

## **SERVICE BULLETIN**

#### **SB-051818 REV C**

**DATE ISSUED:** 6/27/2018 **DATE EFFECTIVE:** 6/27/2018

**SUPERSEDES NOTICE:** SB-051818 Rev B

SUBJECT: Rudder Centering Spring Replacement

AIRCRAFT AFFECTED: MODEL: ICON A5

**S/N:** 00022-00028,00030-00036, 00039

**REQUIRED ACTION:** Remove and Replace the Rudder Centering Spring

**TIME OF COMPLIANCE:** Not to exceed 25 hours time-in-service from the effective date

above. 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:** Removed alternate acceptable centering spring assembly from parts

list and added addition affected serial numbers

#### **PURPOSE:**

ICON is committed to designing, manufacturing, delivering, and supporting a high quality Light Sport Aircraft, providing a level of safety well beyond expectations. A recently received service difficulty report indicated that the rudder centering spring failed. Inspection of the failed centering spring and of several recently produced aircraft has shown the rudder centering spring retaining clips were not installed properly and have a risk of failure. The purpose of this Service Bulletin is to provide instructions on replacing the rudder centering spring with a properly assembled component.

#### **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-051818.

- 1. 3-hours of labor.
- 2. Parts and labor will only be reimbursed when removed centering spring is received.

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#### **PARTS LIST:**

Part Number	Description	QTY
ICA013213	Centering Spring Assy, 11 lb/in	1
ICA012078	Tef-Gel	A/N
Loctite 243	Thread Locker	A/N

#### Instructions:

#### Special tools, fixtures, or test equipment:

#### PREPARATION:

- 1. It is permissible to disassemble the aircraft as required to permit accessibility, inspection, adjustment, maintenance, and repair in accordance with the latest release of the Aircraft Maintenance Manual, ICA000833.
- 2. Remove, the right and left side baggage floors, left main cockpit side panel, left seat aft closeout, and left seat back.
- 3. Remove the rudder centering spring by disconnecting the forward and aft retention hardware. Retain all hardware for installation of new rudder centering spring.
- 4. Mark the removed rudder centering spring with Serial number, Tail number, and Time in service at removal. Return the removed rudder centering spring back to ICON Customer Service to receive reimbursement for warranty parts and labor.

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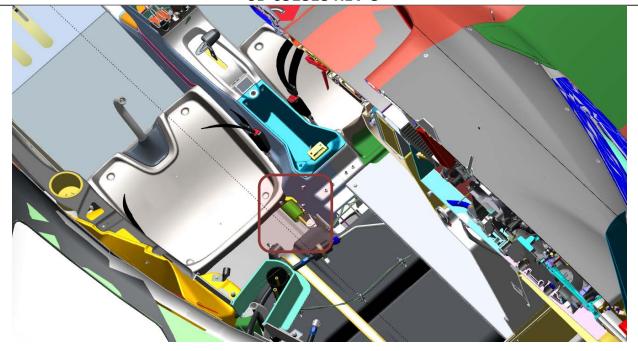


Figure 1: Location of Rudder centering spring (identified in red box)

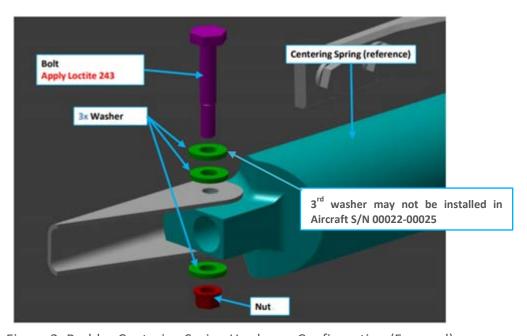


Figure 2: Rudder Centering Spring Hardware Configuration (Forward)

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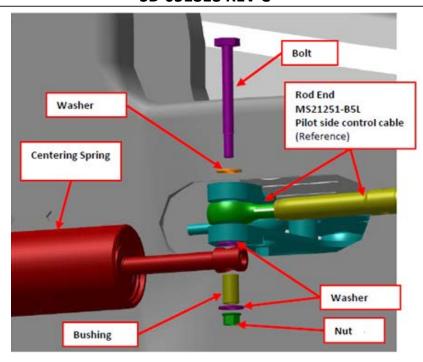


Figure 3: Rudder Centering Spring Hardware Configuration (Aft)

#### **INSTALLATION:**

- 1. Install forward centering spring hardware as shown in Figure 2 above. Apply Loctite 243 to the threads of the bolt and torque hardware to 10-13 in-lb
- 2. Install aft centering spring hardware as shown in figure 3 above. Ensure that the groove in the control cable rod end is facing outboard. Add Tef-gel to threads prior to installation of nut and torque hardware to 18 in-lb.

#### **VERIFICATION:**

- 1. Actuate the rudder pedals (full left then full right) numerous times (5+) from the cockpit and ensure there is no excess friction or binding in the controls.
- 2. Move the air rudder by hand and feel for no excess friction, unusual noise or binding in the controls.
- 3. Check the rudder air rudder rigging in accordance with the latest maintenance manual and ensure that the air rudder centers  $1^{\circ}$  right  $\pm$   $1^{\circ}$

#### **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

<u>support@iconaircraft.com</u>
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	6/27/2018	
NAME	TITLE	DATE	
NAME	TITLE	DATE	
NAME	TITLE	DATE	

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