

AIRWORTHINESS ADVICE NOTICE

TYPE AFFECTED: PW-6U

SUBJECT: Miscellaneous airworthiness information.

BACKGROUND: Issue 1 of this AN lists applicable maintenance information copied from the PW-5 Advice Notice and details of a reported undercarriage failure.

DEFECTS: **1. Quick connectors in aileron and airbrake circuits.**

The quick connectors in the aileron and airbrake circuits are the same as those found in other Polish gliders such as the Jantar, Junior and Puchacz.

Experience has shown that the locking washer on the connecting pin in the connectors may work loose allowing the control to be connected incorrectly as shown in figure 1.

Should the locking washer be loose then the defect must be rectified before next flight.

The defect may be rectified by either replacing the washer with a new part (the best option) or by cold forming the washer until the hole is between 5.980 and 5.990 mm diameter.

Cold forming should be done by either pressing flat between plates or by placing a steel ball (~ 20 mm ø) on the hole and then tapping with a hammer. If using the steel ball method the washer should be turned over and the process repeated.

Before pressing the washer on, the pin diameter should be checked for the correct size of 5.992 to 6.000 mm diameter.

Note: When cleaning the self-aligning ball bearing the pin should not be pressed out of the washer. All cleaning and lubrication of the bearing can be done with the pin in place.

SIGNED:



CHIEF TECHNICAL OFFICER

For and on behalf of:

**THE GLIDING FEDERATION
OF AUSTRALIA**

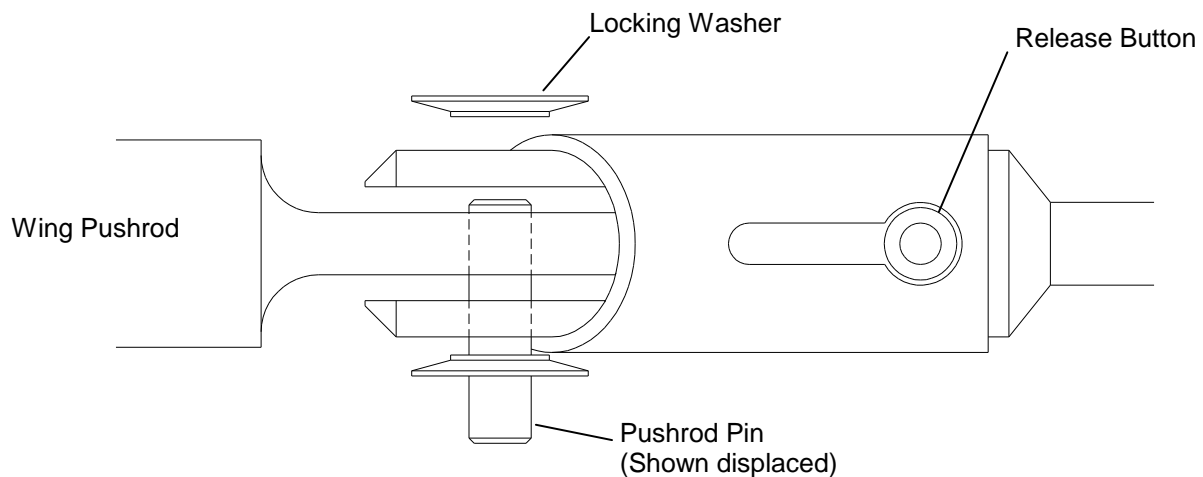


Figure 1 aileron and airbrake connector

2. Cracking of horizontal tailplane rear attachment lugs

Cracks have been found in the lugs of the rear attachment fittings during inspection of two PW-6U gliders as detailed in EASA AD 2010-0108-E / Zakład Szybowcowy “JeŚów” Henryk Mynarski Mandatory Bulletin (MB) BO-78-10-10 (PW-6 sailplane). The British Gliding Association (BGA) has issued a mandatory inspection covering PW-5 and PW-6 types / BGA Airworthiness Inspection Number 048/01/2010 Aft Tail Plane Attachment Fitting – Cracks PW-5 and PW-6.

Failure of the fitting would lead to loss of control. With the tailplane removed carry out a close visual inspection of the aft tailplane fitting lugs for cracks or other signs of distress. If the lugs are cracked or otherwise damaged the aircraft may not fly. In the event of the above failure, a defect report must be submitted.

3. Undercarriage Failure

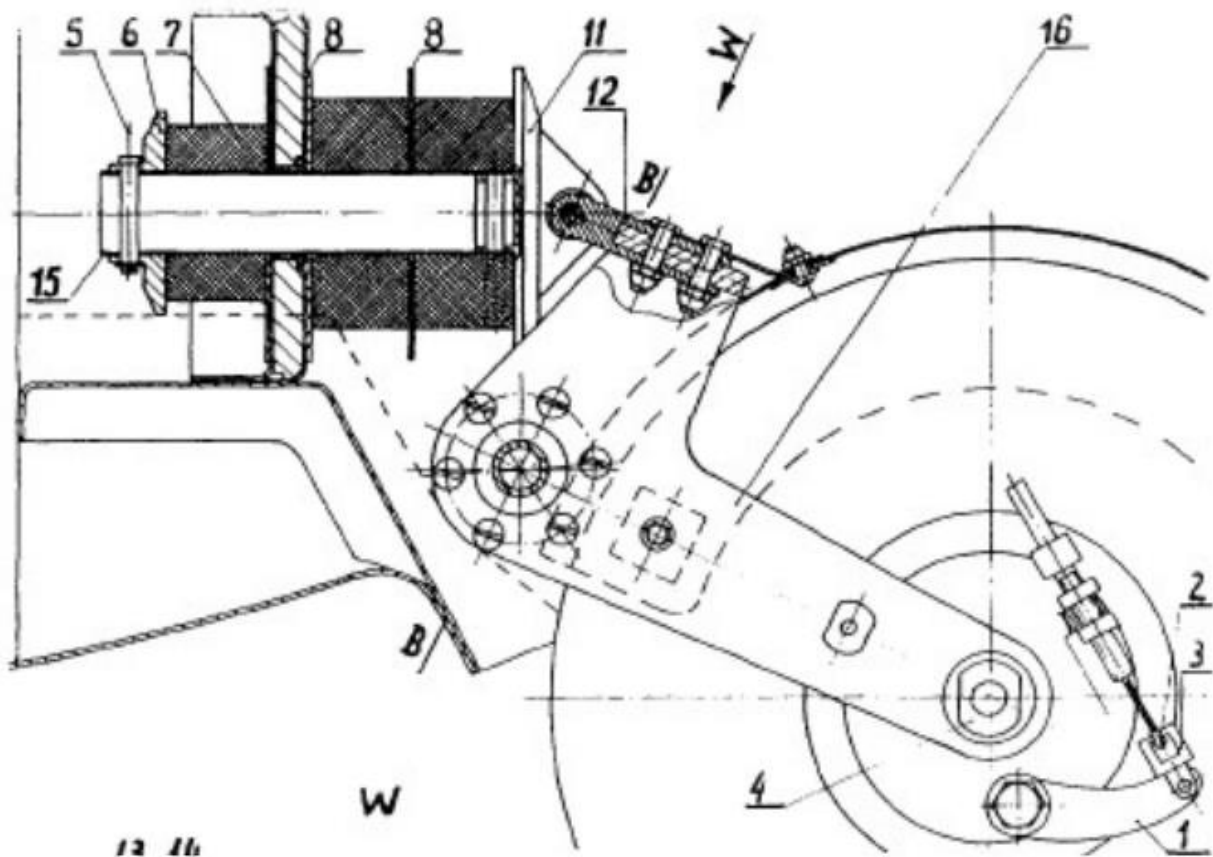
A PW-6 undercarriage was found badly worn and suffering component failure during an annual inspection. The sliding tube connecting the undercarriage swing arm to the main bulkhead, and which supports the cushion rubbers, had failed at the aft end. The pin connecting the tube to the swing arm had torn out of the tube.

The failure appears to be as a result of poor design combined with wear and tear. Failure of the sliding tube is a result of loads imposed by a wheel and its supporting structure swinging down after having been compressed. The failure is not able to be identified at daily inspection, as it only becomes apparent when the

weight is off the wheel. This case was found at annual inspection. The rough strip from which the aircraft operated likely significantly contributed to the failure.

It is highly recommended that the aft pin and sliding tube be closely inspected at each annual inspection. This will unfortunately require extensive disassembly.

See diagram and photo below.



To check for the problem raise the aircraft in its cradle and gain access to the aft pin. This will unfortunately require extensive disassembly of the undercarriage so that the rubber blocks can be slid away to reveal the aft pin and the hole through which it fits in the sliding tube.

The photograph below shows the damaged sliding tube. The displacement of the pin is likely the result of the damage rather than the cause of it. (In other words, the pin hole was damaged and torn allowing the fitting (P/N 11) to move relative to the sliding tube (P/N 15), and then the pin fell out.)

