SUBJECT: M20M - ENGINE FOCAL MOUNT ORIENTATION CLARIFICATION

MODEL/

S/N AFFECTED: M20M, S/N 27-0002 THRU 27-0069, EXCLUDING 27-0025

TIME OF

COMPLIANCE: AT ENGINE OR ENGINE MOUNT CHANGE

## INTRODUCTION:

Part of the early development of the M20M aircraft consisted of a change to the focal point angle on the engine mounting adapters and the tubular engine mount. This is a slight angle change that required new mounting adapter blocks from Lycoming, a new Mooney designed engine mount and new rubber isolators for the engine mount points.

It is possible for the engine with the original focal angle and an engine mount with the new focal angle (31°) (or vice-versa) to be coupled together. However, a mis-match should be obvious to maintenance personnel; the resultant engine installation will not be positioned correctly in relation to the cowling.

This Service Instruction is to advise field personnel of this possibility in case of an engine or engine mount change.

## **INSTRUCTIONS:**

- 1. If the engine on any of the above S/N aircraft is to be changed for any reason, the airframe and engine log book MUST BE REFERRED TO to determine if the aircraft being serviced has had the engine mount changed from the original configuration to the the new 31° focal point configuration.
- 2. The original Mooney engine mount configuration part number is 590047-501. The new 31° Mooney engine mount configuration part number is 590048-501. The Lycoming adapter blocks on the engine as well as the Lord Mfg. isolation mounts will also have been changed for the 590048-501 Mooney engine mount installation.

This configuration has been installed on production aircraft, S/N 27-0001, 27-0025 and 27-0070 and ON. There may have been other aircraft within this S/N range retrofitted by field personnel also. This retrofit action is difficult to keep track of by factory personnel. That is the reason for the check of the aircraft and engine log books.

- 3. There are two conditions that require special handling if the aircraft is in original configuration:
- —When the engine is to be replaced with a new or factory re-manufactured engine the Lycoming adapter blocks will need to be removed from the existing engine and placed on the replacement engine.
- —When the engine mount is to be replaced for any reason, the original engine configuration Lycoming adapter blocks will require replacement with Lycoming 31° focal blocks, P/N 12A21320 and the new Lord Mfg. rubber isolators, P/N J9613-82 (4 required). The old engine mount configuration, P/N 590047-501, is no longer available.

Contact the Mooney Factory Service Parts Department for the information needed for this replacement action.

WARRANTY: N/A - INFORMATION S.I. ONLY -

REFERENCE

DATA: N/A

PARTS LIST: KIT PART NUMBER - N/A

FIGURE/TABLES: N/A