

Beech Aircraft Corporation

OVERHAUL SPECIFICATION

FUEL TANKS - MODEL C-45G, C-45H, and SNB-5

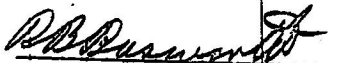
Overhaul Specification OS 9210


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TITLE FUEL TANKS - MODEL C-45G, C-45H, and SNB-5

ISSUED 6-9-53

WRITTEN BY T. R. Taylor REVISED 7-8-54

1. SCOPE

1.1 Purpose. The purpose of this specification is to authorize the use of reconditioned parts and provide reconditioning instructions for component parts of the 189600U, 189604, and 189604-1 main fuel tank assemblies; the 189721U, and 189605-1 rear fuel tank assemblies; the 18970 and 18971 front baggage compartment tank assemblies; and the 184402-8 nose fuel expansion tank assembly as installed in aircraft received for overhaul and instructions for modifications required to adapt them for installation in Model C-45G and C-45H aircraft in accordance with Drawings 694-189604, 694-189605, 18970, 18971 and 184402-8, and installation in Model SNB-5 aircraft in accordance with Drawings 189604, 189605, 18970, 18971 and 184402-8.

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

<u>Page</u>	<u>Date</u>	<u>Description of Revision</u>	<u>Serial Effectivity</u>
* 1	7-8-54	Record Revision	Record Change
2			
3			
4			
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6			
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19	11-20-53	Add Paragraph 3.4.2 (e) to authorize substitute placard.	Record Change
20			
*21	7-8-54	Give patch part number	Record Change
*22	7-8-54	Give patch part number	Record Change

1.3 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.

2. APPLICABLE PUBLICATIONS

2.1 Military.-

MIL-8-6872 Soldering Process, General Specification for

2.2 Federal.-

QQ-P-416 Plating, cadmium

2.3 Beech.-

FS 302 Finish Specification for Model SNB-5 Aircraft
 FS 370A Finish Specification for Model C-45G and C-45H Aircraft
 MF 1111 Acidizing Aluminum Welded Parts
 MP 2451 Slushing Fuel Tanks
 MP 5111 Pressure Test - Fuel Tanks with Liquidometer
 OS 7002 Cleaning Procedures for Reconditioned Aircraft
 OS 7008 General Acceptable Quality Standards
 OS 7010 Removing Corrosion from Aluminum Parts
 OS 7011 Removing Slushing Compounds
 OS 9201 Fuel System - Model C-45G and C-45H
 OS 9202 Fuel System - Model SNB-5

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 9201 Fuel System - Model C-45G and C-45H
 OS 9202 Fuel System - Model SNB-5

3.1.1 Parts Not Used.- The following parts will not be re-used in C-45G, C-45H, and SNB-5 aircraft and will be disposed of at the direction of the customer.

3.1.1.1 Main Fuel Tank Assembly 189600U.-

189631 Gasket
 S-172 1/2 Pipe fitting

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3.1.1.1 Main Fuel Tank Assembly 189600U.- (Continued)

D17973-1	Vent
189611	Collar
189602	Gusset (C-45G and C-45H only)
189600U-4	Tube (C-45G and C-45H only)
103326	Tab assembly
104036	Felt
189760	Stiffener
189609	Seal
189604U	Gasket
189603U	Sump (C-45G and C-45H only)
189605U	Plate (C-45G and C-45H only)
189602U	Stud (C-45G and C-45H only)
189607U	Strainer assembly (C-45G and C-45H only)
AN900-16	Gasket
189632	Plate

3.1.1.2 Center Section Main Fuel Tank Assemblies 189604 and 189604-1.-

AN900-16	Gasket
189615	Tube (C-45G and C-45H only)
189608	Flange (C-45G and C-45H only)
103326	Clip
189602	Gusset (C-45G and C-45H only)
189603U	Sump (C-45G and C-45H only)
189605U	Plate (C-45G and C-45H only)
189604U	Gasket
189602U	Stud (C-45G and C-45H only)
189607U	Strainer assembly (C-45G and C-45H only)
189614	Collar
104036	Felt
189631	Gasket

3.1.1.3 Rear Fuel Tank Assembly 189721U.-

D17973-1	Vent
189631	Gasket
189611	Collar
103326	Clip
AN900-16	Gasket
189725U	Gasket
189632	Plate

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3.1.1.4 Center Section Rear Fuel Tank Assemblies 189605 and 189605-1.-

- 189631 Gasket
- 189614 Collar
- 189608 Flange
- 103326 Clip assembly
- 189725U Gasket
- AN900-16 Gasket

3.1.1.5 Lower Front Baggage Compartment Tank Assembly 18970.-

- 189631 Gasket
- S-173 Fitting
- AN771-5 Stop cock
- 189632 Plate
- 18970-15 Vent

3.1.1.6 Upper Front Baggage Compartment Fuel Tank Assembly 18971.-

- 189631 Gasket
- 189632 Plate
- 18971-7 Vent

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.

- 189600U Main fuel tank assembly
- 189604 Main center section fuel tank assembly
- 189604-1 Main center section fuel tank assembly
- 189721U Rear fuel tank assembly
- 189605 Center section rear fuel tank assembly
- 189605-1 Center section rear fuel tank assembly
- 18970 Lower front baggage compartment fuel tank assembly
- 18971 Upper front baggage compartment fuel tank assembly
- 184402-8 Nose fuel expansion tank

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3.1.3 Parts to be New:

3.1.3.1 Main Fuel Tank Assembly 189600F.-

206067	Flange (to replace 189632 plate only)
189614	Collar
189631	Gasket
103326	Tab assembly
104036	Felt
189604U	Gasket (SMB-5 only)
AN900-16	Gasket
894-180055	Placard
694-189604-76	Angle (C-45G and C-45H only)
AN867-3	Flange (C-45G and C-45H only)
694-189609	Sump assembly (C-45G and C-45H only)
694-189609-1	Sump assembly (C-45G and C-45H only)
694-189641-8	Gasket (C-45G and C-45H only)
108443	Placard

3.1.3.2 Main Center Section Fuel Tank Assembly 189604 and 189604-1.-

AN900-16	Gasket
103326	Clip
189604U	Gasket (SMB-5 only)
189614	Collar
104036	Felt
189631	Gasket
894-180055	Placard
694-189604-76	Angle (C-45G and C-45H only)
AN867-3	Flange (C-45G and C-45H only)
694-189609	Sump assembly (C-45G and C-45H only)
694-189609-1	Sump assembly (C-45G and C-45H only)
694-189641-8	Gasket (C-45G and C-45H only)
108443	Placard

3.1.3.3 Rear Fuel Tank Assembly 189721U.-

189631	Gasket
189614	Collar
AN867-3	Flange (C-45G and C-45H only)
103326	Clip assembly
189725U	Gasket
AN900-16	Gasket
894-180053	Placard
206067	Flange (to replace 189632 plate only)
108443	Placard

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3.1.3.4 Center Section Rear Fuel Tank Assemblies 189605 and 189605-1.-

189631	Gasket
189614	Collar
AN867-3	Flange (C-45G and C-45H only)
103326	Clip assembly
189725U	Gasket
AN900-16	Gasket
894-180053	Placard
108443	Placard

3.1.3.5 Lower Front Baggage Compartment Fuel Tank Assembly 18970.-

189631	Gasket
206067	Flange (to replace 189632 plate only)
AN867-3	Flange (to replace 18970-15 tube only)
AAF 870-16	Flange (to replace 8-173 fitting only)
108443	Placard

3.1.3.6 Upper Front Baggage Compartment Fuel Tank Assembly 18971.-

189631	Gasket
189003	Flange (to replace 18971-7 vent only)
206067	Flange (to replace 189632 plate only)

3.2 Cause for Rejection.- The specific conditions listed below and 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.

- (a) Scrap all tanks which require skin replacement in excess of the replacement of the complete bottom surface,

3.3 Reconditioning Operations.- All operations requiring welding will use welding rod conforming to Specification QQ-R-566, Type 3, Class FS-RA143.

3.3.1 Main Center Section Fuel Tank Assemblies 189600U, 189604, and 189604-1.-

- (a) Cut a cleaning access hole in the aft outboard corner of the tank as shown in Figure 4 of this specification.

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3.3.1 Main Center Section Fuel Tank Assemblies 189600U, 189604, and 189604-1-- (Continued)

- (b) Clean in accordance with OS 7002.
- (c) Remove slushing compound in accordance with OS 7011.
- (d) Remove corrosion in accordance with OS 7010.
- (e) Inspect for nonrepairable conditions.
- (f) Modify tanks to incorporate 694-189609 or 694-189609-1 sump as follows: (C-45G and C-45H only)
 - (1) Make a cut-out in the tank bottom skin around the 189603U sump.
 - (2) Cut off the 189615 tube at the 189607U strainer assembly and remove the sump.
 - (3) Cut out around the S-172 fitting and remove the fitting, the 189615 tube, and the 189602 gusset.
 - (4) Trim away the skin and the 189604-52 and 189604-57 baffles to accommodate the 694-189609 or 694-189609-1 sump in accordance with Drawing 694-189604.
 - (5) Install the 694-189604-76 angle in accordance with Drawing 694-189604.
 - (6) Install the 694-189609 or 694-189609-1 sump in accordance with Drawing 694-189604.
 - (7) Plug hole (S-172 fitting) by welding in new skin of the same material and thickness as the original skin.
- (g) Modify tanks with D17973-1 vent and D17973-3 vent fittings as follows:
 - (1) Remove the D17973-1 vent.
 - (2) Weld the D17973-3 vent fitting closed.
 - (3) Install AN867-3 flange in accordance with Drawing 694-189604 on Model C-45G and C-45H aircraft.
 - (4) Install 189608 flange in accordance with Drawing 189604 on Model BNB-5 aircraft.

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PROJECT <i>189604</i>		FUEL TANKS - MODEL C-45G, C-45H AND BNB-5		
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3.3.1. Main Center Section Fuel Tank Assemblies 189600U, 189604, and 189604-1. (Continued)

- (h) Modify tanks with 189608 vent flanges as follows: (Model C-45G and C-45H only)
 - (1) Cut out around the 189608 flange, being careful to keep the cut adjacent to the old weld bead.
 - (2) Weld in a new AN867-3 flange in accordance with Drawing 694-189604.
- (i) Modify tanks with S-172 fuel outlet fittings as follows: (Model SNB-5 only)
 - (1) Cut out around the S-172 fitting, making the cut adjacent to the weld bead.
 - (2) Make a cut-out in the tank skin as shown in Figure 5 of this specification.
 - (3) Heat the S-172 fitting to facilitate removal from the 189615 tube.
 - (4) Weld OS 9210-1 washer to the 189615 tube as shown in Figure 5.
 - (5) Weld 189604-88 fitting to washer as shown.
 - (6) Using material of the same specification and thickness as the original skin, make a patch to fit the cut-out in the skin. Cut a 1-1/4-inch diameter hole in the patch to fit over the 189604-88 fitting. Locate the hole in accordance with Drawing 189604.
 - (7) Paint a 1-inch red dot adjacent to the 189604-88 fitting.
- (j) Cut off all S-234 clips and 103326 tab assemblies and weld on new 103326 tab assemblies in accordance with Drawings 189604 or 694-189604, as applicable.
- (k) Make necessary repairs as authorized herein.
- (l) Close cleaning access hole by welding in new skin of the same material and thickness as the original skin.
- (m) Acidize in accordance with MP 1111.

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3.3.1 Main Center Section Fuel Tank Assemblies 189600U, 189604, and 189604-1.- (Continued)

- (n) Pressure test in accordance with MP 5111.
- (o) Add new parts as necessary to conform to Drawing 694-189604 for Model C-45G and C-45H and Drawing 189604 for Model SHB-5.
- (p) Slush in accordance with MP 2451.
- (q) Finish in accordance with FS 302 or FS 370A as applicable.
- (r) Add 108443 modification placard by tack welding at corners in the area adjacent to the 103111 placard, after stamping information on placard as follows:
 - (1) Tanks which have been reconditioned using the original part number must have steel stamped on placard, the original part number, the contract number under "Modification, Inc.", and "Reconditioned" stamped with date of reconditioning and inspection stamp.
 - (2) Tanks which have been reconditioned to a new part number must have steel stamped on placard, the new part number, contract number under "Modification, Inc.", and "Reconditioned and Modified" stamped with date of reconditioning and inspection stamp.
- (s) Seal all openings.

3.3.2 Center Section Rear Fuel Tank Assemblies 189721U, 189605, and 189605-1.-

- (a) Clean in accordance with OS 7002.
- (b) Remove slushing compound in accordance with OS 7011.
- (c) Remove corrosion in accordance with OS 7010.
- (d) Inspect for nonrepairable conditions.
- (e) Modify tanks with D17973-1 and D17973-3 vent fittings as follows:
 - (1) Remove the D17973-1 vent.

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3.3.2 Center Section Rear Fuel Tank Assemblies 18972IU, 189605, and 189605-1.- (Continued)

- (2) Weld the D17973-3 vent fitting closed.
- (3) Install AN867-3 flange in accordance with Drawing 694-189605 on Model C-45G and C-45H aircraft.
- (4) Install 189608 flange in accordance with Drawing 189605 on Model SNB-5 aircraft.
- (f) Modify tanks with 189608 vent flanges as follows: (Model C-45G and C-45H only)
 - (1) Cut out around the 189608 flange adjacent to the weld and remove the flange.
 - (2) Weld in a new AN867-3 flange in accordance with Drawing 694-189605.
- (g) Cut off all 8-234 clips and 103326 tab assemblies and weld on new 103326 tab assemblies in accordance with Drawings 189605 or 694-180605, as applicable.
- (h) Make necessary repairs as authorized herein.
 - (1) Acidize in accordance with MF 3111.
- (j) Pressure test in accordance with MF 5111.
- (k) Slush in accordance with MF 2451.
 - (1) Add new parts as necessary to conform to Drawing 694-189605 for Model C-45G and C-45H aircraft and Drawing 189605 for Model SNB-5 aircraft.
- (m) Finish in accordance with FS 302 or FS 370A as applicable.
- (n) Add 108443 placard as stated in Paragraph 3.3.1(r) of this specification.
- (o) Seal all openings.

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3.3.3 Lower Front Baggage Compartment Fuel Tank Assembly 18970.-

- (a) Clean in accordance with OS 7002.
- (b) Remove slushing compound in accordance with OS 7011.
- (c) Remove corrosion in accordance with OS 7010.
- (d) Inspect for nonreparable conditions.
- (e) Modify tanks with 18970-15 vent tubes as follows:
 - (1) Cut out the 18970-15 vent by making the cut adjacent to the weld.
 - (2) Install AN367-3 flange in accordance with the latest revision of Drawing 18970.
- (f) Modify tanks with S-173 fittings and AN771-3 drain cocks as follows:
 - (1) Cut out the S-173 fitting by making a cut adjacent to the weld.
 - (2) Install an AAF 870-16 flange in accordance with the latest revision of Drawing 18970.
- (g) Make necessary repairs as authorized herein.
- (h) Acidize in accordance with MP 1111.
- (i) Pressure test in accordance with MP 5111.
- (j) Slush in accordance with MP 2451.
- (k) Add new parts as necessary to conform to Drawing 18970.
 - (1) Finish in accordance with FS 370A or FS 302 as applicable.
- (m) Add 108443 placard as stated in Paragraph 3.3.1.r of this specification.
- (n) Seal all openings.

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3.3.4 Upper Front Baggage Compartment Fuel Tank Assembly 18971.-

- (a) Clean in accordance with OS 7002.
- (b) Remove slushing compound in accordance with OS 7011.
- (c) Remove corrosion in accordance with OS 7010.
- (d) Inspect for nonrepairable conditions.
- (e) Modify tanks with 18971-7 vents as follows:
 - (1) Cut out the rear corner at the 18971-7 vent location to accommodate an 18971-8 gusset.
 - (2) Install 18971-8 gusset in accordance with Drawing 18971.
 - (3) Install 189003 flange in accordance with Drawing 18971.
- (f) Modify tanks with 189003 flange located on the extreme end of the tank rather than on the 18971-8 gusset as follows:
 - (1) Cut out the 189003 flange making the cut adjacent to the weld.
 - (2) Patch hole by welding in new skin of the same material and thickness as the original skin.
 - (3) Weld on a new 189003 flange in accordance with Drawing 18971.
- (g) Modify tanks that have the 18971-6 and 18971-12 connecting tube located on the same end of the tank as the 18971-5 filler neck as follows:
 - (1) Cut out around the 18971-12 connecting tube, making the cut adjacent to the old weld.
 - (2) Patch hole by welding in new skin of the same material and thickness as the tank skin.
 - (3) Weld on new 18971-6 and -12 connecting tubes in accordance with Drawing 18971.
- (h) Make necessary repairs as authorized herein.

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3.3.4 Upper Front Baggage Compartment Fuel Tank Assembly 18971. - (Continued)

- (i) Acidize in accordance with MP 1111.
- (j) Pressure test in accordance with MP 5111.
- (k) Slush in accordance with MP 2451.
- (l) Add new parts as necessary to conform to Drawing 18971.
- (m) Finish in accordance with FS 302 or FS 370A as applicable.
- (n) Add 108443 placard as stated in Paragraph 3.3.1(r) of this specification.
- (o) Seal all openings.

3.3.5 Nose Fuel Expansion Tank 184402-8. -

- (a) Clean in accordance with OS 7002.
- (b) Remove sludging compound in accordance with OS 7011.
- (c) Remove corrosion in accordance with OS 7010.
- (d) Inspect for nonrepairable conditions.
- (e) Make necessary repairs as authorized herein.
- (f) Acidize in accordance with MP 1111.
- (g) Pressure test in accordance with MP 5111.
- (h) Slush in accordance with MP 2451.
- (i) Finish in accordance with FS 302 or FS 370A as applicable.
- (j) Seal all openings.

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3.3.6 Fuel Gauges 189630-1, 189630-2, 189726-1, 189726-2,
 189714, and 189715:- (EA 1611, EA 1612, and EA 1612A
 Tank Units)

- (a) Disassemble.
- (b) Clean body assembly and electrical parts in Stanisol or equivalent.
- (c) Make necessary repairs as authorized herein.
- (d) Inspect as follows: (See Figures 1, 2, and 3.)
 - (1) Make sure all electrical connections are clean and tight.
 - (2) Examine all bearings. If they are appreciably worn, they will be replaced. If however, they are in good condition, they will be carefully cleaned and re-used.
 - (3) Make sure there is a clean contact between the contact arm and the resistance winding. This contact should be adjusted to a wiper arm tension of 56 grams (2 ounces) plus or minus 25 grams (.8 ounce).
 - (4) Make sure there is a good clean contact between the adjustment levers and the resistance winding and between the contactor and contactor arm.
 - (5) Inspect metal floats for leaks by immersing in hot water (near boiling point) and checking for escaping bubbles.
 - (6) Test bellows seal as follows: The transmitter to be tested, less float, float arm, cover, linkage assembly and potentiometer will be placed on a suitable fixture so that air, under pressure, can be applied to the bottom side of the tank unit housing. Fill the housing with Stanisol. Apply 40 psi air pressure to the seal and inspect for bubbles on the surface of the Stanisol.
- (e) Reassemble.
- (f) Finish in accordance with FS 302 or FS 370A as applicable.

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3.3.7 Cap Assembly 189620.- Refer to OS 9201, Fuel System - Model C-45G and C-45H, for modification instructions to Drawing 694-189620.

3.3.8 Cap Assembly 189620.- Refer to OS 9202, Fuel System - Model SHB-5, for reconditioning of cap assembly.

3.3.9 Cartridge Assembly 189606U.-

- (a) Disassemble by removing getter pin and unsoldering the 189607U-2 cap. Empty out the potassium chromate crystals.
- (b) Clean in accordance with OS 7002.
- (c) Install a new 189606U-1 barrel, if excessively corroded.
- (d) Strip and cadmium plate the assembly consisting of 189606U-1, 189606U-3, and 189603 or AH906-16. Cadmium plate in accordance with Specification QQ-P-416.
- (e) Replace defective K-1700B-2 cocks.
- (f) Refill the barrel with new potassium chromate crystals.
- (g) Solder on a new 189606U-2 cap in accordance with Drawing 189606U.

3.3.10 Strainer Assembly 189607U.-

- (a) Clean in accordance with OS 7002.
- (b) Replace badly corroded AH4007-3 strainers in accordance with Drawing 189607U.
- (c) Strip and cadmium plate in accordance with Specification QQ-P-416.

3.3.11 Stud 189602U.-

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

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PROJECT ENGINEER	<i>E. Lee</i>	DATE REVISED				
APPROVAL	<i>R. B. Blawie</i>			Joseph Overhaul CORPORATION Wichita, Kansas	OVERHAUL SPECIFICATION NO.	9210
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3.4 Authorized Repairs:

3.4.1 Main Center Section Fuel Tank Assembly 189600, 189504, and 189504-1; Center Section Rear Fuel Tank Assembly 189720, 189505, and 189505-1; Lower Front Expansion Component Fuel Tank Assembly 18970; Upper Front Expansion Component Fuel Tank Assembly 18971; and Nose Fuel Expansion Tank 184402-5.

- (a) Corroded tank skins will be repaired by cutting out the corroded area and welding in new skin of the same material and thickness as the original skin.
- (b) Baffles that have enlarged flange rivet holes, resulting from removal of the skin, will be repaired as follows: Add a 5/8-inch by 5/8-inch angle reinforcement made of the same material and thickness as the baffle. The length shall be sufficient to extend the entire length of the exposed portion of the baffle. Rivet the reinforcement to the inside surface of the flange radius using one row of AN470A4 rivets spaced the same as skin attaching rivets. New skin attaching rivets in the baffle flange will be located between old rivet holes and with the same spacing. Maintain 1/4-inch edge distance on all rivets.
- (c) Corroded or cracked baffle flanges may be cut off and replaced with angle of the same material and thickness as the baffle. The angle shall be 5/8-inch by sufficient width to lap 5/8-inch with the baffle web. The length shall be sufficient to extend 5/8-inch beyond both ends of the cut off material in the baffle. Rivet the angle to the baffle with AN470A4 rivets spaced approximately 3/4-inch with 1/4-inch minimum edge distance. An access hole may be cut in the tank skin to permit replacement of cracked flanges. Close access hole by welding in new skin of the same material and thickness as the original skin.
- (d) Defective fittings will be replaced with new fittings. Cut around the old fitting adjacent to the weld bead and remove the fitting. Weld in a new fitting in accordance with applicable drawing information. If the hole is too large to satisfactorily weld in a new fitting, proceed as follows: cut out a round hole in the skin of approximately 2-1/2-inch radius with the original fitting as the center of the cut-out. When the fitting is located closer than 2-1/2 inches from a

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PROJECT REVISION		FUEL TANKS - MODEL C-450, C-45R, AND SUB-5	
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3.4.1 Main Center Section Fuel Tank Assemblies 189600U, 189604, and 189604-1; Center Section Rear Fuel Tank Assemblies 189721U, 189605, and 189605-1; Lower Front Baggage Compartment Fuel Tank Assembly 18970; Upper Front Baggage Compartment Fuel Tank Assembly 18971; and Nose Fuel Expansion Tank 184402-8.- (Continued)

tank corner, the cut-out will terminate at the corner weld bead. Patch the hole by welding in new skin of the same material and thickness as the original skin. Install a new fitting in accordance with applicable drawing information.

- (e) Baffle webs that are cracked or corroded more than .015-inch deep will be repaired by adding a patch over the defective area, providing the defective area is not larger than 3 inches in length. Make the patch from the same material and thickness as the baffle. Cut the patch so that it will extend 5/8-inch beyond all extremities of the damaged area (except at lightening hole edges). Rivet the patch to the baffle with one row of AN470A4 rivets along all edges of the patch. Space the rivets approximately 1/2-inch with 1/4-inch minimum edge distance. Stop drill cracks with a No. 50 drill before installing patch.
- (f) Cracks and leaky portions of the tank skin will be repaired by welding a bead over the defective area.

3.4.2 Fuel Gauges 189630-1, 189630-2, 189726-1, 189726-2, 189714, and 189715.- (RA 1611, RA 1612, and RA 1612A Tank Units) All soldering operations shall be in accordance with Specification MIL-S-6872.

- (a) Repair binding at float arm bearing as follows: (Refer to Figure 1 of this specification.)
 - (1) Remove float arm and operating rod by taking out the locking pin at the bearing and unsoldering and removing the small nut beneath the housing.
 - (2) Remove operating rod and bearing pin by filing one end of the pin and driving out.
 - (3) Clear both bearing holes.
 - (4) Replace bearing if appreciably worn.

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3.4.2 Fuel Gauges 189630-1, 189630-2, 189726-1, 189726-2, 189714, and 189715.- (Continued)

- (5) Reassemble, using a new bearing pin. Polish both the bearing pin and the bearing with No. 000 grade crocus cloth.
- (b) Repair leaky metal floats by soldering. The float should be thoroughly dry before soldering. Care shall be taken that additional leaks are not caused by the soldering operation. To assure that no gasoline remains in the float, the float shall be immersed in boiling water for approximately five minutes after bubbles have ceased to emerge from the cracks.
- (c) Replace defective potentiometer assemblies as follows: (Refer to Figure 3 of this specification)
 - (1) Remove the old potentiometer assembly by removing the two studs or screws, loosening screw (H), and removing it together with the link from slotted arm (J).
 - (2) Remove leads by unsoldering two leads (K) at potentiometer assembly and removing lead (L) by taking out the screw.
 - (3) Assemble new potentiometer assembly using same screws, etc., and solder leads in the original position.
- (d) Replace defective bellows seal assembly as follows: (Refer to Figures 1 and 2 of this specification)
 - (1) Disconnect operating rod by unsoldering and removing the small nut directly below the housing.
 - (2) File off head of rivet and drill out the remainder of the rivet with a No. 53 drill (.059) to a depth of 1/4-inch from the top of the bellows nut.
 - (3) Remove bellows nut and lift out the complete bellows seal assembly.
 - (4) Clean the gasket surface on the housing.
 - (5) Put bakelite varnish on gasket surface.

WRITTEN BY <i>W. Fitzpatrick</i>	DATE ISSUED 6-9-53	OVERHAUL SPECIFICATION	
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APPROVAL <i>P. D. Howard</i>	DATE REVISED	Boech Aircraft CORPORATION White Plains, N. Y.	OVERHAUL SPECIFICATION NO. 9210
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TITLE FUEL TANKS - MODEL C-45G, C-45H, AND SNB-5

ISSUED 6-9-53

WRITTEN BY T. R. Taylor

REVISED 11-20-53

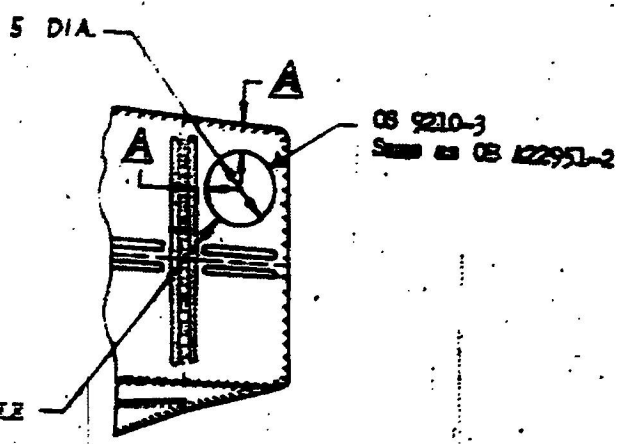
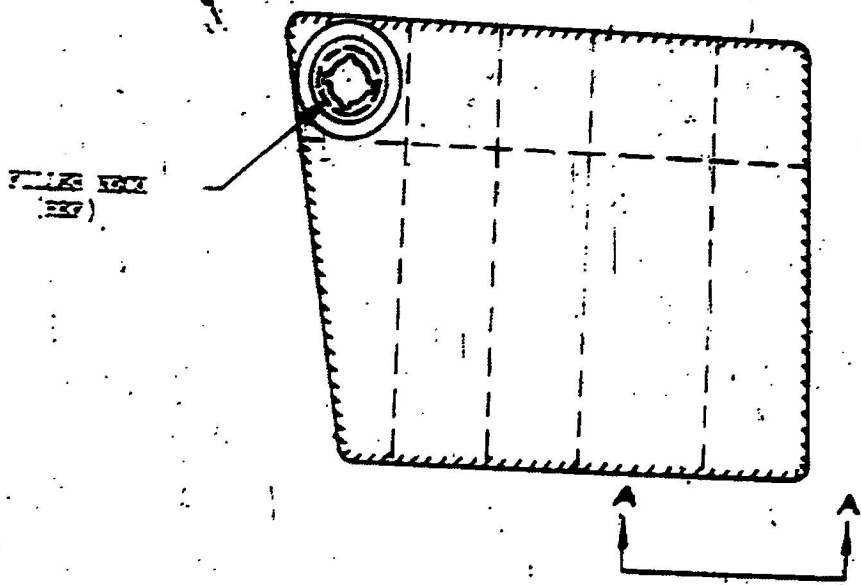
3.4.2 Fuel Gauges 189630-1, 189630-2, 189726-1, 189726-2, 18R9714, and 18R9715.- (Continued)

- (6) Insert replacement bellows seal assembly so that the key enters slot in housing. Secure with a new bellows nut.
- (7) When the nut is in place, drill a new No. 53 (.059) hole 1/8-inch deep into the housing. Drive in a new rivet.
- (8) Install the small nut directly below the housing and connect the operating rod by soldering
- (e) Rework gauges from which the manufacturers placard is missing as follows:
 - (1) Make a placard from a strip of 17BT-AL alclad approximately 1-7/8 x 3/8 x .020.
 - (2) Steel stamp part number EA-1612A-18R9715, EA-1612-18R9714, EA-1612-189726-1, EA-1611-189726-2, EA-1612-189630-1, or EA-1611-189630-2 as applicable on the placard, using 1/16-inch high letters.
 - (3) Drill 1/16 diameter holes in the placard to match the holes in the fuel gauge housing.
 - (4) Attach the placard to the housing with two AN 430-2-4 rivets

4. INSPECTION

4.1 General.- The parts will be inspected to the general acceptable quality standards of OS 7008 and the specific quality standards listed below.

- (a) Tank fittings with threads that vary from tolerance within 1/2 thread are acceptable providing the air test requirements can be met.



SECTION A-A

A 2. REPAIRING ACCESS HOLES SHALL BE MADE AND REPAIRED AS SHOWN AND REPAIR SHALL BE MADE AS SHOWN.

DRAWN BY <i>B. Fitzpatrick</i> CHECKED BY <i>[Signature]</i> APPROVED BY <i>[Signature]</i> DATE <i>6-2-51</i>		OVERHAUL SPECIFICATION PANEL PARTS - MODEL C-45G, C-45E, AND SEE-5	
DATE ISSUED <i>7-8-51</i>		Check Aircraft CORPORATION Wichita, L. Kansas	OVERHAUL SPECIFICATION NO. 9210
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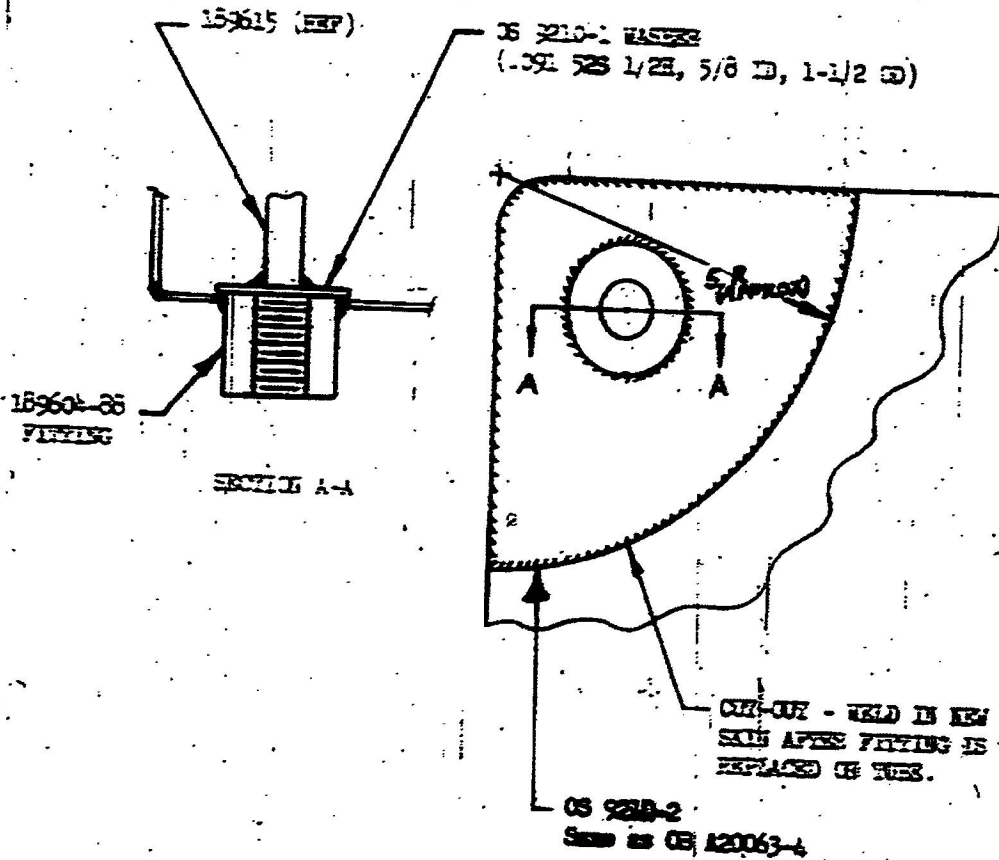


FIGURE 5

DESIGNED BY <i>B. Fitzpatrick</i>	DATE DESIGNED 9-9-53	OVERHAUL SPECIFICATION	
DRAWN BY <i>L. Lee</i>		FUEL TANKS - MODEL C-450, C-452, AND SIB-5	
CHECKED BY <i>R. Howard</i>	DATE CHECKED 7-2	Cessna Aircraft CORPORATION Wichita, Kansas	OVERHAUL SPECIFICATION
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