

 <b>CRUISER AIRCRAFT</b>	<h1>SERVICE BULLETIN</h1>	Czech Aircraft Group s.r.o. Na Záhonech 212 686 04 Kunovice Czech Republic <a href="http://www.cruiseraircraft.cz">www.cruiseraircraft.cz</a> <a href="mailto:info@cruiseraircraft.cz">info@cruiseraircraft.cz</a>
		NO: SB-SC-013
		DATE: 2012-02-09 Page: 1 of 3
		Rev.: 4 Date: 2020-05-12

<b>MODEL AFFECTED:</b>	PS-28 Cruiser
<b>SUBJECT:</b>	Dynon EFIS-D100 / EMS-D120 firmware upgrade, setting and locking
<b>AIRCRAFT AFFECTED:</b>	All PS-28 Cruiser aircraft equipped with Dynon EFIS-D100 / EMS-D120 units
<b>COMPLIANCE:</b>	According to the operator's need

#### DESCRIPTION:

The Service Bulletin contains instructions for firmware upgrade of Dynon EFIS-D100 / EMS-D120 units installed on the PS-28 Cruiser aircraft and their setting and locking.

#### REASON:

1. Firmware upgrade
2. Prevention of an unintentional or deliberate change of the Dynon EFIS-D100 / EMS-D120 equipment setting.
3. Familiarization of the operator with the procedure to be followed at the Dynon EFIS-D100 / EMS-D120 equipment firmware upgrade.

#### SUBJECT:

Firmware upgrade and prevention of an unintentional or deliberate change of the Dynon EFIS-D100 / EMS-D120 equipment setting – this setting is locked by the aircraft manufacturer before the aircraft dispatch to the operator – except of DSAB setting shown in the table below, which unlocking is necessary for the aircraft operation.

If the Dynon Avionics Company upgrades the Dynon EFIS-D100 / EMS-D120 equipment firmware, the operator will be advised, through revision of this Bulletin, including version of Dynon EFIS-D100 / EMS-D120 upgraded firmware.

Owner of the aircraft is advised to regularly observe the web of the aircraft manufacturer for related bulletins which could require changes in the Dynon EFIS-D100 / EMS-D120 setup menu.

(For example, SB-PS-023 – correction of maximum fuel pressure, SB-CR-033 – transition from CHT to CT measurement and correction of maximum CT limit, etc.).

If necessary, locked setting can be accessible for the operator through the password. S/N of the EFIS-D100 / EMS-D120 is the initial password for the individual screens. These passwords can be changed by the operator. Note the passwords for future need.

#### WARNING

**Unintentional or deliberate change of the Dynon EFIS-D100 / EMS-D120 equipment settings without the aircraft manufacturer approval could result in airplane accident, personal injury or death**

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**Czech Aircraft Group (CAG) STATEMENT:**

Dynon EFIS-D100 and EMS-D120 are certified with the PS-28 Cruiser airplanes.

The last tested firmware version and setting approved by the aircraft manufacturer:

<b>EFIS-D100</b>	
Dynon Avionics firmware version	5.6.1
Drawing (GPS Garmin 695, COM / NAV Garmin SL 30 / GNC 255)	SI0921N, Rev. B
Setting according to this drawing	EFIS-D100 setting 5.0 for Rotax 912 S2 engine; EFIS-D100 setting 5.1 for Rotax 912 ULS2 engine
Drawing (GPS / NAV / COM Garmin GTN 750)	SI0922N, Rev. A
Setting according to this drawing	EFIS-D100 setting 5.5 for Rotax 912 ULS2 engine
DSAB	Unlocked

<b>EMS-D120</b>	
Dynon Avionics firmware version	5.6.1
Drawing	SI0921N, Rev. B
Setting according to this drawing	EMS-D120 setting 6.0 for Rotax 912 S2 engine; EMS-D120 setting 6.1 for Rotax 912 ULS2 engine
Drawing (GPS / NAV / COM Garmin GTN 750)	SI0922N, Rev. A
Setting according to this drawing	EMS-D120 setting 6.1 for Rotax 912 ULS2 engine

**AUTHORISATION TO PERFORM:**

Certifying staff in accordance with EU 1321/2014

**MANPOWER: -**

**REFERENCES:**

PS-28 Cruiser Maintenance Manual (CR-MM-1-0-00, the latest revision).  
 EFIS-D100 Installation Guide (P/N 100478-000, the latest revision edition).  
 EMS-D120 Installation Guide (P/N 100591-000, the latest revision edition).  
 Dynon\_Support\_Program\_Guide\_FAQ,(the latest revision)

**PUBLICATIONS AFFECTED:**

None

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**ACCOMPLISHMENT INSTRUCTIONS:**

Dynon Avionics provides free firmware updates for all its products, and continues to add new features periodically. CAG will check whether the latest Dynon firmware is compatible with CAG setting and revise this service bulletin.

Each Dynon EMS or EFIS unit must be individually upgraded by connecting a PC to the instrument's serial port. The HS34 also must be individually upgraded via its Serial 1 port. Firmware upgrade to EDC-D10A is performed automatically during firmware upgrade of the attached EFIS unit.

1. Check Dynon Avionics web pages for the latest Dynon firmware version.
2. Download last revision of this bulletin from CAG web pages to check if the latest Dynon firmware version is approved (see the table above) by the CAG.
3. Download the appropriate firmware version from Dynon websites.
4. Unlock the unit to be upgraded, see the documents shown in the "References" section.
5. Upgrade firmware according to the documents shown in the "References" section.
6. Check service bulletins on the aircraft manufacturer's website and correct items in the Dynon system setup, if needed.
7. Check correct function of compass unit, pitot-static system (airspeed, altitude), fuel volume, pitch and roll trim indicators and/or recalibrate if needed.
8. Perform engine run (see the aircraft maintenance manual) and check correct function of all related systems.
9. Lock the upgraded units, see the documents shown in the "References" section.
10. Check correct function of all related instruments and avionics by turning the switches on/off.
11. Complete aircraft records to reflect compliance with this service bulletin.

**NOTE:**

Ask aircraft manufacturer for detail instruction if needed.

**APPROVAL:**

This Service Bulletin has been approved by:

<b>Title</b>	Head of Design Organization	Airworthiness Manager
<b>Name</b>	Jiří Sklenář	Miroslav Koukal
<b>Hand written signature</b>		