Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On RCS piping Group 1 HCS 5	DCC23170	
14		Verify HCS5 ON		Next Step: END
		Verify Telemetry <p style="text-align: center;">RCSpipG1H5_S WM11E565</p> <p style="text-align: right;">= ON</p>		AND=WAHT1584
15		Switch ON HCS6		Next Step: 16
		Execute Telecommand <p style="text-align: right;">SwOn_XPND1_G1H6</p> TC Control Flags : <p style="text-align: right;">GBM IL DSE --Y -- --</p> Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On XPND1 Group 1 HCS 6	DCC24170	
16		Verify HCS6 ON		Next Step: END
		Verify Telemetry <p style="text-align: center;">Xpnd1_G1H6_S WM11F565</p> <p style="text-align: right;">= ON</p>		AND=WAHT1584

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