



(This Service Letter Is FAA Approved)

This Service Letter reidentified as
Service Bulletin M 20-99
per Service Instruction M20-15.

SUBJECT: Inspection of Oil Radiator Flanges and
Modification of Oil Radiator Installation

MODELS AFFECTED: M20C, Serial Numbers 1940 through 2219

TIME OF COMPLIANCE: **INSPECTION:** Every Twenty-five Hours
MODIFICATION: As soon as possible or on next 100 hour inspection

INTRODUCTION

In order to ascertain that the oil radiator is securely attached to the front of the lower cowl, it is necessary to inspect the radiator mounting flanges every twenty-five hours as described in the instructions below. The installation of the radiator and the attached air deflector should be modified as outlined in the instructions within 100 hours to reduce the possibility of the cracks occurring.

INSTRUCTIONS

Prior to Modification of Installation

1. Inspect the oil cooler attachment flanges every twenty-five hours. The cracks are most likely to appear in the immediate area of the four mounting bolts and are clearly visible in the outside of the flange bend radii as shown in Figure 1.

Installation of Service Letter Kit

1. Remove the oil cooler from the mounting bracket.
2. Remove the air deflector from the back of the oil cooler.
3. Position the oil cooler on the mounting bracket and insert the bolts. If any of the bolts must be forced into place, this indicates the holes are misaligned and the holes should be reamed with a #12 drill. Forcing the bolts can cause the flanges to crack.
4. Install 650044-3 support plate as shown in Figure 2. Install the nuts and tighten.
5. Cut the two inboard air deflector bushings as shown in Figure 2. In some instances, the deflector may be installed with two bushings on each bolt. In this case, discard the shorter bushing and re-install the air deflector using only the 7/8" long bushings on the inboard side.

PARTS LIST - S.L. KIT 20-99

1. Support Plate, Part No. 650044-3 (2 required)

This kit may be purchased from Mooney Aircraft, Inc. Spare Parts Department, P. O. Box 72, Kerrville, Texas, at a cost of \$2.50 net.

COMPLIANCE

After compliance of this service letter, please fill out the enclosed compliance card and return it to Mooney Aircraft for our records.

FIGURE 1

VIEW LOOKING AFT AT
FRONT OF COVL

650017 Oil Cooler
Bracket

Inspect flanges
for crack each side
of bracket opening,
top to bottom

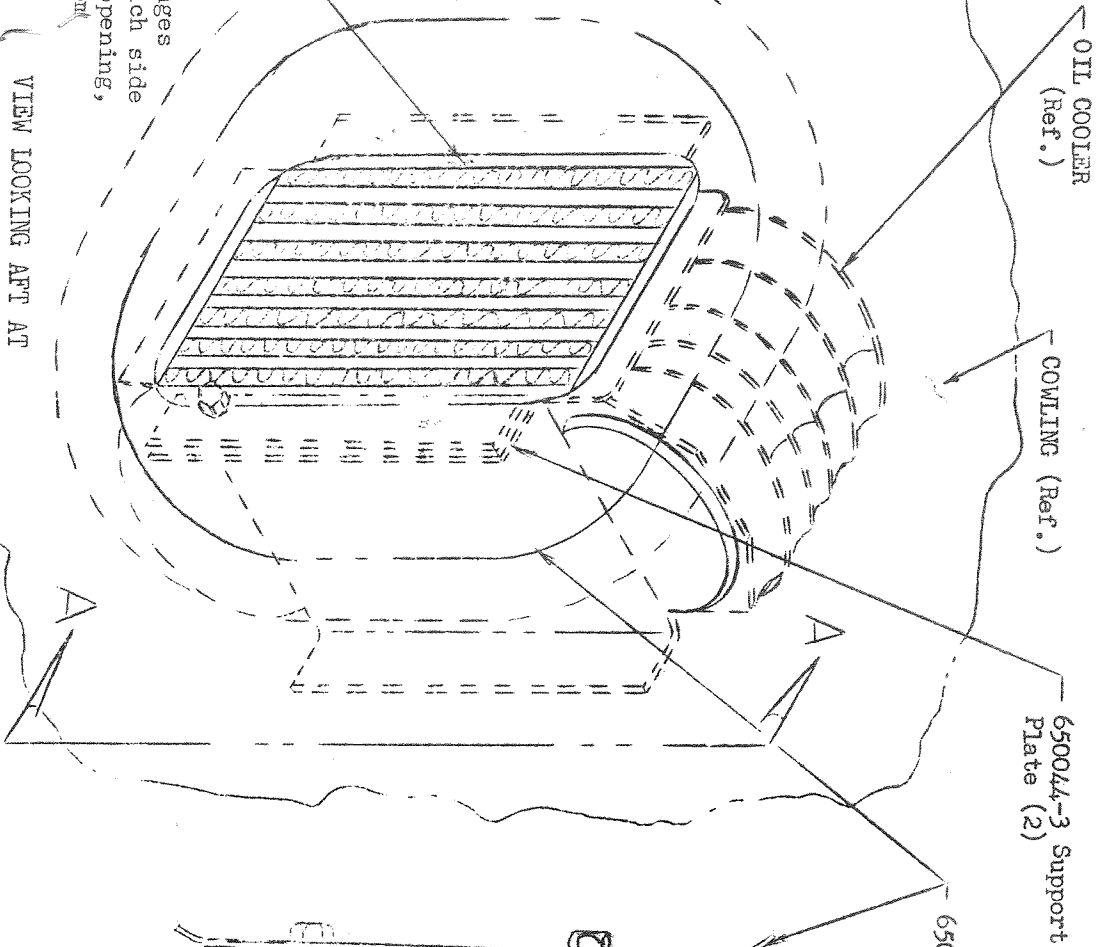
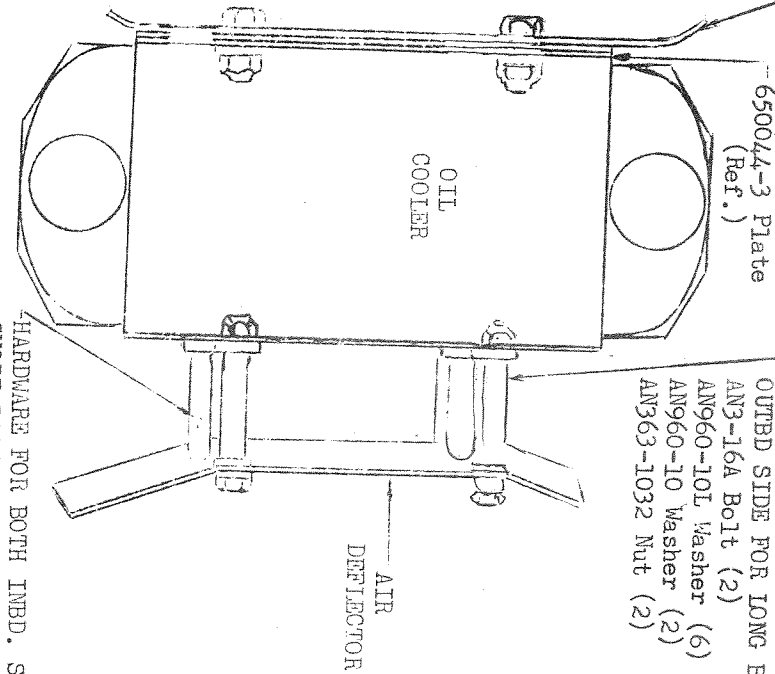


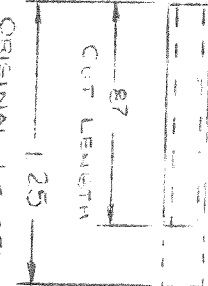
FIGURE 2

VIEW A-A
SHOWING INSTL OF
MODIFIED BUSHING

HARDWARE FOR BOTH INBD. SHI
SHORT BUSHING
AN3-13A Bolt (2)
AN960-10L Washer (6)
AN960-10 Washer (2)
AN363-1032 Nut (2)



ORIGINAL LENGTH
SHORT BUSHING DETAIL



HARDWARE FOR BOTH
OUTBD SIDE FOR LONG BUSI
AN3-16A Bolt (2)
AN960-10L Washer (6)
AN960-10 Washer (2)
AN363-1032 Nut (2)