M20 SERIES



SERVICE INSTRUCTION M20-106

Date: July 10, 2001

SUBJECT: INSPECTION OF PRIMARY FLIGHT CONTROL JOINTS

MODELS/ S/N AFFECTED: All M20 Series Aircraft

TIME OF COMPLIANCE:

PRIOR TO NEXT SCHEDULED FLIGHT

INTRODUCTION: There have been isolated reports from the field of improperly installed hardware associated

with primary flight control joints of aircraft that, in some instances, have undergone various aircraft field modifications. This service instruction is being issued to recommend an inspection of all primary flight control joints prior to next flight and to reemphasize correct re-

installation of the associated hardware after maintenance or modification.

INSTRUCTIONS: Inspect each primary flight control joint in accordance with the applicable aircraft Service and

Maintenance Manual, utilizing the following amplifying information:

1. Verify no relative movement between the clevis, bolt, and heim bearing ball (bolt should not turn and the Heim joint should be free to swivel) (figure M20-106-1).

2. There should be a minimum of two threads visible and protruding on all lock nuts (figure M20-106-2 and M20-106-3).

CAUTION DO NOT REUSE LOCKNUTS IF THEY CAN BE RUN UP FINGER TIGHT.

- 3. For flight control joints incorporating castellated nuts, check for proper installation of the cotter pin; **DO NOT** reuse cotter pins.
- 4. Ensure heim bearing joint has no appearance of control binding.
- 5. Torque seal stripe should be included as a good field practice (figure M20-106-4).
- 6. Both ends of control rod should have appropriate range of movement.
- 7. Ensure there is no play between ball and housing of Heim bearing.
- 8. Heim bearing should be free from rust and corrosion.

WARRANTY: Warranty reimbursement is not available for compliance to this Service Instruction.

REFERENCE DATA:

Mooney Service & Maintenance Manual #151 (M20M), #160 (M20R), #170 (M20S), #134 (M20K), #123 (M20J), #140 (M20L), #106 ('68 – '78 M20 E, F, G), #104 ('62 – '67 M20D, E,

F), #103 (M20B), #102 (M20A), and #101 (M20)

Advisory Circular 43.13(latest revision)

PARTS LIST: NA

FIGURE/TABLES See Figures M20-106-1 through M20-106-4



Figure M20-106- 1

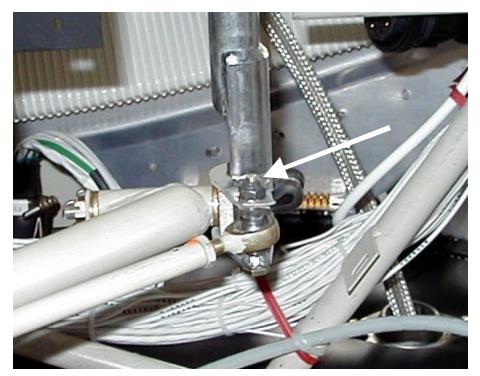


Figure M20-106- 2

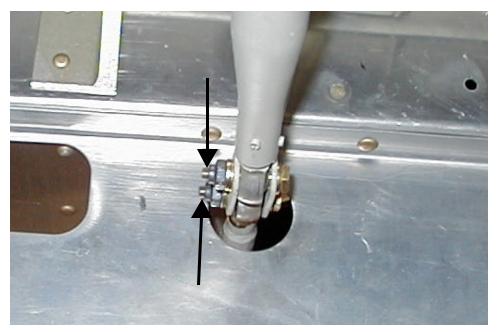


Figure M20-106- 3

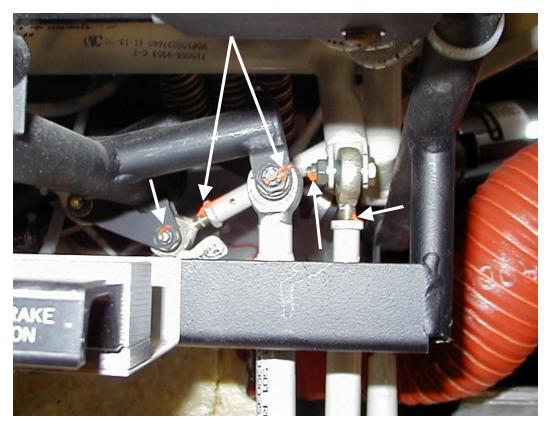


Figure M20-106- 4