

SERVICE BULLETIN 2013.02

Skyranger and Nynja Microlight aircraft

Control Cable Shackles (réf 604) and Elevator Joiner(réf 124 and125)

1. TITLE

Inspection for material type - Control Cable Shackles and Elevator Joiner.

2. Applicability

This service bulletin applies to Best Off Skyranger and Nynja microlight aircraft with affected parts manufactured between 2009 and 2012

Skyranger serial numbers : 931 to 1053

Nynja serial numbers : 05 to 106 (or from no marked 936.05)

Spares of the affected parts supplied from 2009 to present date.

3. DATE of BULLETIN APPLICATION 28 June 2013

4. REASONS

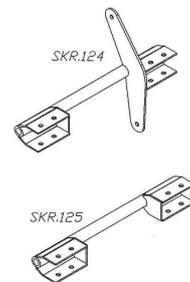
A batch of non optimum stainless steel alloy entered the production process for a limited time. This can result in reduction of strength and cracking of the affected parts.



Shackle 604



Elevator joiner ref 124



variant ref 125

5. SERVICE BULLETIN IMPERATIVE ACTION

5.1 – **Before next flight:** Apply the inspection actions in accordance with the procedures from 6.1 to 6.2 in this Service Bulletin

5.2 – If found to have defective material when inspected in accordance with 6.1 **Control Connection Shackles must be changed before next flight.**

5.3 – If found to have cracks when inspected in accordance with 6.2 **Elevator Joiner must be changed before next flight.**

5.4 - If found to have defective material but no cracks when inspected in accordance 6.2 then visual inspection for cracks must be made before each flight and **Elevator Joiner must be replaced no later than 30th October 2013**

6. INSPECTION PROCEDURES

Equipment necessary to perform inspection: A magnet (a small magnet used to hold paper on a metal flip chart or fridge can be used) and a magnifying glass.

6.1 **Inspection of Control Connection Shackles (ref604)** found on the rear upper elevator cable. Rear ends of both rudder cables. Ends of aileron cables. Also on some aileron cables where cables run parallel with wing leading edges inside cabin (on later series Nynja and option for Skyranger)

Shackles must be removed from aircraft for inspection. Do this one at a time, refitting the shackle before removing the next, to avoid the risk of incorrect reconnection and possibility of reversed controls.

With the clevis pin removed so shackle is bare, test the shackle with the magnet.

If the shackle shows no, or weak attraction to the magnet such that the magnet cannot easily suspend it, the shackle is good.

If the shackle has strong magnetic attraction such that the magnet can easily suspend it the shackle must be replaced before next flight.

An example video of the test can be found here :

<http://www.aeros.com.ua/news.php?lang=english&id=334>

Example test Photo : Shackle fails the test by being easily suspended by the magnet



Use new split pins (ensuring correct size are used) on reassembly. Verify correct reassembly and control sense, deflection angles and free movement before flight - we strongly recommend you involve a second person for a final check.

6.2 Inspection of Elevator Joiner (ref124) :

Inspect carefully with the aid of a magnifying glass all welds and up to 5mm or so from the weld edges, for cracks. **If any cracks are found replace the Elevator Joiner before flight.**

If no cracks are found, next check the joiner with the magnet. The parts to check are the welded on plates with the 6mm diameter attachment bolt holes in them. The check may be done in situ without dismantling from the aircraft. But be away that the bolts will be magnetic, so check some distance away from them - in the position shown in the photo below.

If the magnet does not stick to the plates, then the Elevator Joiner is good.

If the magnet sticks to the plate the Elevator Joiner must be replaced no later than 30th October 2013, and visual Inspection to ensure no cracks exist must be made before each flight. If cracks are found the Elevator Joiner must be replaced before flight.



Test in the area indicated

If changing the joiner, use new split pins on the control connections, and new nyloc nuts on the securing bolts. Verify correct reassembly, control sense, deflection angles and free movement before flight. We also strongly recommend you involve a second person for a final check.

To obtain new parts contact your local dealer, or Best Off info@bestoffaircraft.com Please specify the reference for the Shackle of SKR604 , for the Elevator Joiner SKR124 or 125 as applicable. Parts will be supplied free of charge upon returning the items found defective to your National Importer or Best Off (bestoff aérodrome bp943 82009 Montauban cedex).

7. REFERENCE :

SERVICE BULLETIN 2013-02, 28/06/2013 published on the Internet at <http://www.bestoffaircraft.com>