Diamond DA40D Diamond Star, G-CCHE

AAIB Bulletin No: 6/2004	Ref: EW/G2004/04/10	Category: 1.3
Aircraft Type and Registration:	Diamond DA40D Diamond Star, G-CCHE	
No & Type of Engines:	1 Thielert TAE 125-01 piston engine	
Year of Manufacture:	2003	
Date & Time (UTC):	12 April 2004 at 1150 hrs	
Location:	Cranfield Airfield, Bedfordshire	
Type of Flight:	Training	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Undercarriage damaged	
Commander's Licence:	Student pilot	
Commander's Age:	20 years	
Commander's Flying Experience:	20 hours (all on type)	
	Last 90 days - 20 hours	
	Last 28 days - 15 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The student pilot was carrying out circuits to Runway 22 on his fourth solo flight. During the climbout from a 'touch and go' landing, at about 400 feet agl, the engine began to run unevenly and ATC advised the pilot that they could see smoke coming from the aircraft. ATC cleared the aircraft to continue in the circuit and advised the pilot that he was "number one to land": the weather conditions were benign. After what appeared to be a normal landing, but to the right of the runway centreline, the aircraft was seen to move further to the right and depart the runway, at speed, into Taxiway C. It then veered left off the taxiway onto a grass area and stopped. The airfield Rescue and Firefighting Service attended the scene but there was no fire and the pilot was uninjured. However, in the course of the landing roll the left main landing gear had been damaged.

The pilot stated that he had attempted to increase power during the circuit but without success. During the landing he left the power lever partly open and following the touchdown he reported that the aircraft suddenly appeared to accelerate. The pilot commented that as he was attempting to stop the aircraft safely he probably applied more pressure on the right brake than the left. With the power still greater than idle, the aircraft vacated the runway onto the taxiway, which was the normal exit point after a landing, and then onto the grass verge, where it stopped. The pilot shut the aircraft down, returning the power lever to the idle position as he did so.

This was the third occasion on which ATC had observed smoke emanating from this aircraft during the climbout after a take off. It was an intermittent symptom which tended to clear after a short time,

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however, on this occasion the pilot reported that the smoke continued until after the aircraft had landed. After the two previous reports, which had included increased levels of vibration but no apparent loss of power, engineering investigation and rectification work, as advised by the manufacturer, had been carried out. The operator's current engineering investigation into the cause of the smoke and uneven running of the engine was ongoing at the time of this report and will continue once the left main landing gear has been repaired.

The pilot has since flown both dual and solo.