



Robinson R44 Carburettor Accelerator
Pump

AWB 73-004 **Issue :** 1
Date : 16 April 2008

1. Applicability

All Robinson R44 Raven I helicopters, and any piston powered helicopter using a carburettor incorporating an accelerator pump in the fuel delivery circuit.

2. Purpose

To bring to the attention of operators and maintenance personnel that difficulty in engine starting may indicate a malfunctioning accelerator pump system.

3. Background

An operator has reported difficulty in engine starting which was traced to a faulty carburetor accelerator pump system.

Engines with faulty accelerator pumps may suffer either 'hesitation' or stop when the engine is accelerated from idle to hover power, typically upon rapid throttle application at the bottom of a practice autorotation.

Should the engine hesitate or stop instead of delivering commanded power for flight during autorotative practice, loss of control of the helicopter may result.

Difficulty in starting may be the first indication of a malfunctioning accelerator pump. The carburetor accelerator pump is usually employed to prime the engine by repeatedly moving the throttle control from closed to fully open.

Persisting with an engine that is difficult to start may later result in unreliable engine performance under critical flight conditions.

4. Recommendation

CASA strongly recommends that whenever difficulty in starting the engine is experienced, that the proper function of the carburettor accelerator pump is checked during trouble shooting.



AIRWORTHINESS BULLETIN

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5. Enquiries

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