

Maule Aircraft Corporation

SPENCE AIR BASE -- MOULTRIE, GEORGIA 31768 -- PHONE 912/985-2045



10 March 1983
Page 1 of 2
Rev. A dated: 9/3/86

SERVICE LETTER #49

SUBJECT: New Flap Ratchet.

AIRCRAFT AFFECTED: MAULE Model M-5-180C, Ser. No. 8001C thru 8022C.

COMPLIANCE: Optional.

AUTHORITY: This Service Letter is FAA Approved.

BACKGROUND: Many MAULE owners have requested increased flap travel for their airplanes. The new flap ratchet allows 5° - 8° more travel at each setting. There is also available an alternate lever which is bent upward. This allows more clearance under the lever for easier grasping. Either unit can be used separately.

MATERIAL REQUIRED:

- (1) Flap Ratchet p/n 3207B
- (1) Alternate Flap Lever Assembly p/n 3058F-28 (opt.)
- (1) Flap Handle Placard (20°-40°)
- (1) Installation Sketch

INSTALLATION INSTRUCTIONS AND ACTION TO BE TAKEN:

1. Remove left front seat.
2. Remove control cover (ref. Item 6, Group C-4 of Parts Catalog)
3. Remove old ratchet: (See Sketch on page 2)
 - (a) Remove forward ratchet attach bolt and nut.
 - (b) Remove aft stop bolt and nut.
 - (c) Slide ratchet forward thru plates of flap handle assembly.
4. Install new ratchet:
 - (a) Slide ratchet aft thru plates of flap handle assembly.
 - (b) Install forward attach bolt and nut and secure with cotter pin.
 - (c) Install aft stop bolt and nut removed from old ratchet.
NOTE: 20°-40° ratchet has forward stop bolt and nut deleted.
 - (d) Operational check flap system.
5. Reinstall control cover.
6. Reinstall left front seat.
7. Remove 15°-35° placard from flap handle and apply new placard.
8. Remark Airspeed Indicator: Extend white arc from 60 to 53 mph by applying white tape over instrument glass. Add slippage mark by painting a thin white line over glass and bezel.
9. Attach AFM Supplement No. 1 to FAA Approved Flight Manual dated 19 April 1979.
10. M-5-180C, s/n's 8001C thru 8014C, 8016C thru 8019C and 8021C MUST COMPLY WITH SERVICE BULLETIN #7 when 20°/40° Flap Ratchet is installed in compliance with this service letter.

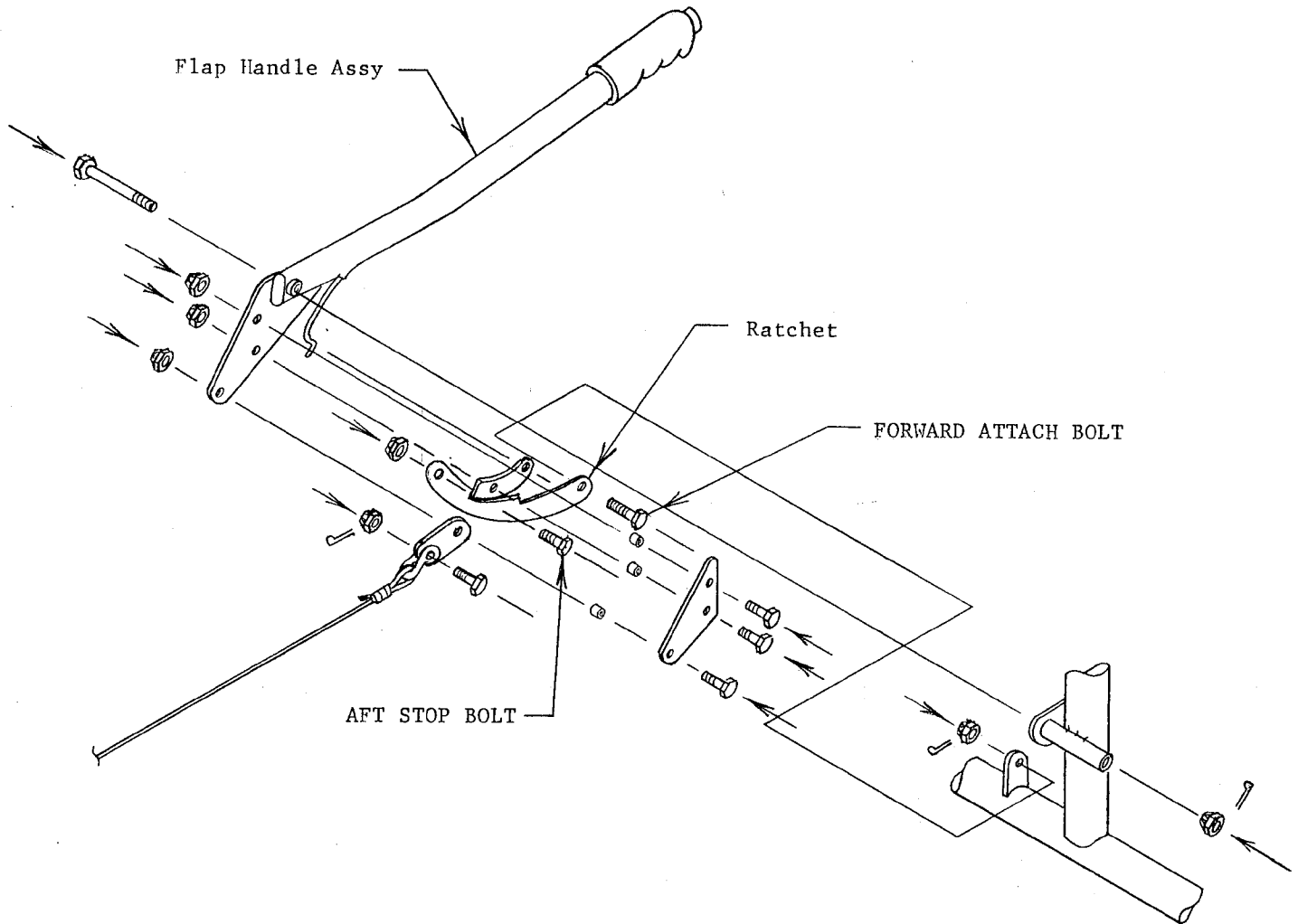
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When modification is completed, make proper Log Entry, fill out Service Letter #49 Compliance Record Sheet and return to Maule Engineering Records.

MAULE AEROSPACE TECHNOLOGY, INC.

SERVICE LETTER #49 - COMPLIANCE RECORD

Airplane Serial Number _____

Airplane Registration Number _____

The following action was taken with respect to this service letter:

Service letter #49 completed

Certified by _____

(Signature)

(Printed Name)

Title _____

(Owner, A&P), IA, etc.)

In an effort to keep our mailing list current for sending Service Letters, Service Bulletins, etc., please fill in the following:

Owner's name _____

Owner's address _____

Mail this Compliance Record to: Maule Aerospace Technology, Inc.
Engineering Records
2099 GA Hwy. 133 S.
Moultrie, GA 31788

MAULE AIRCRAFT CORPORATION

AIRPLANE FLIGHT MANUAL

MAULE M-5-180C

(s/n 8001C-8069C)

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LOG OF SUPPLEMENTS

SUPP. NO.	NO. OF PAGES	DESCRIPTION	APPROVAL DATE
1	2	Installation of 20°/40° Flap Ratchet P/N 3207B – Maule Service Letter No. 49.	04/01/83
2	2	Flight operation with either one (not both) of the Front doors removed .	08/20/02
3	2	Installation of Lamar Alternator Control System – Maule Service Letter No. 60.	09/20/84
-	2	Operation of aircraft when M-5 Wing Assemblies 2110X-30 (with Main Fuel Tanks P/N 2167X) are installed - Maule Modification Kit No. 15 .	10/08/96
-	5	Installation of Apollo MX20 Multi-Function Display - Maule Drawing 7265A	08/15/02

Maule Aircraft Corporation
SPENCE AIR BASE :: MOULTRIE, GEORGIA 31768 :: PHONE 912/985-2045



FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT NO. 1

FOR

MODEL M-5-180C

Reg. No. _____

Ser. No. _____

This Supplement must be attached to the FAA Approved Airplane Flight Manual dated 19 April 1979 when Ratchet p/n 3207B is installed in accordance with Maule Service Letter No. 49.

The information contained herein supersedes and supplements the information of the basic Airplane Flight Manual; for limitations, procedures and performance information not contained in this Supplement, consult the basic Airplane Flight Manual.

FAA APPROVED: _____

Thomas C. Stittley
Acting Manager, Atlanta Aircraft Certification Office, FAA, Central Region

APR 1 1983

DATE: _____

MAULE AIRCRAFT CORPORATION

MOULTRIE, GEORGIA

AFM SUPPLEMENT NO. 1

M-5-180C

SECTION I

OPERATING LIMITATIONS

AIRSPEED LIMITS: All airspeeds are calibrated airspeeds.

EXPLANATION OF AIRSPEED INDICATOR MARKINGS:

White Arc - Flap Operating Range, 53 - 94 mph (46 - 82K): Extends from full flap, power off stall speed at 2300 lbs. (V_{so}) to the maximum flaps extended speed (V_{fe}).

SECTION II

NORMAL FLIGHT OPERATIONS:

FLAP SETTINGS:

Normal Takeoff - 0° (No flaps) 20° (First Notch) flaps permissible for takeoff.

Short, Rough, Soft Field Takeoff - 40° (Second Notch) until safely airborne, then retract to 20°.

Normal Climb - 0°

Best Angle Climb - 20°

Landing - 40° (0° or 20° permissible).

Climbing:

Best Rate of Climb - 90 mph CAS, no flaps

Best Angle of Climb - 75 mph CAS, 20° flaps