

Rockwell service letter

No. SL-AG-31

International

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Service Letter No. SL-AG-31
October 17, 1963

AILERON BELLCRANK ATTACH ANGLES IN THE NEW AILERON CONTROL SYSTEM (SERIAL 1163 & UP)

APPLICABILITY: S-2C Aircraft, Serial Numbers 1163 thru 1179
And 1185

There have been several cases reported of an elongated bolt hole in the aluminum angle that attaches the 180° bellcrank located approximately four feet outboard of the gas tank on the rear spar.

This service letter covers the installation of new attach angles which have a steel bushing incorporated to eliminate the wear. It is suspected that vibration and operation from rough strips cause the elongation of the holes.

It is recommended that an immediate inspection be conducted and thereafter every 50 hours until this fix is incorporated.

INSTALLATION INSTRUCTIONS

1. Remove the attach angles and the 180° bellcrank from the rear spar. This may be accomplished through the existing inspection holes. Be sure to mark the location of each angle as it is removed.
2. It will be necessary to drill holes in the new angles to correspond exactly with the holes in the old angles. This may be accomplished by using the .063 thick formed aluminum angles as drill templates. Clamp the template to the inside of the old attach angles. Drill the template to match the holes on the old angle, using a .250 drill through the one hole in the top flange and a #13 drill through the rest of the holes. Now clamp the template to the inside of the new attach angle and line up the .250 hole in the template with the hole in the steel bushing. Transfer the #13 holes to the new attach angle. Follow the same procedure for the other angles, using a new template angle for each attach angle.
3. Install the new attach angles on the rear spar using new stop nuts.

4. Install the bellcrank using the slightly longer bolt furnished in the kit. The bellcrank should fit snugly, but not too tight or it will cause a binding in the bearings. If the bellcrank fits too tight between the attach angles, put the bellcrank into a lathe and shorten the housing as necessary. If too loose, add an AN960-416L washer between the bearing and the attach angle. After tightening the long 1/4" bolt just enough to take out all of the stack, the bellcrank should be checked for complete freedom before attaching the push rods to it.
5. Re-attach the push rods to the bellcrank, using new stop nuts.

SERVICE KIT #31 PARTS LIST

<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>NO. REQUIRED</u>
Attach angle	246-17	4
Bolt	AN4-72A	2
Nut	AN365-428	6
Nut	AN365-1032	24
Drill Bit #13		1
Washer	AN960-416L	2
Template Angle	254-14	4