

MOONEY AIRCRAFT, INC.

SERVICE LETTER 20-76

(This Service Letter Is FAA Approved)

DATE: January 17, 1961  
SUBJECT: Modification of wing in main fuel tank area  
MODELS AFFECTED: M-20/M-20A, Serial Numbers 1002-1625  
TIME OF COMPLIANCE: On or before next periodic inspection

INTRODUCTION

Certain modifications have been made to the M-20A wing in the area of the main fuel tanks on all airplanes subsequent to Serial Number 1625. This modification was accomplished to prevent the main landing gear attach bolts, which extend through the main spar into the main tank area of the wing, from possibly damaging the main fuel tanks. We recommend that this modification also be made to the aircraft indicated as outlined in the instructions below.

For this modification, order Service Letter 20-76 Kit from the Spare Parts Department, Mooney Aircraft, Inc., 1712 Water Street, Kerrville, Texas. The Kit will be sent on a no-charge basis upon receipt of order, including the "N" number or Serial Number of the aircraft involved.

PARTS LIST

S.L. 20-76 Kit

1) 2139-11	Block	2 ea.
2) 2139-9	Block	2 ea.
3) 2139-7	Block	2 ea.
4) 6408-29	Felt	4 ea.
5) 6408-49	Felt	4 ea.
6) 6408-27	Felt	4 ea.
7) 6408-7	Felt	2 ea.
8) 6408-45	Felt	4 ea.
9) 6408-51	Felt	6 ea.
10) <del>6071-11</del> 6072-15	Scupper Box	<del>2 ea.</del> 1 ea
11) Compliance Card		1 ea

INSTRUCTIONS

- 1) Remove left and right main fuel tanks from airplane, inspect and repair or replace tanks if necessary.
- 2) Remove the tank support pads from the wing rib at Sta. 42.75 (center rib of tank area) as shown in Figure 1. Remove any excess wood from center rib where tank bears against rib at the top of the tank. Also trim center rib at nose, as shown in Figure 1.

- 3) Remove varnish from face of main spar and glue the spacer blocks in position as shown in Figure 1. Use clamps to acquire pressure for gluing.
- 4) Install the felt pads as shown in Figure 1. Use 3-M trim cement to attach felt pads.
- 5) Install the tank in the wing and mark the rib at Sta. 22.875, (wing root rib) as necessary to cut the tank boss opening in the lower cap of the rib to clear the tank boss. Cut only the amount necessary from the rib cap to clear the tank boss. The boss should, however, not be in contact with the rib at any point.
- 6) After cutting the relief in the root rib, install at least three (3) screws in the tank cover to position the cover. Mark the tank cover for clearance around the tank drain and enlarge the hole in the cover to clear the tank drain boss.
- 7) After fitting the fuel tanks in their new positions, it may be necessary to re-fit or install new scupper boxes on top of each tank at the tank filler opening. This should be done after all other operations have been completed. New scupper boxes are included in each kit, but they need not be installed unless necessary.
- 8) Apply two coats of spar varnish to the entire tank area and reinstall the tanks and fittings and the tank covers in the same manner as removed.
- 9) Remove all three fuel tank caps and drill #67 (.032) or #65 hole in center of filler cap to vent fuel tanks in case ice or other obstruction plugs tank vent lines. (See Drawing 6439 attached.)
- 10) Please fill out and return the enclosed compliance card upon completion of the above rework.