



S.I. M20-57

DATE 7-29-81

SUBJECT: MOONEY M20 SERIES AIRCRAFT NOSE GEAR LEG, P/N 540004-501 and -505, SPARES REPLACEMENT

MODELS/SERIAL NUMBERS AFFECTED: Mooney M20 Series Aircraft, ALL Aircraft, S/N 1001 & ON

TIME OF COMPLIANCE: Routine Maintenance Procedure - Information Only

INTRODUCTION: An incident has been reported concerning subject part numbers being repaired and replaced in the field and subsequent interference with rudder directional control.

INSTRUCTION: There are currently two (2) configurations of nose gear legs, part numbers 540004-501 and 540004-505 available as spares replacement for M20 Series aircraft. Engineering changes have progressed throughout the model years from a Basic P/N, 540004-000 thru 540004-505. To standardize, Mooney Aircraft Corporation has chosen to provide only the two subject part numbers for field replacement. Part number ~~540004-501~~ may be used as a replacement for P/N's 540004-000 or -501 on all M20 Series aircraft manufactured through the 1968 model year. Part number ~~540004-505~~ is the replacement part for P/N's 540004-503 or -505 as installed in all aircraft beginning with 1969 model year aircraft (690001 and on).

All the above nose gear legs are heat treated, as well as other components, i.e., main gear legs, main and nose gear spindle assys. and truss assys and should not be repaired without authorization from the F.A.A.

Unauthorized repairs and unauthorized substitutions may create a situation where understrength parts are installed in a high stress area. Replacement of damaged components with new spare items is recommended on all landing gear and retract system components.

As noted in Mooney's Pilot's Operating Handbooks, towing the aircraft with a power tug is not recommended. Caution should be used to keep from exceeding the towing limits and damaging the upper rear tubes of the leg assys.

Mooney Aircraft Corporation is continually working toward improving systems and components in all areas of the aircraft and reserves the right to substitute modified or improved components that are completely interchangeable with items originally installed during manufacture. Technical Publications will be updated periodically to depict this information on some aircraft models. Mooney Service Parts personnel will continue to determine proper substitutions, if necessary, when sufficient data has been given to them at the time of the order.

The engineering aspects only are approved by the F.A.A. per reference letter.

REFERENCE DATA: F.A.A. request for clarification to field, letter dated July 16, 1981, ASW-212.

PARTS LIST: N/A

FIGURES/TABLES: N/A