

Switch ON HCS of HPS12
 File: H_CRP_TCS_12H1.xls
 Author: E. Picallo



Procedure Summary

Objectives

This procedure describes the steps needed to switch ON a selected Heater Control Switch (HCS) of HPS12.

The location units of the HCSs belonging to HPS12 are the following:

- HCS1: STR
- HCS2: Battery
- HCS3: FHWOH
- HCS4: FHWEH
- HCS5: FCV C1A
- HCS6: FCV A2A

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;
 HPS12 ON;
 HCS OFF.

End of Procedure

CDMU in default configuration;
 HPS12 ON;
 HCS switched ON.

Reference File(s)

Input Command Sequences

Output Command Sequences

HRT12H1

Referenced Displays

ANDs GRDs SLDs
 WAHT2584

Configuration Control Information

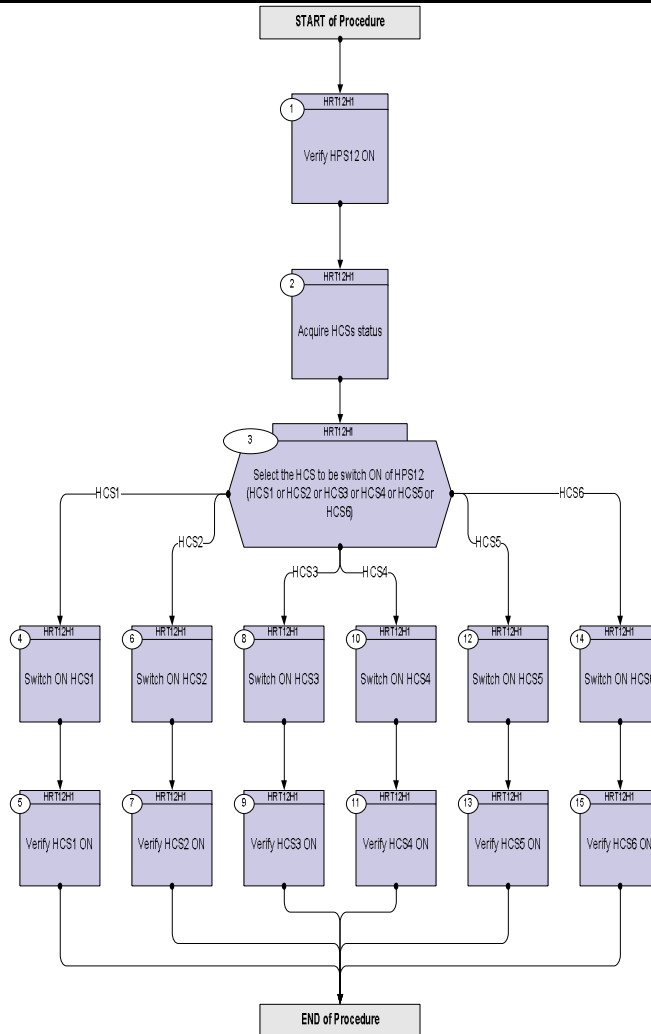
DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
16/02/09	2.1	1	Created	E. Picallo	

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

Switch ON HCS of HPS12
 File: H_CRP_TCS_12H1.xls
 Author: E. Picallo



Procedure Flowchart Overview



Switch ON HCS of HPS12
 File: H_CRP_TCS_12H1.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
TC Seq. Name :HRT12H1 (Switch ON HCS HPS12)				
TimeTag Type: N				
Sub Schedule ID:				
□				
1		Verify HPS12 ON		Next Step: 2
		Verify Telemetry GRP12_HPS_STS WM72G565 = ON		AND=WAHT2584
2		Acquire HCSs status		Next Step: 3
		Verify Telemetry STR_G12H1_S WM71A565		AND=WAHT2584
		Verify Telemetry BATTconG12H2_S WM71B565		AND=WAHT2584
		Verify Telemetry FHWOH_G12H3_S WM71C565		AND=WAHT2584
		Verify Telemetry FHWEH_G12H4_S WM71D565		AND=WAHT2584
		Verify Telemetry FcvC1A_G12H5_S WM71E565		AND=WAHT2584
		Verify Telemetry FcvA2A_G12H6_S WM71F565		AND=WAHT2584
3		Select the HCS to be switch ON of HPS12: (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_STR_G12H1 TC Control Flags : Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On STR Group 12 HCS 1	DCC85170	
		GBM IL DSE --Y -- --		

Switch ON HCS of HPS12
 File: H_CRP_TCS_12H1.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
5		Verify HCS1 ON		Next Step: END
		Verify Telemetry STR_G12H1_S WM71A565	= ON	AND=WAHT2584
6		Switch ON HCS2		Next Step: 7
		Execute Telecommand SwOn_BATTconn_G12H2 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On BATTERY Connector Group 12 HCS 2	DCC86170	
7		Verify HCS2 ON		Next Step: END
		Verify Telemetry BATTconG12H2_S WM71B565	= ON	AND=WAHT2584
8		Switch ON HCS3		Next Step: 9
		Execute Telecommand SwOn_FHWOH_G12H3 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On FHWOH Group 12 HCS 3	DCC87170	
9		Verify HCS3 ON		Next Step: END
		Verify Telemetry FHWOH_G12H3_S WM71C565	= ON	AND=WAHT2584
10		Switch ON HCS4		Next Step: 11
		Execute Telecommand SwOn_FHWEH_G12H4 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On FHWEH Group 12 HCS 4	DCC88170	

Switch ON HCS of HPS12
 File: H_CRP_TCS_12H1.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
11		Verify HCS4 ON		Next Step: END
		Verify Telemetry FHWEH_G12H4_S WM71D565	= ON	AND=WAHT2584
12		Switch ON HCS5		Next Step: 13
		Execute Telecommand SwOn_FCV_C1A_G12H5 TC Control Flags : Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On FCV C1A Group 12 HCS 5	DCC89170 GBM IL DSE --Y -- --	
13		Verify HCS5 ON		Next Step: END
		Verify Telemetry FcvC1A_G12H5_S WM71E565	= ON	AND=WAHT2584
14		Switch ON HCS6		Next Step: 15
		Execute Telecommand SwOn_FCV_A2A_G12H6 TC Control Flags : Subsch. ID : 10 Det. descr. : PCDU:TC(8,4,112,5) switch On FCV A2A Group 12 HCS 6	DCC90170 GBM IL DSE --Y -- --	
15		Verify HCS6 ON		Next Step: END
		Verify Telemetry FcvA2A_G12H6_S WM71F565	= ON	AND=WAHT2584
End of Procedure				