NUMBER: M20-43

DATE: 5-2-79

SUBJECT: STATIC PRESSURE SYSTEM MODIFICATION TO ELIMINATE MOISTURE ACCUMULATION IN SYSTEM

MODELS AFFECTED: All M20 Series models and serial numbers prior to:
M20C - S/N 20-1257
M20J - S/N 24-0787
M20K - S/N 25-0101

TIME OF COMPLIANCE: At owner's option.

INTRODUCTION: Certain environmental conditions may cause moisture to accumulate within the static pressure system. This accumulation of moisture can cause false altitude, vertical speed and airspeed indications to the pilot. It is recommended that the static pressure system be modified as described in this Service Instruction.

INSTRUCTION:

1) Remove static system tube assembly connected to static port buttons located on both sides of the tailcone assembly. Remove tube from clamp on longeron located at top of tailcone assembly. Remove the nylon tube from the drain valve located on bottom skin of tailcone assembly. The antenna wire clamp must be loosened from nylon tube prior to removal. Slide through bulkheads on older models.

2) Disassemble 64 X 3 tee from tube assembly leaving nuts and ferrules on tube end and on static button tube end. Tag this end of tube before removal of tee for a dimension to be addressed later.

Disconnect Nylo-Seal tube from short aluminum tube coming from the tee. Retain the spring clamp.

Disconnect short tube from tee and leave the nut and ferrule attached.

3) Lay the long tube assembly on flat surface and measure along center line of tube, starting from opposite end of tube where the 64 X 3 tee was connected, 23.5 inches and cut tube in two with tube cutter. Deburr both ends tubes now cut and clear filings from tubes.

Instructions cont....

4) Lay short tube on flat surface and bend a 90° angle in tube so each leg is equal in length. Use a bend radius of approximately 1 inch while bending being careful not to collapse tube walls.

5) Install 64 X 3 tee between the two cut sections of old tube assy using the nuts and ferrules from the 62 X 3 union supplied in the kit at this new tee location. The tee must be located in a horizontal plane, when installed on aircraft, with third leg facing forward to accept new aluminum and nylon tubes. Connect the short aluminum tube to tee with tube leg pointing toward left side of aircraft. Connect nylon tube, included in kit, to this leg of tube using the spring clamp removed from old installation. Clamp nylon tube to adjacent section of aluminum tube attached to static button, with the SST25 sta-strap included in the kit.

6) Completed assembly is now ready to install onto aircraft. Connect the assembly to the 62 X 3 union already connected to right hand side of aircraft and using the new 62 X 3 union supplied in kit, connect the assembly to the static button on the left side of the aircraft using the old nuts and ferrules already attached. Reconnect the clamp at the top of the tailcone assy and the antenna wire clamp at their existing locations. Connect the nylon tube to the static drain valve finger tight plus 1/4 turn. Tighten all nuts at the new connections to a torque of 15-20 inch pounds. Do not over tighten, damage to ferrules or tube may result.

7) Conduct static system leak check.

8) Make entry into Aircraft Log Book when S.I. action is accomplished.

REFE[illegible] DATA: 1. FAR 23, Appendix E.
2. AC 43-203A

PA[illegible]T: S. I. Kit M20-43-1

	Quantity	Part Number	Description
1)	1 ea.	M20252-27	Tube, nylon.
2)	1 ea.	62 X 3	Union.
3)	1 ea.	SST25	Sta-Strap.

This kit is available through your local Mooney Marketing or Service Center.

[illegible]S/
[illegible]: See attached illustration.

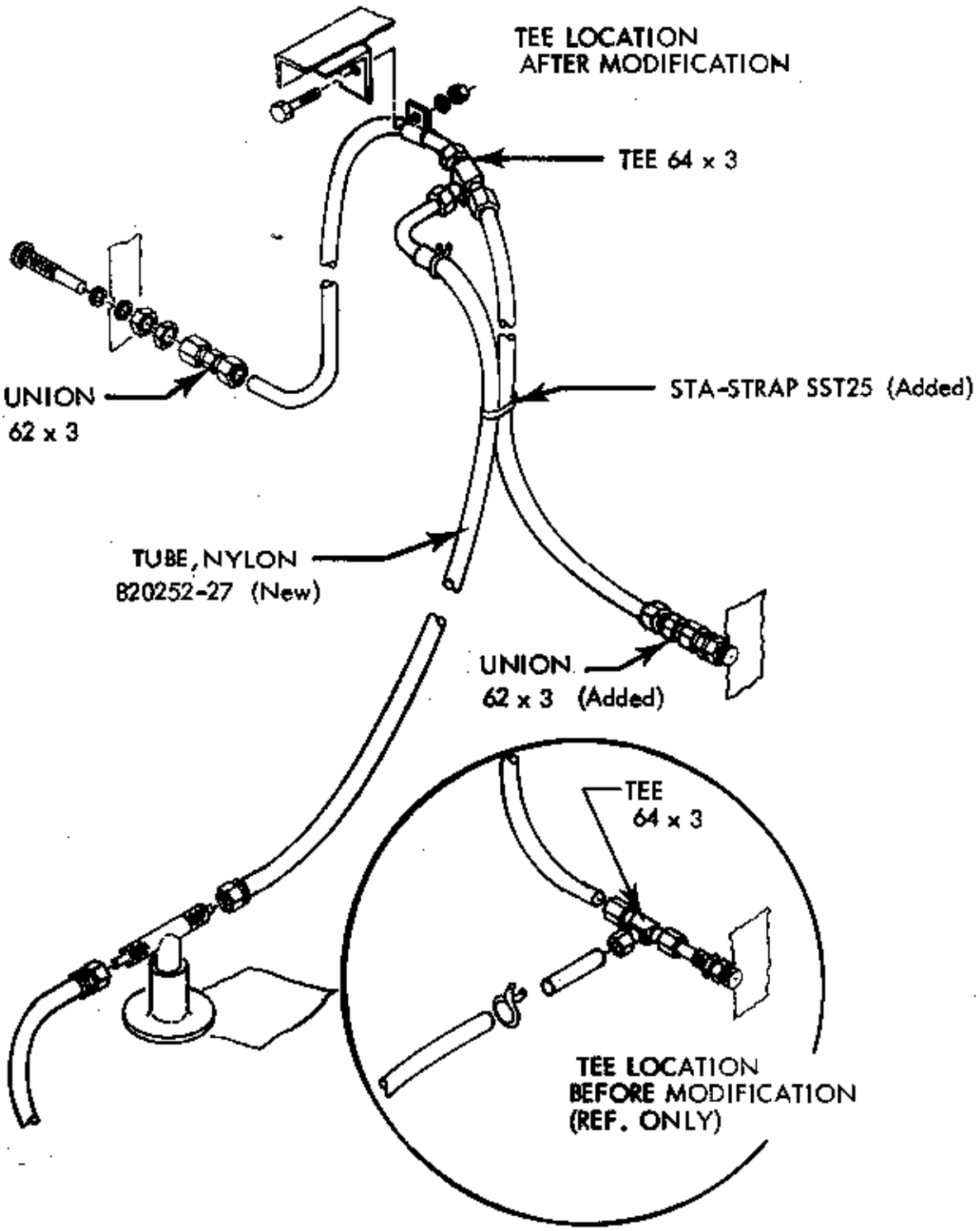
TEE LOCATION
AFTER MODIFICATION
TEE 64 x 3
UNION
62 x 3
STA-STRAP SST25 (Added)
TUBE, NYLON
B20252-27 (New)
UNION
62 x 3 (Added)
TEE
64 x 3
TEE LOCATION
BEFORE MODIFICATION
(REF. ONLY)

FIGURE 1