

CREC_VM - Recycle the Dilution Cooler
 File: H_FCP_SPI_CREC.xls
 Author: R. Biggins



Procedure Summary

Objectives

The objective of this procedure is to recycle the Dilution Cooler

Summary of Constraints

n/a

Spacecraft Configuration

Start of Procedure

SPIRE is in REDY mode

End of Procedure

SPIRE is in REDY mode

Reference File(s)

Input Command Sequences

Output Command Sequences

HFSCREC

Referenced Displays

ANDs **GRDs** **SLDs**
 ZAZ96999

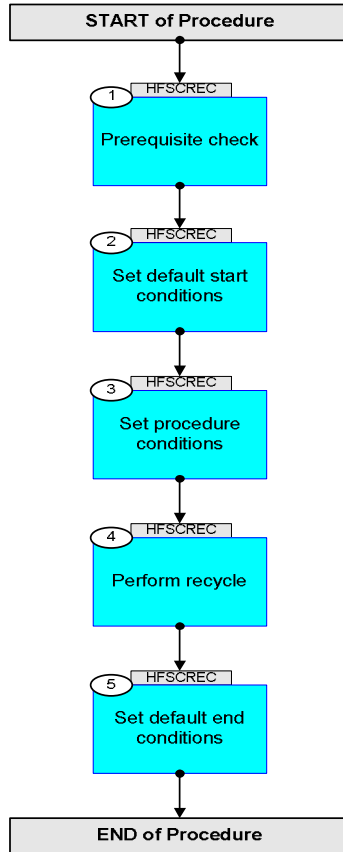
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
07/08/07		1	Created	R. Biggins	
15/01/08		2	Update due to initial testing against the simulator: - TCs updated due to new DB	R. Biggins	
24/01/08		2.01	Validation : Minor editorial updates	R. Biggins	
22/02/08		3	Update due to testing against MOC Simulator: - Time Tags updated - BBID/OBSID TM checks added - Editorial updates	R. Biggins	
19/05/08	1	4	Updates due to SVT-1 testing: - TM checks added to RESET_DRCU_COUNTERS TC - Default OBSID value updated to 0x0000 0000 - Flags updated - Comments added/updated	R. Biggins	

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Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
HFSCREC Recycle cooler				
SSID :				
1		Prerequisite check		Next Step: 2
		Verify Telemetry MODE SM00M500	= REDY	AND=ZAZ96999
2		Set default start conditions		Next Step: 3
		Note that a TM(5,1) packet [New_Step_Report] is generated after each of the following SET_OBS_STEP telecommands		
	ET=+ UT=+00.00.00	SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 SSID : 370	SET_OBS_STEP SC003500 0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 SSID : 370	SET_BBID SC001500 80010001 <hex>	
		Verify Telemetry BBFULLTYPE SM2LN500	= ClearObs	AND=ZAZ96999
	ET=+ UT=+00.00.00	SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 SSID : 370	SET_OBS_STEP SC003500 1 <hex>	
	ET=+ UT=+00.00.01	SET_OBSID Command Parameter(s) : OBSERVATION_ID SP00N500 SSID : 370	SET_OBSID SC000500 00000000 <hex>	
		Verify Telemetry OBSID SM10N500	= 00000000 <hex>	AND=ZAZ96999

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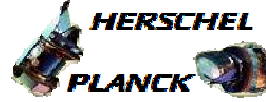
Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.00	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 SSID : 370	SC003500 0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 SSID : 370	SC001500 80000000 <hex>	
		Verify Telemetry BBFULLTYPE SM2LN500	= Null	AND=ZAZ96999
	ET=+ UT=+00.00.00	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 SSID : 370	SC003500 0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 SSID : 370	SC001500 80020001 <hex>	
		Verify Telemetry BBFULLTYPE SM2LN500	= StartObs	AND=ZAZ96999
3		Set procedure conditions		Next Step: 4
	ET=+ UT=+00.00.00	RESET_DRCU_COUNTERS RESET_DRCU_COUNTERS SSID : 370	SCD00505	
		Verify that the TRESET parameter has the same value as the THSK parameter TRESET SM01T500	same as THSK	AND=ZAZ96999
		THSK SM00T500	any	AND=ZAZ96999
		Note that a TM(5,1) packet [New_Step_Report] is generated after each of the following SET_OBS_STEP telecommands		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.00	SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SSID : 370	SET_OBS_STEP SP03N500 1 <hex>	SC003500
	ET=+ UT=+00.00.01	SET_OBSID Command Parameter(s) : OBSERVATION_ID SSID : 370	SET_OBSID SP00N500 OBS_ID	SC000500
		Verify Telemetry OBSID SM10N500	OBS_ID	AND=ZAZ96999
	ET=+ UT=+00.00.00	SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SSID : 370	SET_OBS_STEP SP03N500 0 <hex>	SC003500
	ET=+ UT=+00.00.01	SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SSID : 370	SET_BBID SP01N500 80000000 <hex>	SC001500
		Verify Telemetry BBFULLTYPE SM2LN500	= Null	AND=ZAZ96999
	ET=+ UT=+00.00.00	SET_OBS_MODE Command Parameter(s) : OBSERVING_MODE SSID : 370	SET_OBS_MODE SP02N500 600 <hex>	SC002500
		Verify Telemetry MODE SM00M500	= CREC	AND=ZAZ96999
4		Perform recycle		Next Step: 5
		The following command (Run_VM) will take about 151 minutes to execute		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry BBFULLTYPE SM2LN500	= EndObs	AND=ZAZ96999
	ET=+ UT=+00.00.00	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 SSID : 370	SC003500 1 <hex>	
	ET=+ UT=+00.00.01	SET_OBSID SET_OBSID Command Parameter(s) : OBSERVATION_ID SP00N500 SSID : 370	SC000500 00000000 <hex>	
		Verify Telemetry OBSID SM10N500	= 00000000 <hex>	AND=ZAZ96999
	ET=+ UT=+00.00.00	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 SSID : 370	SC003500 0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 SSID : 370	SC001500 80000000 <hex>	
		Verify Telemetry BBFULLTYPE SM2LN500	= Null	AND=ZAZ96999
End of Procedure				