Incident report: Tecnam P92 leaf spring bolt failure

Microlight type/model:

Tecnam P92 Echo Super

Place of incident:

Whitianga

Other aircraft:

Nil involved

Describe the incident:

On Sunday 18 November., 2019 I had flown from Tauranga to Whitianga. I parked on the grass in the parking area in front of the hangars.

On leaving where I was parked in Whitianga, I applied a little power, to start my taxi to the runway. When the plane had only just started to move, I heard a 'bang' noise, and felt the LHS of the plane sink downwards.

I immediately stopped the engine, and got out to look for the cause. I saw that the nut of the LHS inboard wheel leaf-spring bolt was missing.

I removed the broken bolt from inside the cockpit. The bolt was installed with the nut downwards. The bolt had broken at the start of the threaded section, Le. the bolt had no threaded section at all.

The LHS landing gear would almost certainly have collapsed on the next landing, possibly with severe consequences.

Remedial action:

A LAME from Whitianga fitted a temporary replacement bolt, and I returned to Tauranga at about 5pm on the same day.

He said that it appeared to have been a clean break, with no evidence of any stress-cracking before the bolt broke.

Corrective or preventive action recommendations:

All of the leaf-spring bolts, both inboard and outboard, were replaced by a LAME in Tauranga. The LAME who replaced the bolts in Tauranga suggested replacing the bolts on a fixed frequency, possibly 5-yearly or every 600hrs.