

Bombardier (Boeing Canada/De Havilland) DHC-8 Series Aeroplanes

AD/DHC-8/67 **Main Landing Gear - Visual Leak Check** **12/99**
DM

Applicability: All DHC 8 series 100, 200 and 300 aircraft, serial numbers 003 through 531.

- Requirements:
1. Perform a visual leak check of the endcaps (Part Number 34629) of the landing gear selector valve (Part Number 57420-1, 57420-3 or 57420-5 for Series 100 and 200 aircraft and Part Number 57420-5 for series 300 aircraft) in accordance with instructions in Bombardier Alert Service Bulletin A8-32-145 dated 28 June 1999.
 2. Subject to indications of a leak at requirement 1 above, replace endcap(s) or complete selector valve in accordance with instructions in Bombardier Alert Service Bulletin A8-32-145 dated 28 June 1999.
 3. Repeat the inspection at requirement 1 above (and the maintenance action at requirement 2 above if required).
 4. Replace landing gear selector valve with P/N 57240-5A. P/N 57240-5 valves may be reworked to P/N 57240-5A standard.

Note: Transport Canada Airworthiness Directive CF-99-22 dated 30 August 1999 refers.

- Compliance:
1. Within 100 flight cycles of the effective date of this Directive.
 2. Prior to further flight.
 3. Every 400 flight hours or at each 'A' check, whichever occurs later.
 4. Within 12 months of the effective date of this Directive.

This Airworthiness Directive becomes effective on 6 October 1999.

Background: Investigation into the collapse of a main landing gear revealed the cause as an external hydraulic fluid leak in the landing gear selector valve (Part Number 57420-5) due to a fracture of the spool end cap. In service experience has also shown that landing gear selector valves that have not had modification 8/0530 incorporated (upgrade to Part Number 57240-5 configuration) are more susceptible to internal leaks, and excessive internal leaks can also contribute to the collapse of the landing gear. This directive introduces initial and repeat visual inspection of the landing gear selector valve for leakage until the landing gear selector valve can be replaced (or upgraded) to 57420-5A standard. Installation of , or upgrade to, landing gear selector valve Part Number 57420-5A, is terminating action for the inspection introduced by this Directive.