

SERVICE BULLETIN

SB-073018 REV B

DATE ISSUED:	7/31/2018
DATE EFFECTIVE:	7/30/2018
SUPERSEDES NOTICE:	SB-073018-A.
SUBJECT:	MSC Software Upgrade Version 3.0
AIRCRAFT AFFECTED:	MODEL: ICON A5 S/N: 00001 through 00044
REQUIRED ACTION:	Upgrade MSC software version to 3.0 (PN: ICA010570 Rev D)
TIME OF COMPLIANCE:	Not to exceed 100 hours' time-in-service from the effective date above or next annual condition inspection whichever occurs first. All Service Interventions must include a review of open Bulletins, Directives, or Alerts; where possible all open Service Bulletins, Directives, or Alerts should be closed. If not closed, the aircraft must be scheduled for return within the stated time or use requirements.
Revision History:	Revision B changes effectivity to S/N 00001 through 00044.

PURPOSE:

ICON is committed to designing, manufacturing, delivering, and supporting a high quality Light Sport Aircraft, providing a level of safety well beyond expectations.

ICON has experienced several anomalies related to the functionality of the MSC. Several issues were identified over time and none of these events individually have resulted in a safety of flight issues. However, ICON is proactively upgrading the software to the latest revision to address the issues. This software makes a minor modification to the way AoA is indicated when at flaps settings of 15 and 30 degrees. This Service Bulletin provides Instructions for Continued Airworthiness.

ICON will send the Certified Service Providers with a new MSC Unit with software version 3.0. Please ship the removed MSC unit back to ICON after the new MSC unit is installed. Software update can be provided at certain Service Providers only.

WARRANTY:

ICON Certified Service Providers: Please submit an invoice for warranty reimbursement for labor and parts on completion of this service bulletin. Please reference service bulletin number SB-073018.

- 1. 2-hours of labor for removal and installation only.
- 2. 3-hours of labor for removal, upgrade and installation.
- 3. Parts and labor will only be reimbursed when removed MSC is received.

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PARTS LIST:

Part Number	Description		
ICA011651	CONTROLLER, MULTIPLE SYSTEMS	1	
ICA010570 Rev D	SOFTWARE, CONTROLLER, MULTIPLE SYSTEMS	1	

Special tools, fixtures, or test equipment:

- 1. Pyramid PS3KX 2.5 Amp Power Supply.
- 2. MPLAB DV164035 In-Circuit Programmer, Figure 1.



Figure 1: Programmer

- a. Microchip MPLAB IPE (Integrated Programming Environment) Software on the computer.
- b. MSC Programming MPLAB ICD 3 Cable Connection.
- c. MSC Programming MPLAB ICD S Cable.
- 3. Serial Power Port from power supply to MSC harness.

Service Centers WITHOUT software upgrade hardware:

- 1. Remove existing DAC unit in accordance with Maintenance Manual and set aside.
- 2. Remove existing MSC unit in accordance with Maintenance Manual and send back to ICON Customer Service and Support.
- 3. Install new MSC unit in accordance with Maintenance Manual.

Service Centers WITH software upgrade hardware:

- 1. Remove existing DAC unit in accordance with Maintenance Manual and set aside.
- 2. Remove existing MSC unit in accordance with Maintenance Manual.
- 3. Remove 4 screws from the back of the MSC panel and set aside and retain hardware for re-install, Figure 2.



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Figure 2: MSC Unit

- 4. Open MPLAB IPE v 3.55 on the computer.
- 5. Connect Serial Power Port to the back of the MSC.
- 6. Turn on Pyramid Power Supply.
- 7. Connect USB cable from MPLAB DV164035 to the computer.
- 8. Connect ethernet cable from MPLAB DV164035 to the inside of the opened MSC.
- 9. Select the device under the Device dropdown to: dsPIC33FJ256GP710A. If selecting for the first time otherwise verify the correct device is showing, Figure 3.

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Figure 3: Software Screen

10. Hit Connect as shown in Figure 4 to connect software to the MSC.



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		Pass Count: 0000 Fail Count: 0000	
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x file selected.			
06-05T12:26:41-0700-Loading hex file. Plei ia code from	se wait		

Figure 4: Connecting to MSC

- 11. Using the browse button, select the .HEX file supplied for your software version. The following dialog will open, allowing you to point to the .HEX file, Figure 5 and Figure 6.
- 12. Use provided file labeled "ICON_A5_MSC_V3_0_RELEASE.X.production.hex"
- 13. Once the file has been opened, status show indicating that the file has been loaded as shown in Figure 7. The hex file should say "file loaded successfully"



Figure 5: Open Dialog Reference



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Figure 6: Programming Screen Shot

14. Hit Program, the MSC should program properly at this point. It will automatically reset and start the new code when it is done. The program will indicate status success once the hex is loaded onto MSC, Figure 7.



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Figure 7: Program

- 15. If the programming failed, repeat Step 14 to re-program the MSC, if it fails again, contact ICON Engineering for further instructions.
- 16. Power down the MSC, disconnect and remove the ICD 3 cable.
- 17. Install back cover on the MSC using retained screws.
- 18. If a temporary software label was applied (label maker) remove label and discard.
- 19. On the production label Mark H/W Revision with black marker up to "F" letter.
- 20. On the production label Mark S/W Revision with black marker up to "D" letter.
- 21. Install MSC in accordance with the maintenance manual.

MAKE THE FOLLOWING LOGBOOK ENTRY:

"Service Bulletin (insert subject bulletin number) has been complied with and installation is reported to ICON Aircraft Customer Support and Service, Ref FAA Exemption 10829B".

If you need assistance relocating your A5 to your home base or temporary storage arrangements, please contact ICON Aircraft and ask for Customer Service and Support.



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If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify ICON Aircraft, Owners Center at:

ICON Aircraft 2141 ICON Way Vacaville, CA 95688 (855) FLY-ICON or (707) 564-4000 support@iconaircraft.com

Please include the aircraft registration number, serial number, your name, and if known the contact information of the new owner/operator.

SERVICE BULLETIN APPROVAL

Bret Davenport	Flight Sciences Manager	7/31/2018
NAME	TITLE	DATE
NAME	TITLE	DATE
NAME	TITLE	DATE