

Beech Aircraft Corporation

OVERHAUL SPECIFICATION

ELEVATOR ASSEMBLY 84-186175 - MODEL C-45G AND C-45H

Overhaul Specification 6101

ISSUED February 26, 1953

REVISED December 28, 1954

T. R. Taylor
T. R. Taylor
Writer

R. B. Bosworth
R. B. Bosworth
Requirements Engineer

J. H. Ball
J. H. Ball
Project Engineer

A. S. Odevseff
A. S. Odevseff
Chief Project Engineer - Military

M. R. Jerry
M. R. Jerry
USAF Quality Control

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TITLE ELEVATOR ASSEMBLY 84-186175 - MODEL C-45G AND C-45H

ISSUED February 26, 1953

WRITTEN BY F. M. Polk; Revised: T. E. Taylor

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1. SCOPE

1.1. Purpose.- The purpose of this specification is to authorize the use of reconditioned parts and provide reconditioning instructions for the 84-186175 elevator assembly as installed on T-7, T-7C, AT-11, UC-45B, and C-45F aircraft and instructions for modifications required to adapt them for installation on C-45G in accordance with Drawing 900-186175-6 and C-45H aircraft in accordance with Drawing 694-186175.

1.2. Application.- All reconditioning operations and repairs covered by this specification may be accomplished without further authorization. Repairs not authorized by this specification cannot be performed without further authorization.

1.3. List of Pages and Revisions.- This specification consists of the pages listed below. An asterisk (*) denotes pages revised by the current revision.

<u>Page</u>	<u>Date</u>	<u>Description of Revision</u>	<u>Serial Effectivity</u>
1*	12-28-54	Record revision	Record change
2	2-26-53		
3	5-14-53	Add sub-title	Record change
4	5-14-53	Limit part numbers to C-45H	AF 469 and after
5	5-14-53	Revisions made retyping necessary	Record change
6*	12-28-54	Add Para. 3.4.1 (d) and 4.1 (a)	Record change

2. APPLICABLE PUBLICATIONS

2.1 Specifications:

2.1.1 Federal.-

QQ-P-416 Cadmium Plating

2.1.2 Beech.-

FS 370A Finish Specification for Model C-45G and C-45H
 OS 5211 Tab Systems - Model C-45G and C-45H
 OS 7002 Cleaning Procedures for Reconditioned Aircraft
 OS 7003 Air Frame and Control Antifriction Bearings
 OS 7007 Sheet Metal Repairs
 OS 7008 General Acceptable Quality Standards
 OS 7010 Removing Corrosion from Aluminum Parts

3. REQUIREMENTS

3.1 Parts Involved.- For parts involved in addition to those covered by this specification, refer to the overhaul specifications listed below.

OS 5211 Q Tab Systems - Model C-45G and C-45H

3.1.1 Parts Not Used.- The parts listed below will not be reused in the C-45H or C-45G and will be disposed of at the direction of the customer.

84-186175-2 Cover
 84-186175-4 Reinforcement
 186178 Reinforcement
 186187 Cover
 186188 Reinforcement
 186351 Reinforcement
 186352 Cover
 186353 Cover

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3.1.1 Parts Not Used.- (Continued)

186169 Tail cowl support strip
 186179 Tail cowl support strip
 109636-10 Cover
 105774-C-085-05600 Hinge Pin
 No. 2 Grommet

3.1.2 Parts to be Reconditioned.- The following parts are to be reconditioned in accordance with the instructions contained herein. "Reconditioned" means the disassembly, cleaning, inspection and correction of discrepancies, repair and/or replacement of components, and modifications to incorporate changes in accordance with applicable engineering drawings to assure an operationally safe and serviceable aircraft.

84-186100 Uncovered elevator
 187725 Elevator tab control
 186110 Right- and left-hand tab assembly
 186151 Inspection door
 S-124-16 Bolt
 S-168 Rod end

3.1.3 Parts to be Supplied New.-

694-186052 Cover (C-45H only)
 694-186175-1 Cover (C-45H only)
 694-186175-3 Reinforcement (C-45H only)
 694-186175-5 Reinforcement (C-45H only)
 694-186175-7 Reinforcement (C-45H only)
 694-186175-9 Reinforcement (C-45H only)
 186178 Reinforcement
 186353 Cover
 186169 Tail cowl support
 186179 Tail cowl support
 No. 2 Grommet

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3.1.3 Parts to be Supplied New.- (Continued)

109636-10 Cover
105774-C-085-05600 Hinge Pin
186188 Reinforcement (C-45G only)
186187 Cover (C-45G only)
186351 Reinforcement (C-45G only)
186352 Cover (C-45G only)

3.2 Cause for Rejection.- Damage or wear which cannot be corrected by one or more of the authorized repairs listed in Paragraph 3.4 of this specification is cause for rejection.

3.3 Reconditioning Operations:

3.3.1 Uncovered Elevator Assembly 84-186100:

- (a) Inspect for nonrepairable conditions.
- (b) Clean in accordance with OS 7002.
- (c) Remove corrosion in accordance with OS 7010.
- (d) Recondition when necessary as authorized herein.
- (e) Modify to conform to Drawing 900-186100.
- (f) Install new tail cowl supports 186169 and 186179.
- (g) Refinish in accordance with FS 370A.
- (h) Install new 109636 covers.
- (i) Recover the elevator assembly and balance in accordance with Drawing 694-186176. Install a new No. 2 grommet (C-45H only).
- (j) Recover the elevator assembly and balance in accordance with Drawing 900-186175-6. Install a new No. 2 grommet (C-45G only).
- (k) Refinish the covered elevator assembly in accordance with FS 370A.
- (l) Use a new 105774-C-085-05600 hinge pin when installing the 186110 right- and left-hand assemblies.

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3.3.2 Tab Assembly 186110.-

- (a) Inspect for nonrepairable conditions.
- (b) Clean in accordance with OS 7002.
- (c) Remove corrosion in accordance with OS 7010.
- (d) Recondition when necessary as authorized herein.
- (e) Recondition Fafnir K3-1 bearing in accordance with OS 7003.
- (f) Refinish in accordance with FS 370A.

3.3.3 Inspection Door 186151 and Rod End S-168.-

- (a) Inspect for nonrepairable conditions.
- (b) Clean in accordance with OS 7002.
- (c) Remove corrosion in accordance with OS 7010.
- (d) Refinish in accordance with FS 370A.

3.3.4 Bolt S9124-16.-

- (a) Inspect for nonrepairable conditions.
- (b) Clean in accordance with OS 7002.
- (c) Strip and cadmium plate in accordance with Specification QQ-P-416.

3.4 Authorized Repairs:

3.4.1 Elevator Assembly 84-186100.-

- (a) Sheet metal repairs may be accomplished when necessary in accordance with OS 7007.
- (b) Elevator tab hinges 186165, 186165-1, 186166, 186166-1, 186167, and 186167-1 will be replaced when damaged.
- (c) Right- and left-hand 186134 hinges that are damaged may be replaced or repaired by replacing damaged sections. Replaced sections must not be less than 3 increments in length and not closer than 3 increments to the end of the hinge.

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TITLE ELEVATOR ASSEMBLY 84-186175 - MODEL C-45G AND C-45HISSUED 2-26-53WRITTEN BY F. H. Folk; Revised: T. R. Taylor REVISED 12-28-54**3.4.1 Elevator Assembly 84-186100.- (Continued)**

- (d) Repair elevator link attaching holes in the 186108 elevator horn casting which have a diameter greater than .260 inch by line reaming to .3125 inch and installing 105740-X0250-0312-0157 bushing.

3.4.2 Tab Assembly 186100.-

- (a) The 186134-2 hinge may be repaired, when damaged, in the same manner as hinges referenced in Paragraph 3.4.1(c).

3.4.3 Inspection Door 186151; Rod End S-168; and Bolt S-124-16.-

- (a) Remove dents and straighten inspection door in accordance with shop practice.
- (b) Chase threads in rod end when necessary to clean and straighten.
- (c) Chase threads on bolt before plating when necessary to straighten and clean.

4. INSPECTION

4.1 General-- Parts will be inspected to the general acceptable quality standards of OS 7008 and the specific conditions listed below:

- (a) Elevator link attaching holes in the 186108 elevator horn casting which show evidence of wear and elongation are acceptable up to and including a maximum diameter of .260, without rework.

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3.4.1 Elevator Assembly 84-186100.- (Continued)

- (d) Repair elevator link attaching holes in the 186108 elevator horn casting which have a diameter greater than .260 inch by line reaming to .3125 inch and installing 105740-10250-0312-0157 bushing.

3.4.2 Tab Assembly 186100.-

- (a) The 186134-2 hinge may be repaired, when damaged, in the same manner as hinges referenced in Paragraph 3.4.1(c).

3.4.3 Inspection Door 186151; Rod End S-168; and Bolt S-124-16.-

- (a) Remove dents and straighten inspection door in accordance with shop practice.
- (b) Chase threads in rod end when necessary to clean and straighten.
- (c) Chase threads on bolt before plating when necessary to straighten and clean.

4. INSPECTION

4.1 General.- Parts will be inspected to the general acceptable quality standards of QS 7008 and the specific conditions listed below:

- (a) Elevator link attaching holes in the 186108 elevator horn casting which show evidence of wear and elongation are acceptable up to and including a maximum diameter of .260, without rework.