

SUBJECT: Retrofit of Pilot's side NACA duct and cabin interior panel.

MODELS/S/N AFFECTED: M20M - S/N 27-0194 THRU 27- 0210 *
M20R - S/N 29-0030 THRU 29-0086 *

TIME OF COMPLIANCE: AT OWNERS DISCRETION

INTRODUCTION: Aircraft have been observed to have cracks in the skin at the top, aft corner of the LH NACA duct. It appears that the outer skin has been pulled in as the interior panel was installed and connected to this skin by the NACA duct housing. In order to prevent this possibility, the kit provided in this Service Instruction has been prepared for field retrofit. This retrofit kit may be installed without removing the fiberglass interior panel if done in accordance with the following instructions.

INSTRUCTIONS: (Reference Figure SI M20-102-1, Page 2)

1. Gain access to LH Wemac from inside the aircraft. This wemac is located adjacent to pilot's left knee.
2. Remove escutcheon, P/N 640334-5, from wemac by removing 4 long screws. Discard these screws.

NOTE

If at this point, it is determined that the fiberglass panel and the NACA duct housing are connected with a slip joint type of duct-spacer, and bonded together, the retrofit is not required. The Wemac may be reinstalled and resealed and the escutcheon may be reinstalled.

3. This will also allow wemac to be removed from interior panel.
4. There will be PRO-SEAL 700 on the backside of the interior panel and on the near side of the NACA Duct housing. This must be cleaned off prior to installation of the foam seal, P/N SI-102-1.
5. Remove the 4 Tinnerman Nuts clipped to the NACA duct housing, if installed. Discard these clip nuts.
6. When backside of fiberglass interior panel is clean, bond 4 each A1777-6Z-1 nuts to backside of fiberglass interior panel with 3M, #8001 adhesive. Align nuts with the 4 holes already in the panel. Use the short screws enclosed in retrofit kit # SI M20-102-1 to hold nuts in place while adhesive sets.
7. Remove screws used to hold nuts to interior panel after adhesive is set.
8. Carefully force P/N SI-102-1 foam seal through fiberglass interior panel wemac hole so inside "donut" hole will align with large existing holes in fiberglass interior panel and NACA duct housing.
9. Move foam seal away from cleaned NACA duct housing surface and carefully spread 3M, #8001 adhesive around circumference of NACA duct housing hole.

NOTE

Rotate foam seal around one of the existing wemac mounting holes while holding a drill bit or similar object through hole for a pivot point. Be careful not to drop seal inside interior panel.

10. Quickly position foam seal onto this adhesive, making sure NACA duct housing hole and wemac hole are centered with hole in SI-102-1 seal, and allow adhesive to set up. Additional rods (drill bits, etc.) may be used for alignment.
11. Press interior panel slightly to compress foam seal to obtain complete surface bonding. Pull alignment rod(s) from hole(s) when adhesive is set.
12. Position wemac and escutcheon onto fiberglass interior panel and attach with the four short screws, PS6SM8DL20GY, included in SI M20-102-1 kit.

NOTE

If outer aluminum skin on wemac is cracked, repairs to this area should be made in accordance with the Service and Maintenance manual, Section 51, and/or AC 43-13 approved repairs.

WARRANTY: Mooney Aircraft Corporation will allow up to 2.0 hour of labor to incorporate retrofit action in accordance with this SI if completed within 180 days of the date of this SI. Kits may be obtained through any Mooney Service Center.

The cost of the kit will be credited to the Service Center's account when proper paperwork and compliance notification is received by the Service Parts Department.

REFERENCE
 DATA: N/A

PARTS LIST: KIT PART NUMBER - SI M20-102-1

ITEM	P/N	DESCRIPTION	QTY
1.	SI-102-1	SEAL, FOAM	1
2.	A1777-6Z-1	NUT, SPEED	4
3.	PS6SM8DL20GY	SCREW, (.5 IN. LG.)	4

FIGURES/
 TABLES: See Figure SI M20-102-1

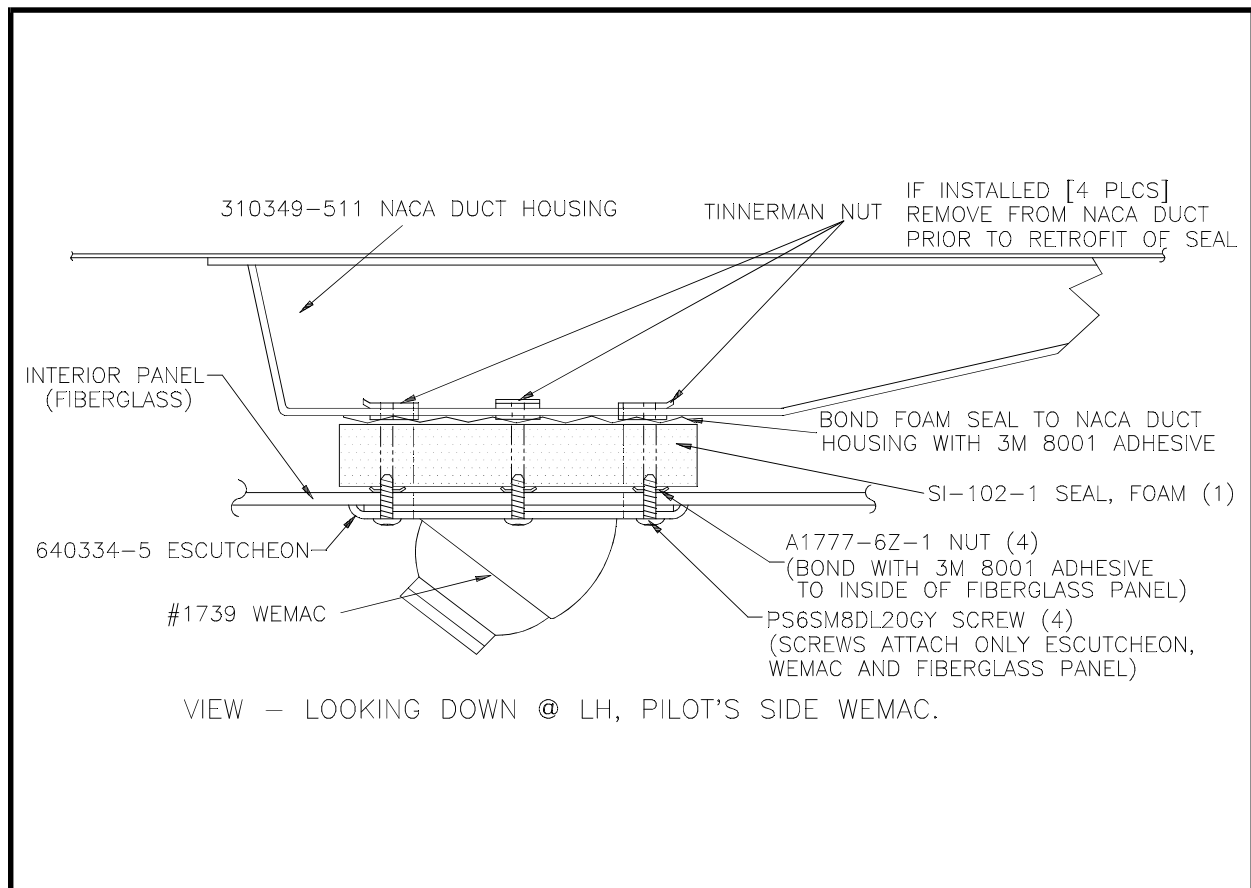


FIGURE SI M20-102-1