

51-21-01 CESSNA: Applies to Models 120 and 140 Aircraft, Serial Numbers 8001 to 10650, Inclusive, and/or Any Other Serial Numbers Not Having Steel Reinforcing Channel, Cessna P/N 0433131 or Equivalent Installed.

Compliance required prior to December 1, 1951.

Inspect bottom rib of rudder for kinks or cracks in the rib flanges just aft of the rudder horn fitting. If there is any damage, the bottom rib assembly should be replaced with Cessna P/N 0433106, since the damage may progress until the rib breaks in two with the loss of rudder control. On installing P/N 0433106, which is an assembly of the rib, the control horn and a steel reinforcing channel (P/N 0433131), AD-4 protruding head type rivets should be used wherever rivets or spotwelds were used on the original installation; six additional rivets for attachment of aft part of steel channel to bottom rib and four AD-4 protruding head type or Cherry 163-4-4 rivets added to attach the skin to each flange of the steel reinforcing channel. If no damage to the bottom rib assembly is detected, installation of the steel reinforcing channel only is necessary. This may be accomplished by drilling out existing rivets for attachment of control horn and installing the steel reinforcing channel (P/N 0433131), above the bottom rib with flanges up, using existing rivet holes. The completed installation should be the same as for the installation of the complete lower rib outlined above. The reinforcing channel, P/N 0433131, is 4 17/32 long with 5/8 flanges, planform to fit inside lower rib installed as near horn flange as possible. Flanges removed on forward inch of channel. Material 0.036 1025 steel or 0.051 24ST, ALCLAD or equivalent. It is recommended that the length of the chains to the steerable tail wheel be so adjusted that under static conditions the coil springs are not extended more than 1/8 inch, since excessive tautness of the chains contributes to the rib failures.

(Cessna Service Letter SLN-46 dated 07-31-47 covers this same subject.) This supersedes AD 47-43-07.