

## ACCIDENT

<b>Aircraft Type and Registration:</b>	Kolb Twinstar MKIII (Modified), G-MYPC	
<b>No &amp; Type of Engines:</b>	1 Rotax 582 piston engine	
<b>Year of Manufacture:</b>	1994 (Serial no: PFA 205-12437)	
<b>Date &amp; Time (UTC):</b>	21 August 2014 at 1850 hrs	
<b>Location:</b>	Field near Shifnal Airfield, Shropshire	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Damage to fuselage pod and boom, wings, landing gear and propeller	
<b>Commander's Licence:</b>	National Private Pilot's Licence	
<b>Commander's Age:</b>	32 years	
<b>Commander's Flying Experience:</b>	64 hours (of which 5 were on type) Last 90 days - 4 hours Last 28 days - 0 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

## Synopsis

Whilst flying at circuit height, the pilot experienced severe vibration, probably from the engine/propeller. He performed a forced landing in a field but overran into a hedge, causing extensive damage. It is possible that damage to the propeller may have been responsible for the vibration.

## History of the flight

The pilot, who had not flown for about nine weeks, was practising circuits. The engine had recently been fitted with a new crankshaft and he had run it in as per the manufacturer's instructions. He performed two approaches to Runway 18 before landing and backtracking to take off again. He climbed to circuit height (500 ft), retracting the flaps at 200 ft but, as he reduced power to cruise rpm, he heard a "rough noise" coming from area of the engine. This was accompanied by a violent vibration throughout the airframe and the pilot looked for his options to carry out a forced landing, being somewhat limited by the presence of several sets of power cables. Eventually, he chose a field and touched down in it. Unfortunately, his groundspeed was too high and he realised that he would collide with a wooden fence at the end and so he tried to climb over it. There was insufficient energy to clear the fence, which was struck by the main landing gear wheels, and the aircraft came to a halt in a hedge further on.

In addition to the extensive damage to the airframe, the pilot later observed that two of the three propeller blades had been damaged – one was missing a few millimetres of its tip and the other blade had started to delaminate at the tip. He believes that if either damage had pre-existed the landing, then that might explain the vibration. In addition, he noticed that the starter motor mounting flange had a piece missing (Figure 1). Again, he was uncertain whether this piece may have been liberated in flight and struck the propeller, or occurred as a result of the accident.



**Figure 1**

Starter motor mounting flange showing missing section