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Registration no 2002/022837/07
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Manufacturing Organisation M677

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(Sling Aircraft (Pty) Ltd. considers compliance with all Service Bulletins mandatory)

RELEASE DATE: 07/05/2026

EFFECTIVE DATE: 07/05/2026

MODELS AFFECTED: **Sling 4 HW:**

017ik, 020i, 021ik, 032i, 034i, 056ik, 066iq, 079i, 083i, 093iq, 094iq, 102i, 109ik, 110ik, 128iq

SUBJECT: Replacement of Pedal Bellcrank and Brackets

COMPLIANCE TIME: Before next flight or immediately if kits remain in build

LABOUR TIME: Replacement: 120 minutes

1 DESCRIPTION AND PURPOSE:

The rudder pedal bellcrank on the Sling 4 High Wing Taildragger could potentially deform under excessive loads. Although the parts have been designed to comply with FAR Part 23 standards, there could be specific instances of operation which would cause the bellcrank to bend. If this were to happen, the bellcrank could prevent full movement of the pedals, and in turn lead to loss of full rudder control. This possesses a risk during ground roll and landing operation as well as the use of full rudder if needed during a spin recovery. Examples of operations that could lead to this failure is an abrupt/instantaneous full deflection whilst the aircraft is subjected to high crosswind components on the take-off run and the pilot acts instinctively with excessive forces on the pedals.

Due to potential failure risks as described above, and to mitigate the hazards regarding partial loss of rudder control, this service bulletin's intent is to describe the replacement procedure of the bellcrank and its attachment brackets.

Changes to the components include thicker material choices on the brackets securing the bellcrank as well as a geometry change of the bellcrank to ensure more symmetrical load distributions.

Operation of the pedals and the range of motion between the pedals and rudder control surface remains unchanged.

1.1 MASS DATA:

N/A

1.2 ELECTRICAL LOAD DATA:

N/A

1.3 SOFTWARE MODIFICATIONS:

N/A

1.4 REFERENCES:

a) DC-KAI-008-X-G – Sling 4 HW Finishing Construction Manual
b) DC-KAI-003-X-G – Sling 4 HW Fuselage Construction Manual
c) DC-MAM-001-X-G – Sling 4 HW Maintenance Manual

1.5 PUBLICATIONS AFFECTED:

N/A

2 MATERIAL INFORMATION:

2.1 PARTS AND CONSUMABLES LIST:

a) 1 x CF-BKT-039-X-I (Bellcrank Mounting Bracket – Top)
b) 1 x CF-BKT-040-X-I (Bellcrank Mounting Bracket – Bottom)
c) 1 x CF-CHL-058-C-I (Bellcrank Firewall Forward Mounting Channel)
d) 1 x FF-CHL-011-C-I (Bellcrank Support Bracket)
e) 1 x CT-ASS-S01-C-I (Pedal Bellcrank Assembly)
f) 1 x CT-BSH-011-X-G (Aileron Stop Bush)
g) 2 x HW-ANB-377-X-X (AN3 – 7A Bolt)
h) 1 x HW-ANB-415-X-X (AN4 – 15A Bolt)
i) 2 x HW-ANW-031-X-X (AN3 Washer Thin)
j) 3 x HW-ANW-040-X-X (AN4 Washer)
k) 2 x HW-ANL-030-R-X (AN3 Nylock Locknut)
l) 2 x HW-ANL-031-R-X (AN3 Low Profile Nylock Nut)
m) 1 x HW-ANL-040-R-X (AN4 Nylock Locknut)

2.2 TOOLS REQUIRED:

a) 3.0 Allen key
b) 3/8” Spanner
c) 7/16” Spanner
d) 3/8” Socket
e) 7/16” Socket
f) Socket wrench
g) 3mm drill bit
h) 4mm drill bit
i) 4.2mm drill bit
j) Angle drill
k) Rivet gun
l) Safety gloves
m) Safety glasses

2.3 MATERIAL RESPONSIBILITY:

Sling Aircraft (Pty) Ltd will provide the required parts listed in Section 2.1 for all aircraft subject to the Service Bulletin.

2.4 COMPANY SUPPORT INFORMATION

Sling Aircraft AMO 1264 (Johannesburg, South Africa) is available to perform the work required under this Service Bulletin on aircraft presented at its facilities. All personnel undertaking the actions prescribed herein shall adhere strictly to the instructions set out below and shall consult all supplementary documentation identified in Section 1.4, as applicable. Sling Aircraft accepts no liability for the quality, completeness, or airworthiness of any work carried out to implement this Service Bulletin if such work is performed by any entity other than Sling Aircraft AMO 1264 (Johannesburg, South Africa).

Work required under this Service Bulletin (Service Bulletin 32) may be performed by a kit builder, subject to compliance with the legal and regulatory requirements of the governing aviation authority in the jurisdiction in which the work is undertaken.

Sling Aircraft will reimburse labour costs only for aircraft that (i) are already in flying condition at the time of compliance and (ii) remain within their applicable warranty period. Labour reimbursement by Sling Aircraft shall be limited to a maximum rate of US$50.00 per hour, and only for the time reasonably required to accomplish the corrective actions described herein.
Sling Aircraft shall bear no responsibility for labour costs associated with kit-built aircraft. Kit builders are entitled to the parts specified under this Service Bulletin; however, all labour associated with the installation, modification, or corrective work remains solely at the builder's expense.

Sling Aircraft shall not be liable for any indirect, consequential, or incidental costs arising from compliance with this Service Bulletin, including but not limited to shipping charges, aircraft downtime, loss of income, or other associated expenses.

2.5 COMPANY SUPPORT INFORMATION

Customers are required to direct all requests for Service Bulletin kits, materials, or related support to their authorised local distributor. Customers who have purchased their aircraft, kit, or components directly from Sling Aircraft Headquarters shall direct such requests to sales@slingaircraft.com.

All technical inquiries or requests for clarification regarding this Service Bulletin shall be submitted to technical@slingaircraft.com.

3 INSTRUCTIONS:

This section details the corrective action required.

3.1 Sling 4 HW

3.1.1 Replacement of Bellcrank and Attachment Components

Step 1: Remove the Centre Console Front Skin (Right or Left) to gain access to the bellcrank and brackets.

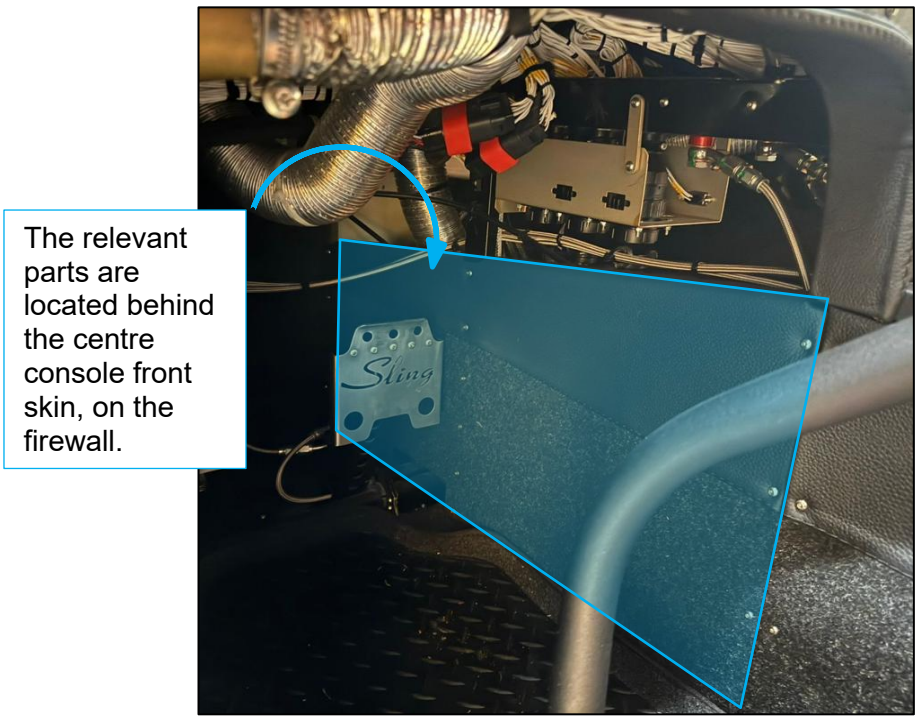

Figure 1. Centre Console Skin to be Removed.

Step 2: Loosen and remove the bolts (circled in blue in Figure 2 below) securing the Pedal Pushrod Assemblies to the bellcrank.

Figure 2. Bolts to Remove for Detachment of Pedal Pushrod Assemblies.

Step 3: Remove the bolt that attaches the bellcrank to the brackets and take out the old bellcrank.

Figure 3. Removal of Old/Current Bellcrank.

Step 4: Drill out the rivets securing the brackets and *Bellcrank Firewall Forward Mounting Channel* (Item 3 in the figure below). Use the relevant drill bits and angle drill for this operation. (Refer to rivets indicated by item *998* and *999* below).

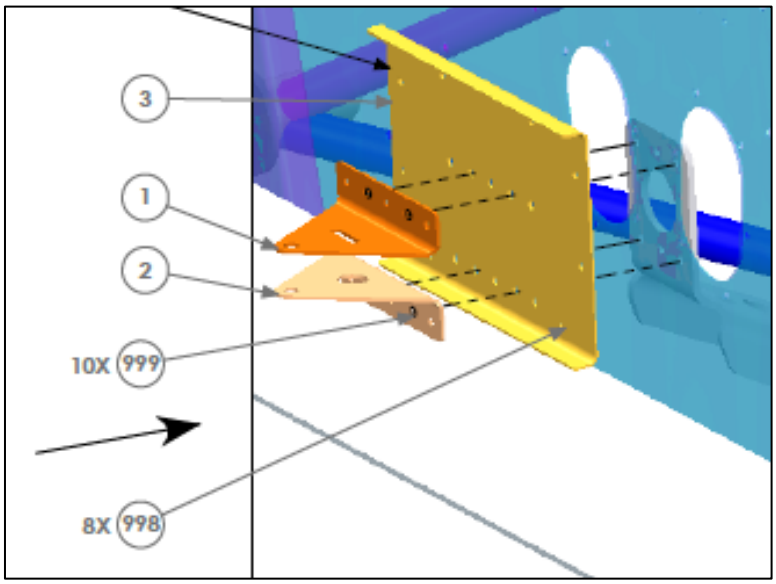

Figure 4. Rivets to be Drilled Out.

Step 5: Remove the bellcrank support bracket.

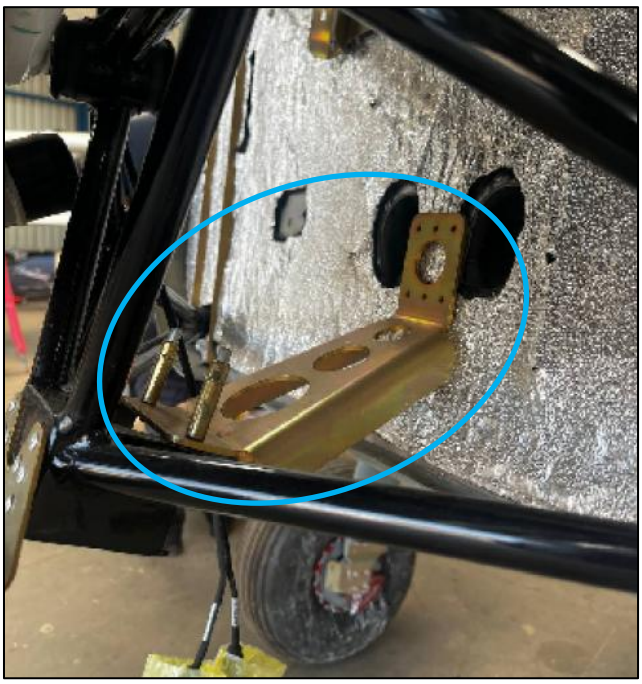

Figure 5. Old/Current Bellcrank Support Bracket to be Removed.

Step 6: Drill new holes through the firewall for the updated brackets, as per the instructions in the construction manuals referenced under section 1.4 of this document.
Use part *CF-CHL-058-C-I (Bellcrank Firewall Forward Mounting Channel)* as a template to drill the new holes.
The new brackets are spaced 13mm further apart than the old brackets. Thus, the holes through the firewall won't line up with the holes in the updated part *CF-CHL-058-C-I* and new holes will need to be drilled. The specific holes mentioned here are shown in the figure below.

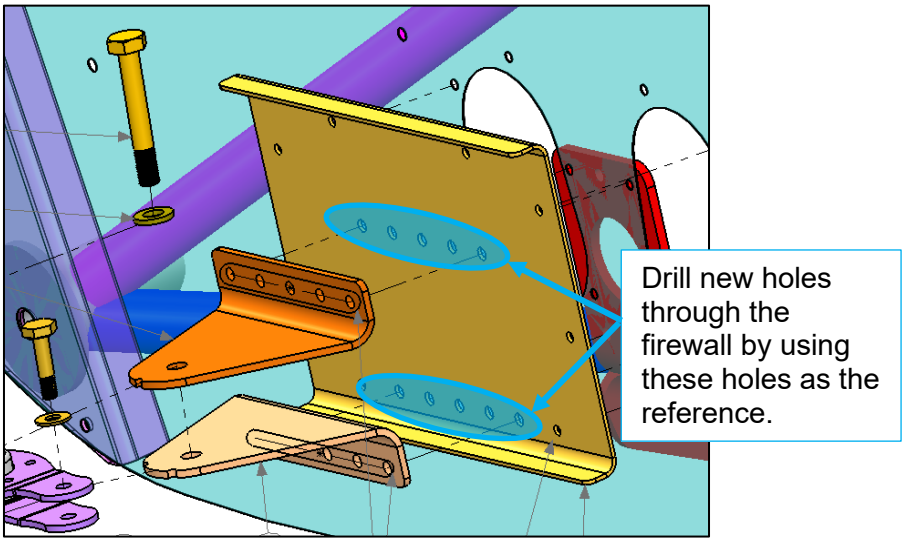

Figure 6. New Rivet Holes for Brackets.

Step 7: Install the new components and the pushrods as per the construction manuals referenced under section 1.4 of this document.

Step 8: Conduct a thorough inspection on the installation of the new components. As well as the bellcrank, while operating the pedals, to confirm that a full range of motion is still achievable in both directions of travel.

Step 9: Re-install the centre console front skin that was removed in Step 1.

Signed on this 6th day of ……May…… 2026

J A L Pitman

ACCOUNTABLE MANAGER

MR JAMES PITMAN