AD 94-11-04 Hub Arm Assembly

Effective Date: June 10, 1994

As Amended by 59 FR 27442

94-11-04 MITSUBISHI HEAVY INDUSTRIES, LTD.: Amendment 39-8920; Docket No. 94-CE-09-AD.

Applicability: The following model and serial number airplanes, certificated in any category:

Model	Serial Nos.
+	
MU-2B-26A	All serial numbers
MU-2B-36A	All serial numbers
MU-2B-40	All serial numbers
MU-2B-60	All serial numbers
MU-2B-36	All serial numbers modified
	by Supplemental Type
	Certificate SA2413SW

Compliance: Required within the next 25 hours time-in-service after the effective date of this AD, unless already accomplished.

To prevent propeller hub arm assembly failure because of high vibration frequencies during ground idle speed and possible separation of the propeller from the airplane, which could result in loss of control of the airplane, accomplish the following:

(a) Adjust the underspeed governor minimum stop (ground idle) to a range of 76.5 percent to 78.5 percent in accordance with the Allied Signal Garrett Maintenance Manual (Report No. 72-00-95 for TPE331-10-501M or Report No. 72-00-27 for TPE331-501M or -511M), chapter 72-00-00, General-Adjustment/Test; and chapter 76-10-01, Control Linkage Assembly, Maintenance Practices.

NOTE 1: One clockwise turn of the adjusting screw will increase the ground idle engine speed approximately 5 percent.

- (b) Modify the airframe condition control linkage by adjusting Rod 1 and Levers 2 and 7 as specified in Figure 1 of this AD in accordance with Chapter 6, Section 9.2, of the applicable Mitsubishi MU-2 maintenance manual.
- c) Modify the tachometer indicator marking by accomplishing the following:

- 1. ROD
- LEVER
- CYLINDER ASSEMBLY
- 4. ROD (Reference dimension 3.39 inches * by 0.02 inches)
- 5. BELL CRANK
 6. ROD
 7. LEVER

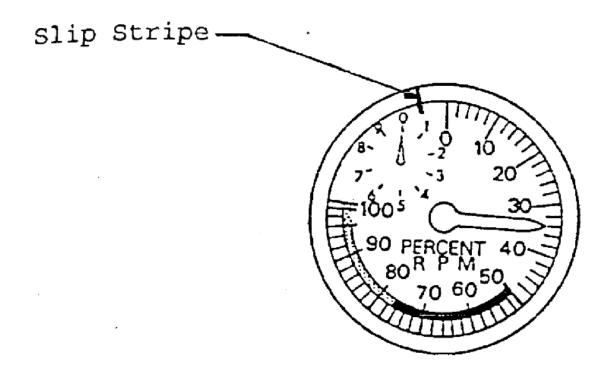
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(1) Apply red lacquer (Federal Standard 595a, number 11105 or equivalent) to the tachometer indicator glass so that the red operating arc extends to 76.5 percent.

& CRUISE TAKE-OFF LAND

NOTE 2: The red operating arc range will now be from 50 percent to 76.5 percent.

(2) Using white lacquer (MIL-L-7178, color number 511 or equivalent), apply a 1/16-inch wide by 1/4-inch long slip stripe over the tachometer glass and indicator case at the 11:30 o'clock position as specified in Figure 2 of this AD.



- (d) Fabricate a placard with the following words utilizing letters at least .10-inch in height: "Minimum engine idle speed 76.5 percent". Install this placard on the instrument panel in close proximity to the tachometer within the pilot's full view.
- (e) Modifying the tachometer dial through an FAA-approved instrument repair shop to extend the red operating arc to 76.5 percent is equivalent to those actions required by paragraph (c)(1), (c)(2), and (d) of this AD, and may be accomplished in lieu of those actions.
- (f) Incorporate the following revision into the applicable Airplane Flight Manual:

Model	Effective pages	Date and revision
	1	level
+	+	
MU-2B-26A	1, 2, Revision	FAA approved 1-12-77
	Log 2, 1-5, 5-10,	reissued 03-25-86
	5-13, and 5-23	revision 4
MU-2B-36A	1, 2, Revision	FAA approved 01-12-77
	Log 2, 1-5, 2-10,	reissued 02-28-86

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5-10, 5-13, and 5-23 | revision 6
MU-2B-40
             1, 2, Revision
                                   | FAA approved 3-2-78
               Log 2, 1-5, 2-10,
                                    reissued 03-25-86
                5-10, 5-13, 5-14,
                                    revision 4
                and 5-24
                                    | FAA approved 3-2-78
MU-2B-60
             1, 2, Revision
                Log 2, 1-5, 2-9,
                                   reissued 09-24-85
                5-10, 5-13, 5-14,
                                    revision 5
                and 5-24
MU-2B-36
             1 through 31
                                    | FAA approved 2-1-78
                                      reissued 12-18-92
Modified by
STC SA2413SW
                                       revision 1
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- (g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.
- (h) An alternative method of compliance other than that referenced in paragraph (e) of this AD or adjustment of the compliance time that provides an equivalent level of safety may be approved by the Manager, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209. The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Wichita ACO.

(i) The incorporation required by this AD shall be done in accordance with the following airplane flight manual revisions (as applicable):

Model	Effective pages	Date and revision
	I	level
+		
MU-2B-26A	1, 2, Revision	FAA approved 1-12-77
	Log 2, 1-5, 5-10,	reissued 03-25-86
	5-13, and 5-23	revision 4
MU-2B-36A	1, 2, Revision	FAA approved 01-12-77

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Log 2, 1-5, 2-10, reissued 02-28-86
                5-10, 5-13, and 5-23 | revision 6
MU-2B-40
             | 1, 2, Revision
                                   FAA approved 3-2-78
                Log 2, 1-5, 2-10,
                                    reissued 03-25-86
                5-10, 5-13, 5-14,
                                   revision 4
                and 5-24
MU-2B-60
             | 1, 2, Revision
                                   FAA approved 3-2-78
                Log 2, 1-5, 2-9,
                                    reissued 09-24-85
                5-10, 5-13, 5-14,
                                   revision 5
                and 5-24
MU-2B-36
             | 1 through 31
                                    | FAA approved 2-1-78
Modified by
                                       reissued 12-18-92
STC SA2413SW
                                       revision 1
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This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Mitsubishi Heavy Industries, Ltd., 5-1 Marunouchi 2 Chome, Chiyoda-ku, Tokyo Japan. Copies may be inspected at the FAA, Central Region, Office of the Assistant Chief Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW., 7th Floor, suite 700, Washington, DC.

⁽j) This amendment becomes effective on June 10, 1994.