



## Extracting HCU events

### Logging and exporting HCU events

This instruction is an appendix to Circular Letter CL2939-2018. Its purpose is to explain how to make and extract data to evaluate whether the ELFI pilot spools are working properly.

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To find the HCU Events, use MOP-B and select:

1. "Troubleshooting"
2. "HCU Events".

Max Limiter Parameterset not Valid | Normal | ECUB\_020125K | 09:43:56 | 116 | 105 | 0 | 0

Maintenance > Troubleshooting | 2016-08-18 | 11:18:56

HCU | HPS | **HCU Events** | HPS Events | Insulation

CCU	Date	Time	Sequence
CCU1	2016-08-02	14:02:30	
CCU11	2016-08-02	09:45:28	
CCU10	2016-08-02	09:45:28	
CCU9	2016-08-02	09:44:43	
CCU7	2016-08-02	09:44:43	
CCU6	2016-08-02	09:44:43	
CCU5	2016-08-02	09:44:43	
CCU4	2016-08-02	09:44:43	

# Channel description

1  
2  
3  
4  
5  
6  
7

80.0  
60.0  
40.0  
20.0  
0.0

0.0 20.0 40.0 60.0 80.0 [Sec]

Alarms  
Engine  
Auxillaries  
Maintenance  
System View  
I/O Test  
Invalidated Inputs  
Network Status  
Function Test  
**Trouble-Shooting**  
Admin  
Power Off  
System Options  
Operator

Show Sequence | Clear All | Zoom to Fit | Log Manually | Export...



## Extracting HCU events

To log HCU Events manually, follow the next two steps:

3. Engine should be running at constant load when HCU events are logged. Then press the “Log Manually” button.

The screenshot displays the engine control interface with the following elements:

- Status Bar:** Max Limiter Parameterset not Valid, Normal, ECUB\_020125K, 09:43:56, 116, 105, 0, 0.
- Navigation:** Maintenance > Troubleshooting, 2016-08-18, 12:06:19.
- Event List:**

CCU	Date	Time	Sequence
CCU5	2016-08-18	11:25:01	
CCU4	2016-08-18	11:25:00	
CCU3	2016-08-18	11:24:58	
CCU2	2016-08-18	11:24:58	
CCU1	2016-08-18	11:24:57	
CCU1	2016-08-02	14:02:30	
CCU11	2016-08-02	09:45:28	
CCU10	2016-08-02	09:45:28	
- Graph:** A plot area with a y-axis from 0.0 to 80.0 and an x-axis from 0.0 to 80.0 [Sec].
- Buttons:** Show Sequence, Clear All, Zoom to Fit, **Log Manually** (highlighted with a red '3'), Export...
- Right Panel:** Alarms, Engine, Auxiliaries, Maintenance, System View I/O Test, Invalidated Inputs, Network Status, Function Test, Trouble-Shooting, Admin, Power Off, System Options, Operator.



## Extracting HCU events

4. Press each numeric button to select all cylinders to log manually. After a short time, the log will appear in the list to the left.

The screenshot displays the MAN engine control interface. At the top, a status bar shows "Max Limiter Parameterset not Valid", "Normal", "ECUB\_020125K", and "09:43:56". The main window is titled "Maintenance > Troubleshooting" and shows the date "2016-08-18" and time "12:07:33".

The interface is divided into several sections:

- Alarms:** A vertical sidebar on the right containing buttons for "Alarms", "Engine", "Auxiliaries", "Maintenance", "System View I/O Test", "Invalidated Inputs", "Network Status", "Function Test", "Trouble-Shooting", "Admin", "Power Off", "System Options", and "Operator".
- Event List:** A table with columns "CCU", "Date", "Time", and "Sequence". It lists several events, with the most recent ones on 2016-08-18.
- Graph:** A large empty grid area with a y-axis from 0.0 to 60.0 and an x-axis from 0.0 to 80.0 [Sec].
- Channel Description:** A table with columns "#", "Channel description", and "1" through "7".
- Manual Logging:** A section at the bottom titled "Select cylinder to log manually" with buttons for cylinders 1 through 11 and a close button (X).

Two red callout boxes provide instructions:

- A callout pointing to the event list table says: "List of logged HCU Events".
- A callout pointing to the manual logging buttons says: "4. Press to log each cylinder".



## Extracting HCU events

Export the HCU Events to a USB key.

First insert an empty USB key into the MOP, and then repeat below for each cylinder.

5. Select the HCU Event that is to be exported.
6. Press export.
7. Press save.

Manual blower operation demanded | Normal | ECUB\_50215 | 10:49:16 | 69 | 16 | 41 | 1

Maintenance > Troubleshooting | 2013-10-07 | 12:45:14

HCU	HPS	HCU Events	HPS Events	Insulation
CCU	Date	Time	Sequence	
CCU4	2013-10-03	08:35:08	CCU4 (VA Amp. thermal protect. act.)	
CCU6	2013-09-11	11:36:07		
CCU4	2013-09-11	11:36:01		
CCU1	2013-09-11	11:31:54		
CCU11	2013-08-09	14:41:24		
CCU11	2013-08-09	14:40:47		
CCU3	2013-08-09	14:33:00		
CCU6	2013-08-06	13:42:06		

# Channel description

- 1 FIVA Set Point
- 2 FIVA Feedback Ch30
- 3 FIVA Controller Ch70
- 4 Amplifier Current Ch33
- 5 Plunger Position Ch31
- 6 Exhaustvalve Position Ch34
- 7 Tacho Angle Cyl. 1

Buttons: Show Sequence, Clear All, Zoom to Fit, Log Manually, Export...

7. Press "Save"

Export

TIP: Remove USB storage to save to HDD

USB: Ready to save

Save