



NUMBER: M20-49

DATE: 6-5-80

- SUBJECT: MODIFICATION FROM PRESSURE TRANSDUCER SYSTEM
TO TURBINE MEASURING SYSTEM FOR FUEL FLOW,
M20K AIRCRAFT
- MODELS/
SERIAL NUMBERS
AFFECTED: M20K - S/N 25-0001 - 25-0171
- TIME OF
COMPLIANCE: At next scheduled maintenance or scheduled as
kits are available from Mooney Aircraft Company.
- INTRODUCTION: M20K aircraft, S/N's shown above, were manufactured
with a pressure transducer fuel flow gauge readout
system. Current production aircraft are using a
turbine transducer measuring fuel flow system and
is considered to be a better method of determining
actual fuel flow required by the engine.
- INSTRUCTIONS:
1. The illustrations and figures contained in
Kit No. 940005-501 depict locations and part
numbers of all components required to modify
the system to current production configuration.
The pressure transducer system will have to be
removed completely and the new wires, tubes,
brackets, transducers, etc. installed and
secured per the figures attached.
 2. When the turbine transducer and necessary
components are installed a leak check should
be performed prior to starting the engine.
 3. If engine has been set-up per Teledyne
Continental Motors (T.C.M.) specification,
S.B. M79-8 procedure, proceed with calibration
of new indicator per Mooney Service Instruction
M20-48, dated 2-20-80.
 4. If the engine has not been set up per above
procedures within the past 100 hours accomplish
this setup prior to calibration of fuel flow
gage. Use 5.82 pounds per gallon as conversion
factor.
 5. Enter statement of compliance in Engine and
Aircraft Log Books prior to returning aircraft
to service.

REFERENCE

- DATA:**
1. Service Instruction M20-48 dated 2-20-80, Calibration of Fuel Flow Gage Used W/Turbine System.
 2. Mooney Aircraft Drawing No. 940005.

PARTS

LIST: See attached sheets, kit P/N 940005-501, Parts List.

FIGURES/

TABLES: See Mooney Drawing 940005-000 for complete instructions for installation of this modification.

| "PARTS LIST" | | | | | | | | | | Qty. | P/N | Description | |
|--------------|--|--|--|--|--|--|--|--|------|------|---------------------------|---------------------------------|-------------|
| | | | | | | | | | X | | AN995C32 | Safety Wire | 29 |
| | | | | | | | | | X | | AN995C20 | Safety Wire | 28 |
| | | | | | | | | | 1 | | 2650-28 | "Stratoflex" Firesleeve | 27 |
| | | | | | | | | | 20 | | MS 3367-4 | Ty-Rap (TY-3) | 26 |
| | | | | | | | | | 1 | | 940005-901 | Harness, Wire | 25 |
| | | | | | | | | | 1 | | 651035-0107 | Indicator | 24 |
| | | | | | | | | | 6 | | 32446 | Disconnects, Knife Bld. | 23 |
| | | | | | | | | | 10 | | 324485 | Caps, Wire (AMP) | 22 |
| | | | | | | | | | 4 | | 1601-0410 | Avex Rivets | 21 |
| | | | | | | | | | | | | | 20 |
| | | | | | | | | | 1 | | C10X-34-SF | Clamp | 19 |
| | | | | | | | | | 1 | | C10Y-34-6S | Clamp | 18 |
| | | | | | | | | | 1 | | P1F-30-4 | Tubing, Insulating | 17 |
| | | | | | | | | | 1 | | (32622-6) 880030-501 | (Aerosonic Corp.) Transducer | 16 |
| | | | | | | | | | 1 | | AN526-10R6 | Screw | 15 |
| | | | | | | | | | 2 | | AN960-10 | Washer | 14 |
| | | | | | | | | | 2 | | AN960-10L | Washer | 13 |
| | | | | | | | | | 2 | | AN515-6BR-12 | Screw | 12 |
| | | | | | | | | | 4 | | AN363-1032 | Nut | 11 |
| | | | | | | | | | 1 | | MS51508B-4-4 AN823-4-4 | Alternate Fibow | 10 |
| | | | | | | | | | 1 | | 660233-511 | Tube Assy | 9 |
| | | | | | | | | | 1 | | 660233-509 | Tube Assy | 8 |
| | | | | | | | | | 1 | | MS51500B4-4 AN816-4-4 | Alternate Nipple | 7 |
| | | | | | | | | | 2 | | AN3-12A | Bolt | 6 |
| | | | | | | | | | 1 | | 660233-13 | Brkt | 5 |
| | | | | | | | | | 1 | | AN929-3J | Cap, Fig. No. 3 | 4 |
| | | | | | | | | | 1 | | AN929-4J | Cap, Fig. No. 4 | 3 |
| | | | | | | | | | 1 | | 940005-1 | Doublers | 2 |
| | | | | | | | | | 1 | | 940005 | Drawing | 1 |
| | | | | | | | | | -501 | | | | |
| | | | | | | | | | | | PART NO. | PART NAME | PAGE |
| | | | | | | | | | | | | | ITEM |

LIST OF MATERIALS

| | | |
|------------------------------------|------------------|-----------|
| Drawing No.: 940005 | Revision Letter: | Page No.: |
| MOONEY AIRCRAFT CORPORATION | | |

