



(This Service Letter is FAA/DMER SW-1 Approved)

SUBJECT: NAV-2 (Group 1), B6 (Group 3) Autopilot, and P. C. Aileron Servo Diaphragms

This Service Letter reidentified as Service Bulletin M 20-133 per Service Instruction M20-15.

MODELS AFFECTED: M20C 2742, 2807 thru 3347
M20E 303, 400, 470 thru 1043

TIME OF COMPLIANCE: At Owners Discretion

INTRODUCTION: Service life of the rubber diaphragms may be increased by reworking the wing servo installation per the following instructions.

INSTRUCTIONS: These steps must be repeated twice; once for each side of the wing.

1. Remove the large inspection plate located in the lower side of the wing just outboard of wing station 147.75.
2. Remove the 3/16" bolt used to secure the aileron servo chain to the aileron bellcrank.*
3. Remove the 3/8" plastic line at the rear of the servo.
4. Remove the 5/16" nut used to secure the servo to the mounting bracket.
5. Remove the servo from the wing.
6. Drill the six rivets out of the wing used to secure the servo bracket.
7. Remove the servo bracket from the wing.
8. Remove the next rivet outboard of the six rivets previously removed in the upper and lower stringers.
9. Install the new servo bracket in the wing, aligning the pilot holes in the bracket with the eight holes in the wing, making sure the odd dash number part goes to the left side of the wing and the even dash number part to the right side of the wing.
10. Install the new servo bracket with AN470AD4 rivets 8 required (Ref. Figure 1).
11. Install the servo in the outboard most set of holes, securing with hardware previously removed (autopilot only).
12. Install the plastic hose on the servo.
13. Install the chain to the bellcrank in same manner as before removal.
14. Test autopilot to see that system is working properly.
15. Reinstall inspection plates.

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COMPLIANCE: Upon compliance of this Service Letter, please fill out the enclosed compliance card and return to Mooney Aircraft for our records.

SERVICE LETTER KIT NO. 20-133:

ITEM	NO. REQ'D
210230-501 Bracket	1
210230-502 Bracket	1

* On all autopilots there should be an extension on the bellcrank, Brittain Part no. 1753. If these extensions are not installed on your aircraft, the autopilot will not function properly. Please notify your local distributor if these bellcrank extensions are not installed. He will furnish you these extensions with the new servo brackets.

This Service Letter Kit may be purchased from your local Mooney Distributor. Direct factory orders will not be accepted.