

LAA/AWA/19/09
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CZAW SportCruiser

Withdrawal of PS. Mk.1 Nose Undercarriage Assemblies

In May 2018, LAA Engineering published an Airworthiness Alert (LAA/AWA/18/03) giving notification to owners of CZAW SportCruiser aircraft that it will remove the approval to use the PiperSport (PS) Mk.1 noseleg. This withdrawal is felt necessary following an in-service failure of a PS. Mk.1 noseleg on an LAA aircraft, even though, up to the moment of the failure, it had been subject to regular and careful pre-flight inspections.

Since May 2013, PS. Mk.1 nose undercarriage assemblies have been allowed as a replacement for the earlier CZAW legs (as supplied in the aircraft kit); these original legs suffered from spindle failures and were withdrawn early in the aircraft type's history.

In addition to the PS. Mk.1 undercarriage assembly, two new designs of spindle assembly were approved. Using a modified version of the CZAW undercarriage leg as a base, the spindle assemblies were replaced. These became available to owners as Standard Modifications for LAA aircraft: SM13605 (AKA - Dover Mod) and SM 13550 (AKA - Derby Mod). The fitment of either of these parts or the fitment of a redesigned leg (PS. Mk.1 Leg - Pt. No. SG-0270N) from the manufacturer allowed the aircraft to return to service.

An increasing number of problems involving the welded connection between the spindle housing and the leg itself have bedogged the PS. Mk.1 legs worldwide and the manufacturers have now significantly strengthened the design. The latest version of the 'factory' undercarriage assembly has part number CSA NLG SG0300N. Use of this leg, which is acceptable to LAA Engineering, must be accompanied with the firewall strengthening kit as described in CSA SB-CR-032.

A copy of the Airworthiness Information Leaflet (AIL) (LAA/MOD/338/020 Issue 1) withdrawing the PS. Mk.1 leg from service can be downloaded [HERE](#).



Fig. 1 This picture shows a failed PS. Mk. 1 undercarriage leg.



Fig. 2 The picture above shows the prototype spindle assembly attached to a strengthened CZAW undercarriage leg. Note that the spindle assembly is subject to an annual inspection requirement (see LAA/MOD/338/019 Issue 1) and the fork, here a two-leafed variant, is subject to inspections laid out in LAA/MOD/338/016 Issue 2.