

KU-KI-527

No. TCD-5030-99

Date May 17, 1999

Japan Civil Aviation Bureau

TAIKUSEI-KAIZEN-TSUHO

Airworthiness Directive

The undermentioned examinations or modifications are mandatory

1. Applies to : Mitsubishi Heavy Industries (MHI) Model MU-2B-30/-35/-36 airplane : Serial Number (S/N) 501 through 696 (except S/N 652 and 661)

2. Compliance required as indicated, unless already accomplished.

To prevent the propagation of fatigue cracks of fuselage frame, accomplish the following paragraphs 2.1-2.2

2.1 Within 200 flight hours after the effective date of this Airworthiness Directive(AD), and thereafter at intervals not to exceed 2,000 flight hours, inspect the fuselage frame in accordance with the MHI Service Bulletin No. 209B dated April 19, 1997, or further JCAB approved revisions (SB). If cracks are found as a result of the inspection, modify the fuselage frame in accordance with SB.

2.2 An alternative means of compliance with this AD may be used, if approved by the Director-General of JCAB.

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<p>3. Remarks</p> <p>3.1 This AD becomes effective on May 24, 1999.</p> <p>3.2 MHI Service Bulletin No. 209B dated April 19, 1999, or further JCAB approved revisions pertain to this subject.</p>		

Additional Information on Japanese Airworthiness Directive No.TCD-5030-99

<u>Aircraft Manufacturer/Model</u>	<u>JCAB AD/Date</u>	<u>Service Bulletin/Rev.No./Date</u>
Mitsubishi Model MU-2B-30, -35 and -36 airplane	TCD-5030-99, issued on May 14, 1999	MHI Service Bulletin No.209 Rev.B, issued on April 19, 1999

1. Describe the unsafe condition, and its root cause. Include description of how the problem could affect the safe operation of the airplane.

Propagation of fatigue cracks around the screw holes of fuselage frame at STA 4610, STA 4850 and STA5605 due to excessive gap between frame flange and splice angle. The cracks could result in wing separation.

2. Provide the number and description of occurrences which prompted the AD.

The crack which exceeded the repairable limit specified in SB No.209 Rev.A was found in an airplane. Possibly the crack might occur due to omission of the initial inspection which is required within 200 flight hours by the SB. Because the damage exerted significant influence to the structural integrity, JCAB decided to issue AD to order the initial inspection.

3. What is the compliance time and consequences if extended? What would be considered an appropriate grace period for compliance?

Extension of the compliance time is not allowed.

4. Cost of parts and/or installation workhours for the owner/operator (data from the manufacturer and their supplier, if applicable)

Approximately 6 man-hours for the inspection.

Approximately 10 man-hours per repair.

See page 1 of SB.

5. If parts are required, are they available for all aircraft?

Please contact to the manufacturer.

See page 7 through 14 of SB.

6. What category best describes the cause of the unsafe condition:

<input type="checkbox"/> Design Problem	<input checked="" type="checkbox"/> Quality Control Problem	<input type="checkbox"/> Operational
<input checked="" type="checkbox"/> Maintenance	<input type="checkbox"/> Unapproved Parts	<input type="checkbox"/> Other (Specify)

7. Should a ferry flight be permitted? If no, why not?

No. It should not be permitted, because the damage exerts significant influence to the structural integrity.

8. Number of aircraft affected, by model designation and serial number (Worldwide)

Please contact to the manufacturer.

9. Is further action anticipated to be necessary to correct this unsafe condition? If so, please provide description and recommended compliance time.

No further action is required.

10. Other:

None.