AD/ML-M4/15 Retirement Life of Fatigue Critical Components 12/88 DM Amdt 4

Applicability: All Models.

Requriement:

1. Remove wing lift strut forks and inspect for cracking using a magnetic particle technique in accordance with ANO 108.8.

2. Retire wing lift strut forks from service.

3. Install placards reading NO STEP in letters at least 25 mm high on the left and right wing struts, either by painting or by the use of durable adhesive labels, in a colour contrasting to the strut colour, the lettering to commence approximately 150 mm from the bottom of the struts and be oriented so that it can be read when looking in a forward direction with respect to the aeroplane. For those aircraft which have a fairing over the front and rear strut lower ends a single placard on the fairing will suffice, otherwise both struts must be placarded.

Note: The standard M4 series forks have a 7/16 inch threaded shank diameter. Some aircraft have been retrofitted with M5 series struts which have forks with a 1/2 inch threaded shank. The M5 type forks are exempt from the requirements of this Directive, however it is recommended that the "NO STEP" placards be retained for consistency and as an additional safeguard against accidental damage.

Compliance: For Para 1 - Prior to achieving 200 hours component time in service or three years after initial installation whichever occurs first, and thereafter at intervals not exceeding 500 hours component time in service. For aircraft which have exceeded these limits, perform the initial inspection within 100 hours time in service after 30 November 1986.

For Para 2 - Retire wing lift strut forks prior to the accumulation of 1000 hours component time in service or within 200 hours time in service after 30 November 1986, whichever occurs later.

For Para 3 - Within 100 hours time in service after 30 November 1986.

Background: Service experience with forks on other aircraft types indicates the possibility of fatigue failure. The heavier M5 type forks are exempt from the requirements. This Amendment deletes the life limitation previously placed on the wing, on the basis of data received from the manufacturer which shows that wing fatigue failure is unlikely within the economic life of the airframe.