



S.I. No. M20-44A

Date: 4-24-80

SUBJECT: RUDDER AND ELEVATOR AFT BELLCRANK MODIFICATION

MODELS/
SERIAL NUMBERS
AFFECTED:

M20D,E,F,G, All Serial Numbers;
M20C, All Serial Numbers prior to 20-1259;
M20J, All Serial Numbers prior to 24-0901;
M20K, All Serial Numbers prior to 25-0247.

TIME OF
COMPLIANCE:

At such time that either rod end bearing is disassembled from either bellcrank it is recommended that the modification to the bellcrank be accomplished or a new configuration bellcrank purchased as a spares replacement.

INTRODUCTION:

The possibility exists that the rod end bearings on the end of the rudder and elevator push-pull tubes can be attached to the subject bellcranks, P/N 913031-() (Elevator), and P/N 913030-() (Rudder), and not be assembled properly. The rod end bearing can fall below the bolt holes in the bellcrank and the bolt inserted and torqued. The rod end bearing could be clamped between the bellcrank side plates and allow the elevator or rudder normal movement as long as no extreme air loads are encountered.

It is recommended that the bellcranks be updated to the 913030-503 and 913031-503 configurations at such time as there is reason to disassemble any of the control tube rod end bearings from the bellcranks. See Figure for modification of earlier bellcrank prior to adding bracket.

INSTRUCTIONS:

When it is determined necessary to disassemble the push-pull tube from either the rudder or elevator bellcrank it is recommended that the bellcrank be removed from the aircraft and modified per the attached drawing prior to reassembly of the push-pull tube to the bellcrank.

The simple sheet metal bracket is to be secured with two Avex rivets through existing holes in each bellcrank.

The modified bellcranks are to be reinstalled into the aircraft and are now ready for the reassembly of the push-pull tubes. The modification will allow the rod end bearing to fall only far enough to keep the bolt from being inserted if not aligned properly.

Instructions
cont...

Reidentify each bellcrank after modification to
XXXXX-503 part numbers and make entry into
Aircraft Log Book when S.I. has been complied with.

REFERENCE
DATA:

NONE.

PARTS LIST:

Kit No. S. I. M20-44-1

	<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
1.	1	913130-1	Bracket
2.	2	Avex 1601-0410	Rivet

NOTE: (-1) kit to be used for modification of
bellcrank assy P/N 913030-(any dash no.).

Kit No. S. I. M20-44-2

	<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
1.	1	913131-1	Bracket
2.	2	Avex 1601-0410	Rivet

NOTE: (-2) kit to be used for modification of
bellcrank assy P/N 913031-(any dash no.).

These kits are available through your local Mooney
Marketing or Service Center.

FIGURES/
TABLES:

