TECHNICAL BULLETIN

2 Stroke Engine Services

RT-191
Issue 2, 23 March 2018

FCM-20 (Flex Control Module) Hardware Revision 08

Information to all owners and operators of Wärtsilä RT-flex and W-X engines with WECS-9520 (Wärtsilä Engine Control System).

NOTE:
Detailed information about the WECS-9520 Update Tool R02 is provided in the Instructions Bulletin I-28, Issue 5.

For immediate attention

Affected engines
Wärtsilä RT-flex and W-X engines with WECS-9520 (Wärtsilä Engine Control System).

Current situation
Technical Bulletin RT-191 Issue 1 already informed that FCM-20 hardware revision 08 replaces the previous revision 07.

For this reason, WECS-9520 software must be updated before installation of FCM-20 hardware revision 08. The WECS-9520 Update Tool R02 is available for download on the website: http://www.wartsila.com/products/marine-oil-gas/engines-generating-sets/low-speed-rt-flex-engines.

In the meantime, new insights are available and the content in the Technical Bulletin RT-191 Issue 2 represents the latest state of knowledge.

Warning
FCM-20 hardware revision 04 have become obsolete after being more than 10 years in operation and for this reason Wärtsilä Services Switzerland Ltd recommends upgrade to FCM-20 hardware revision 08.

If all modules on the engine have to be replaced with FCM-20 hardware revision 08 at the same time, a new WECS-9520 software is required.

In this case please contact Wärtsilä Services Switzerland Ltd for support.

Note
This Technical Bulletin supersedes the Technical Bulletin RT-191, Issue 1, dated January 23, 2017, named “FCM-20 hardware Revision 08”.

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Contents

		Page
1	Introduction	2
2	Identification of the FCM-20 hardware revision and bootloader version	3
3	Installation of software	4
4	WECS-9520 Update Tool R02	4
5	flexView Installation WECS-9520	6
6	Appendix	6
7	Contacts	7

1 Introduction

This Technical Bulletin complements the information provided in the Technical Bulletin RT-191 Issue 1 and it incorporates additional information according to the latest state of the knowledge.

FCM-20 hardware revision 07 has been phased out, since some parts used for the production are no longer available. The new FCM-20 hardware revision 08 replaces the previous revision 07 and is fully interchangeable with the previous FCM-20 hardware revisions 04, 06 and 07.

FCM-20 hardware revision 08 can be installed in the same engine control system with previous revisions 04, 06 and 07, provided that the WECS-9520 software has been updated in advance.

WARNING:

- FCM-20 hardware revision 08 can be installed in the same engine control system with FCM-20 hardware revisions 04, only if the bootloader version 3.11 or higher is installed (see paragraph 2, “Identification of the FCM-20 hardware revision and bootloader version”).

- FCM-20 hardware revision 04 have become obsolete after being more than 10 years in operation and for this reason Wärtsilä Services Switzerland Ltd recommends an upgrade to FCM-20 hardware revision 08.

  If all modules on the engine have to be replaced with FCM-20 hardware revision 08 at the same time, a new WECS-9520 software is required. In this case please contact Wärtsilä Services Switzerland Ltd for support.

- FCM-20 hardware revision 08 must not be used for MAPEX-PR, due to incompatibility between FCM-20 hardware revision 08 and the product specific software.
  In case a spare FCM-20 is required for MAPEX-PR, please use the spare parts code number **SP 98116** when placing an order.

2 Identification of the FCM-20 hardware revision and bootloader version

As already informed in the introduction paragraph, the FCM-20 hardware revision 08 can also be installed in the same engine control system with FCM-20 hardware revisions 04, provided that bootloader version 3.11 or higher is installed.

FCM-20 hardware revision and the bootloader version can be checked in flexView, on the “flexView SW-Info card” (see Figure 1).

1. FCM-20 hardware revision *2. Bootloader version*

Figure 1: FlexView SW-Info card

Information about the hardware revision can also be found on the FCM-20 identification, (see Figure 2).

1. Identification label on FCM-20 *2. FCM-20 hardware revision*

Figure 2: Identification label on FCM-20

3 Installation of software

WECS-9520 software must be updated using the WECS-9520 Update Tool R02 to ensure compatibility of FCM-20 hardware revision 08. The WECS-9520 software update is available for following WECS-9520 software versions:

- Software version 32, build 081, 082, 083 and 084
- Software version 33, build 101 and build 102
- Software version 34, build 104 to build 111.

NOTE:
The software update is not required for engines with WECS-9520 software version 35, since the needed modifications are included in the software.

NOTE:
Update of the WECS-9520 software can be done by ship's crew using the flexView computer.

4 WECS-9520 Update Tool R02

The WECS-9520 Update Tool R02 is available for downloading on the Wärtsilä Webpage, under the following link: http://www.wartsila.com/products/marine-oil-gas/engines-generating-sets/low-speed-rt-flex-engines, see Figure 3.

1. WECS-9520 Update Tool R02, ZIP-file 2. flexView installation, ZIP-file

Figure 3: ZIP-file location on Wärtsilä Webpage

Download the WECS-9520 Update Tool R02

1. Click on the button “WECS-9520 UPDATE TOOL R02” on the right side of the webpage to start the download.

The ZIP-file “WECS-9520_SW_Update_02.zip” will be downloaded. It contains the following:

- WECS-9520 Update Tool R02 “Install WECS-9520_Update Tool.exe”
- Copy of the Technical Bulletin “RT-191.pdf”
- “Instruction I-28”, Issue 5 and the relevant appendixes.

2. Before download start, you are requested to fill in a registration form, see Figure 4:

Figure 4: Registration form for update file

NOTE:
The information will be sent to Wärtsilä. If the requested information is not submitted to Wärtsilä, download will not be possible.

3. Select the download file and save it to a convenient location.

4. After the download, the file “WECS-9520_SW_update_02.zip” can be sent to all affected vessels.

To unzip and download the file on board, follow the Instruction I-28 attached to this Technical Bulletin which is also included in the ZIP file for your reference.

Please contact a Wärtsilä Service Station for further information in case that the assistance of Wärtsilä is preferred. If Wärtsilä Field Services is contracted for the WECS-9520 Update Tool R02, an upgrade to the latest WECS-9520 software version is also possible.

NOTE:
The WECS-9520 Update Tool R02 does not change any WECS-9520 parameter settings or any functions of the control system.
In particular, the NOx IMO related parameters and associated IMO CRC value remain unaffected.

5 flexView Installation WECS-9520

To ensure the compatibility of the WECS-9520 Update Tool R02 with the flexView PC, it is recommended to install the latest version of the flexView program.

The latest flexView version can be downloaded from the Wärtsilä webpage: http://www.wartsila.com/products/marine-oil-gas/engines-generating-sets/low-speed-rt-flex-engines.

6 Appendix

For instruction on how to download and install the WECS-9520 software update, please refer to Instructions Bulletin I-28, Issue 5, dated March 23, 2018, named “WECS-9520 software update tool”.

For instruction on how to install the flexView interface, please refer to Instructions Bulletin I-28, Issue 5, Appendix 3, dated March 23, 2017, named “Instruction for flexView base and communication drivers installation”.

7 Contacts

7.1 How to contact Wärtsilä

For questions about the content of this Technical Bulletin, or if you need Wärtsilä assistance, services, spare parts and/or tools, please contact your nearest Wärtsilä representative.

7.2 Contact details for emergency issues

7.2.1 Operational support

For questions concerning operational issues, please send your enquiry to:
technicalsupport.chts@wartsila.com
or phone 24hrs support: +41 52 262 80 10.

7.2.2 Field service

If you need Wärtsilä Field Service, please send your enquiry to:
ch.fieldservice@wartsila.com
or phone 24hrs support: +41 79 255 68 80.

7.2.3 Spare parts

If you need Wärtsilä spare parts and/or tools, please contact your nearest Wärtsilä representative or your key account manager.

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