



"TAKE YOUR CESSNA HOME
FOR SERVICE AT THE SIGN
OF THE CESSNA SHIELD"

single-engine SERVICE LETTER

MARKETING DIVISION • CESSNA AIRCRAFT COMPANY
WICHITA, KANSAS 67201 • CABLE ADDRESS / CESSCO WICHITA

December 18, 1970

SE70-32

*Done
1/28/71*

IMPORTANT SPECIAL NOTICE

A MANDATORY INSPECTION AND MODIFICATION OF 177/CARDINAL STABILATOR ATTACHMENT IS IMMEDIATELY REQUIRED BECAUSE OF CRACKING OF ATTACHMENT ANGLES IN SOME HIGH TIME 177/CARDINAL AIRCRAFT.

CAREFUL ATTENTION AND COMPLIANCE WITH THE FOLLOWING INSTRUCTIONS IS IMPERATIVE.

AIRCRAFT AFFECTED:

177/Cardinal Serials 17700001 thru 17701370

This letter applies to 1968 and 1969 models only since an improved design stabilator mounting bracket assembly was incorporated on production beginning with the 1970 model.

REASON FOR LETTER:

As a result of this condition, Service Kit SK177-11 (copy attached) has been developed which contains instructions for inspection and installation of reinforcement brackets to increase the strength in this area.

COMPLIANCE REQUIREMENTS:

Visual Inspection

Aircraft with 750 hours or more total time in service:

Before further flight, conduct a careful visual inspection of the bracket attachment angles shown in Figure 1 of the attached Service Kit (Items 1 and 3). Pay particular attention to the area around the heads of the top attach bolts (Items 4 and 5).

Continued.....

THERE ARE MORE CESSNAS FLYING, THAN ANY OTHER MAKE

Modification

All Affected Aircraft

- A. Any attach angles found cracked must be immediately replaced and SK177-11 installed before returning the aircraft to service.
- B. Within the next 25 hours of operation, on all aircraft, accomplish the special inspection detailed in SK177-11 and install the reinforcement brackets as shown.

PARTS INFORMATION:

The following parts can be obtained through the Cessna Dealer Organization.

| <u>Part Number</u> | <u>Description</u> | <u>Suggested List Price</u> |
|--------------------|--------------------|-----------------------------|
| SK177-11 | Service Kit | \$8.43 (S) |
| 1712108-3 | Angle (LH) | \$4.04 (S) |
| 1712108-4 | Angle (RH) | \$4.04 (S) |

COST ALLOWANCE INFORMATION:

A full parts and labor allowance will be paid for the required inspection and installation of SK177-11 providing work is completed by the following dates.

Domestic and Canada June 15, 1971
 Export August 15, 1971

REMARKS:

To aid in the notification of this important service program, a copy of this letter is being sent to the owners of all affected aircraft per the latest FAA registered owners listing.

(Owners Notification System - No. 2)

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

THE CESSNA AIRCRAFT COMPANY

SERVICE

Kit



Title INSPECTION AND REINFORCEMENT OF
STABILATOR ATTACH BRACKETS

MODELS AFFECTED

177

SERIALS AFFECTED

17700001 THRU 17701370

PARTS LIST:

| QUANTITY | PART NUMBER | NOMENCLATURE |
|----------|-------------|---------------------------|
| 1 | 1709019-3 | Bracket |
| 1 | 1709019-4 | Bracket |
| 2 | AN4-5A | Bolt |
| 4 | NAS679A4 | Nut |
| 2 | AN4-4A | Bolt |
| 4 | AN3-4A | Bolt |
| 4 | MS21044N3 | Nut |
| 1 | | Installation Instructions |

NOTE

In addition to the parts supplied in this kit 1 ea. Part Number 1712108-3 and/or 1712108-4 angles may be required as indicated in 2. a. (4) of the instructions. These parts may be ordered separately.

CHANGE IN WEIGHT AND BALANCE:

| | |
|------------------|-------------------|
| WEIGHT INCREASE | 0.3 pounds |
| ARM | 283.8 inches |
| RESULTANT MOMENT | 91.0 pound-inches |
| INDEX | .091 |

1. DESCRIPTION OF INSTALLATION.

a. Installation of this kit consists of:

- (1) Inspecting stabilator attach bracket angles.
- (2) Reworking or replacing angles. Stabilator must be removed if angles replaced.
- (3) Adding 2 reinforcement brackets.

2. INSTALLATION INSTRUCTIONS.

a. Inspection of stabilator bracket attach angles.

- (1) Remove stinger and side plates.
- (2) (Refer to figure 1.) To allow inspection access to angles (1) & (3) cut out skin as shown in detail A, on both sides of tailcone.
- (3) Remove chamfer (9) from each angle (1) & (3) as shown in detail B.

- (4) Apply dye check to each reworked area.

NOTE

If cracks are still present in angles, each angle must be replaced.
Proceed to step b.

If cracks are not present in angles, proceed to step c. (2).

b. Removal of stabilator bracket attach angles.

- (1) Remove access plates from each side of tailcone, immediately forward of leading edge of stabilator.
- (2) Remove push-pull control cover from center of tab trailing edge.
- (3) Disconnect push-pull tube at tab.
- (4) Disconnect stabilator control cable bracket from stabilator balance weight arm.

NOTE

Disconnection at this point will prevent having to re-rig system.

- (5) Remove balance weights from balance arm.
- (6) Remove stabilator pivot bolts & bushings.

NOTE

Make sure that bushings are not lost when pivot bolt is removed. Assure that washers are properly positioned. (Refer to Service Letter SE69-6 dated 3-9-69)

- (7) Remove stabilator from aircraft.
- (8) On aircraft serials 17700001 thru 17701165 remove tail skid & bracket assembly from aircraft.
- (9) Remove bottom plate (8) to allow access to lower rivets thru angles.
- (10) Drill out all rivets (6) remove bolts (2) and (5).

NOTE

If bolt (5) does not exist it must be installed thru second rivet hole on serials shown.

- (11) Remove stabilator bracket & angle assembly, UP-stop (7), DOWN-stop (2) brackets from aircraft.

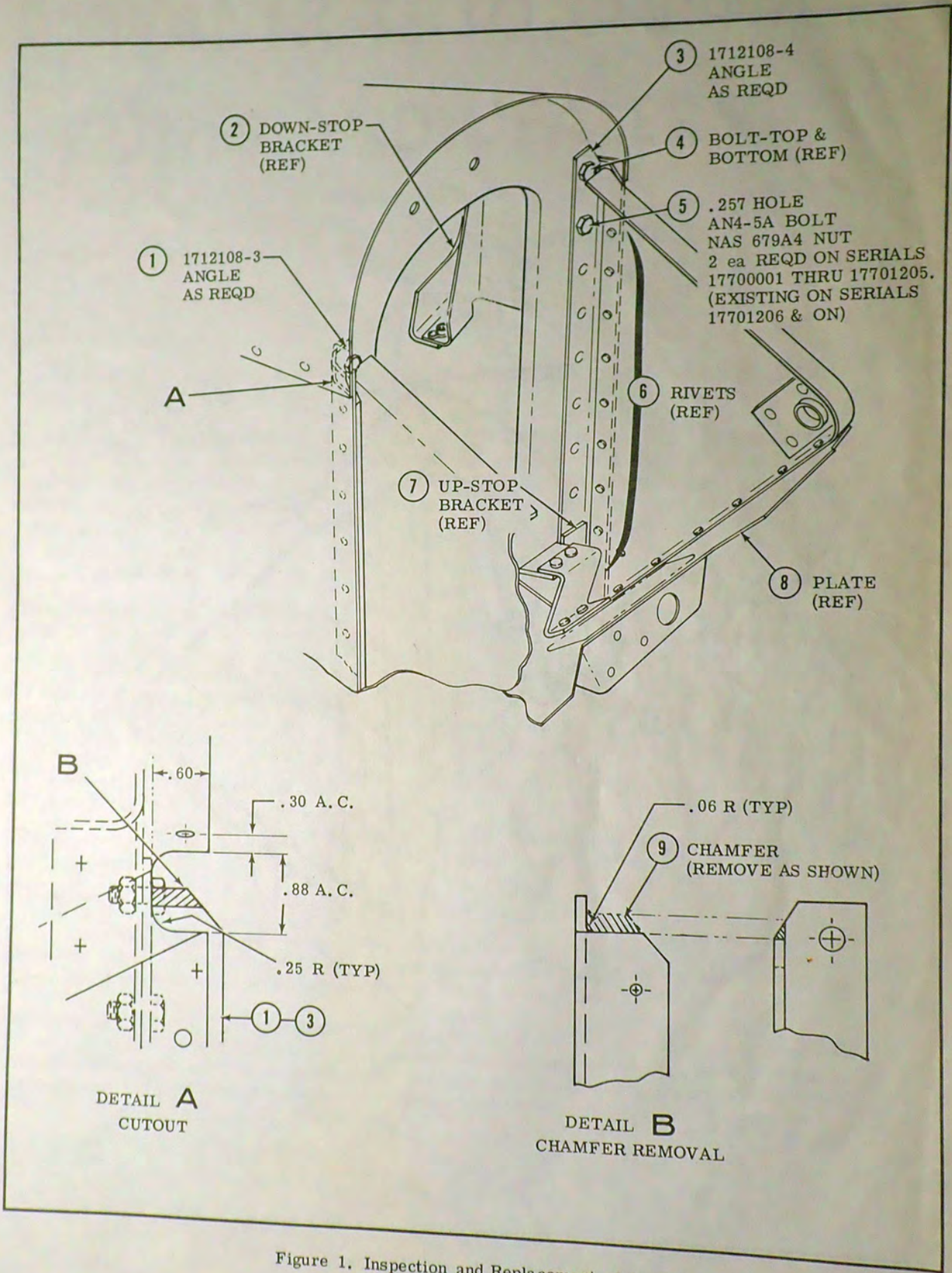
c. Installation of new angles & reinforcement brackets.

- (1) Install new angles (1) & (3) on stabilator brackets.

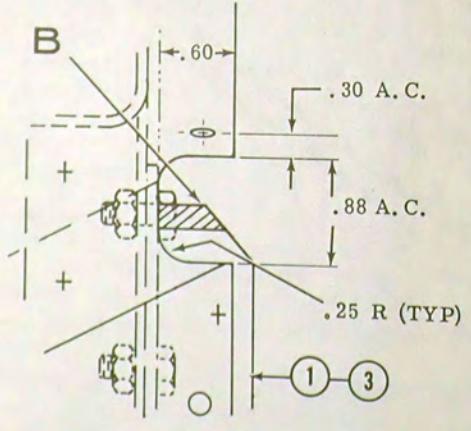
NOTE

Enlarge pilot holes in new angles, UP-STOP and DOWN-STOP brackets to fit rivets & bolts as required, and install lower bolts common to angle and stabilator bracket before riveting angles to brackets.

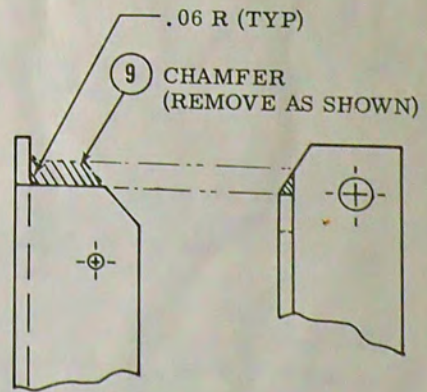
- (2) (Refer to figure 2.) Install reinforcements (1) & (2) as shown.
- (3) Reinstall all previously removed hardware and parts.



- ① 1712108-3 ANGLE AS REQD
- ② DOWN-STOP BRACKET (REF)
- ③ 1712108-4 ANGLE AS REQD
- ④ BOLT-TOP & BOTTOM (REF)
- ⑤ .257 HOLE AN4-5A BOLT NAS 679A4 NUT 2 ea REQD ON SERIALS 17700001 THRU 17701205. (EXISTING ON SERIALS 17701206 & ON)
- ⑥ RIVETS (REF)
- ⑦ UP-STOP BRACKET (REF)
- ⑧ PLATE (REF)



DETAIL A
CUTOUT



DETAIL B
CHAMFER REMOVAL

Figure 1. Inspection and Replacement of Angles

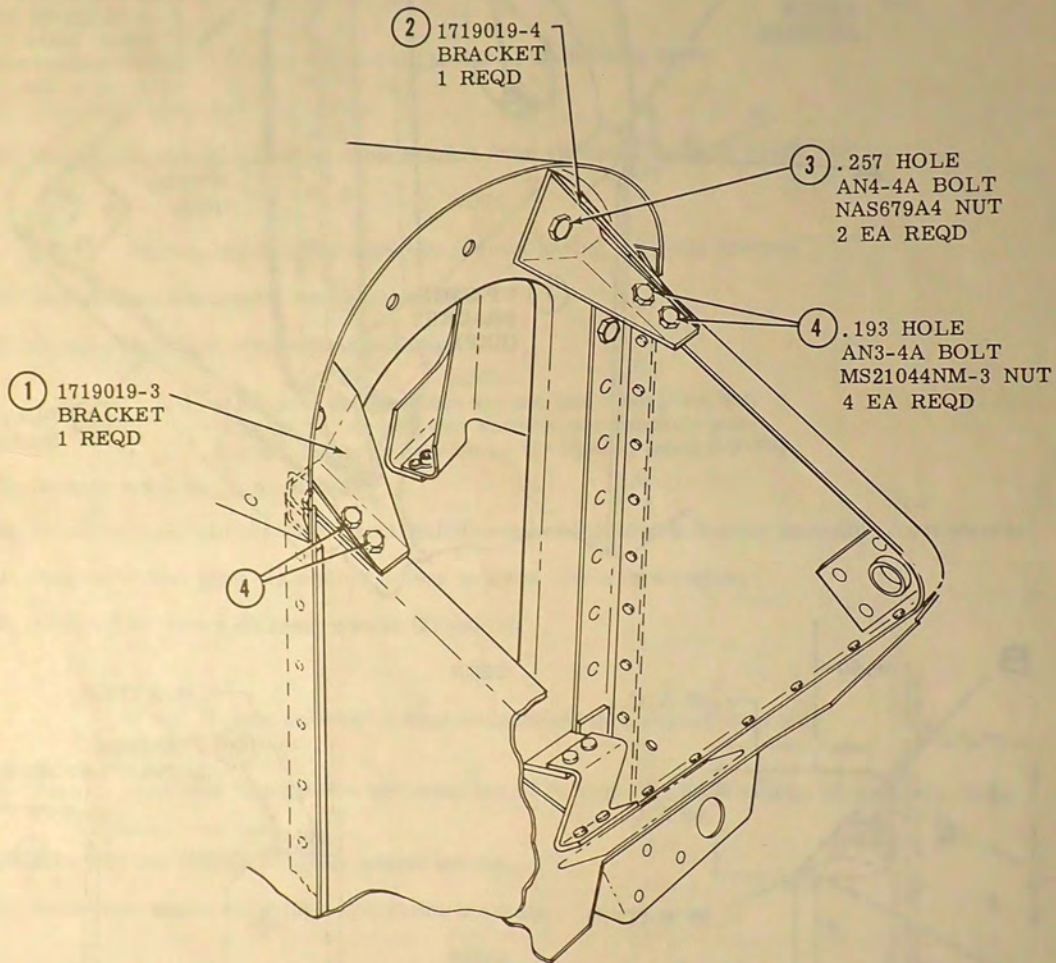


Figure 2. Stiffener Bracket Installation

SPECIAL NOTE TO CESSNA ZONES AND DEALERS

December 18, 1970

ATTACHMENT
TO
SE70-32

PARTS INFORMATION:

Because of the importance of this program, an initial quantity of SK177-11 Service Kits has been shipped to each Zone.

Additional SK177-11 Service Kits (and P/N 1712108-3 & -4 angles if required) are available for immediate ordering and shipment from Cessna Service Parts Center. To avoid unnecessary parts shortages in some areas, please do not order more kits than are required for the aircraft within your area (reference notification information below).

CREDIT INFORMATION:

Upon receipt of a credit claim at Cessna, Wichita, the following allowances will be paid in accordance with the Cessna Policy Information and Procedures Manual (Section E4h).

Inspection and installation
of SK177-11 4.0 man-hours plus
full parts credit

Inspection, replacement of
P/N 1712108-3 and/or -4 angles
and installation of SK177-11 10.0 man-hours plus
full parts credit

NOTIFICATION INFORMATION:

A copy of the registered owners list applicable to each Zone has been included with the Zone Advance Copy of this Service Letter to assist in owner notification and compliance reporting on this important program.

Dealers are to report to their Zone, on a weekly basis, the serial numbers of affected aircraft completed or in process during the preceding week. Zone Service Managers are to forward this information to Cessna Customer Services Department or their Regional Service Representative, whichever is applicable.