

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

For

Operator Seat Installations

Document No.: AF-576

Revision "E"

Revision Date: 04/12/18

Applicable to:

Beechcraft models 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, B90, C90, C90A, C90GT, C90GTi, E90, F90, H90, 99, 99A, A99, A99A, B99, C99, 100, A100, A100A, A100C, A100-1, B100, 200, 200T, 200C, 200CT, A200, A200C, A200CT, B200, B200T, B200C, B200CT, B200GT, B200CGT, 300, B300, B300C, & 300LW

Modified by FAA STC SA01809WI

The information in the Instruction for Continued Airworthiness is FAA accepted material and complies with 14 CFR 23.1529, Instructions for Continued Airworthiness. It supersedes or adds to that provided in the Maintenance Manual for the Beechcraft King Air Series Aircraft, only where covered in the items contained herein. For limitations and procedures not contained in the Supplement, consult the Component Maintenance Manual, or other approved airplane data.

REVISION PAGE

Document Title: Instructions for Continued Airworthiness

Prepared By: Todd Pogue

Updates to the ICA will be made by Aviation Fabricators Inc. Updates will be listed in the log of revisions and the effective pages will be listed below.

Log of Revisions				
REV. NO.	EFFECTED PAGE(S)	DESCRIPTION	DATE	APPROVED BY
IR	All	*Initial Release	06/11/15	JRL
A	5	*Added document AF-621 reference to DATA section for the installation of the operator seat assembly in 99 series aircraft	04/13/16	JRL
B	6-7	*Updated views in Figure 1.0A and Figure 1.0B to latest seat design.	06/20/16	JRL
C	All	*Add new seat P/N 32-0485 and updated all Figures accordingly; also added to Seat Installation info on page 12	11/15/17	JRL
D	All	-Changed P/N 32-0485 to 32-0493	01/03/18	JRL
E	All	-Added P/N's 32-0503 through 32-0516 and updated all Figures accordingly -Updated the W&B info on page 12 for new seat with different armrest configurations	04/12/18	JRL

Per the requirement of Appendix G of 14 CFR Part 23 paragraph G23.1 (c), the changes made to the ICA by the applicant will be distributed via mail by means of paper copy.

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ABBREVIATIONS AND DEFINITIONS

Abbreviations	Definitions
AML	FAA Approved Model List (AML)
Detailed Inspection (DET)	An intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors, magnifying lenses, etc. may be necessary. Surface cleaning and elaborate access procedures may be required.
FAA	Federal Aviation Administration
FAA MIDO	FAA Manufacturing Inspection District Office
General Visual Inspection (GVI)	A visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight or droplight and may require removal or opening of access panels or doors. Stands, ladders or platforms may be required to gain proximity to the area being checked.
ICA	Instructions for Continued Airworthiness
Special Detailed Inspection (SDI)	An intensive examination of a specific item, installation , or assembly to detect damage, failure or irregularity. The examination is likely to make extensive use of specialized Inspection Techniques and/or equipment. Intricate cleaning and substantial access or disassembly procedure may be required.
STC	Supplemental Type Certificate

1.0 INTRODUCTION

The purpose of this Maintenance Manual Supplement and Instructions for Continued Airworthiness (ICA) is to provide the maintenance technician with the information necessary to ensure the continued airworthiness of the Aviation Fabricators operator seat installations, for seat part numbers:

32-0397, 32-0493, 32-0503, 32-0504, 32-0505, 32-0506, 32-0507, 32-0508,
32-0509, 32-0510, 32-0511, 32-0512, 32-0513, 32-0514, 32-0515, 32-0516

when installed in accordance with Aviation Fabricators design data included on STC Drawing List AF-571 and per Supplement Type Certificate (STC) SA01809WI.

Modifications to an aircraft obligates the operator to include the maintenance information provided by this document into the operators aircraft Maintenance Manual and operator's aircraft scheduled maintenance program. This document defines supplementary maintenance operations and frequencies recommended by Aviation Fabricators Inc., to ensure the aircraft's airworthiness.

The information contained herein addresses the requirements specified in 14 CFR 23.1529, Instructions for Continued Airworthiness and supplements the basic Airplane Maintenance Manual only in those areas listed as pertains to the installation of the operator seats, as installed per the Aviation Fabricator STC Drawing List AF-571. For limitations and procedures not contained in this supplement, consult the basic Airplane Maintenance Manual.

DATA

All information to support the continued airworthiness of this modification is contained in:

STC SA01809WI
STC Drawing List AF-571

Installation: STC Drawing List AF-571:

See document number: AF-594 for 90 Series Aircraft
AF-592 for 100, 200, B200 & 300 Series Aircraft
AF-573 for B300 Series Aircraft
AF-621 for 99 Series Aircraft

Parts: Refer to P/N's 32-0397, 32-0493, 32-0503, 32-0504, 32-0505, 32-0506,
32-0507, 32-0508, 32-0509, 32-0510, 32-0511, 32-0512, 32-0513, 32-0514,
32-0515, 32-0516 and respective drawings as listed on STC Drawing List AF-571.

The operator seat is a self-contained complete assembly that mounts in the cabin to the existing seat track, using standard fittings, in accordance with FAA approved floor plans.

Design Change Control

All data and changes to the parts and assemblies will be tracked per STC Drawing Lists AF-571 Rev IR or later FAA approved revisions.

Applicable Aircraft

Beechcraft models 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, B90, C90, C90A, C90GT, C90GTi, E90, F90, H90, 99, 99A, A99, A99A, B99, C99, 100, A100, A100A, A100C, A100-1, B100, 200, 200T, 200C, 200CT, A200, A200C, A200CT, B200, B200T, B200C, B200CT, B200GT, B200CGT, 300, B300, B300C, & 300LW

Operator Seats

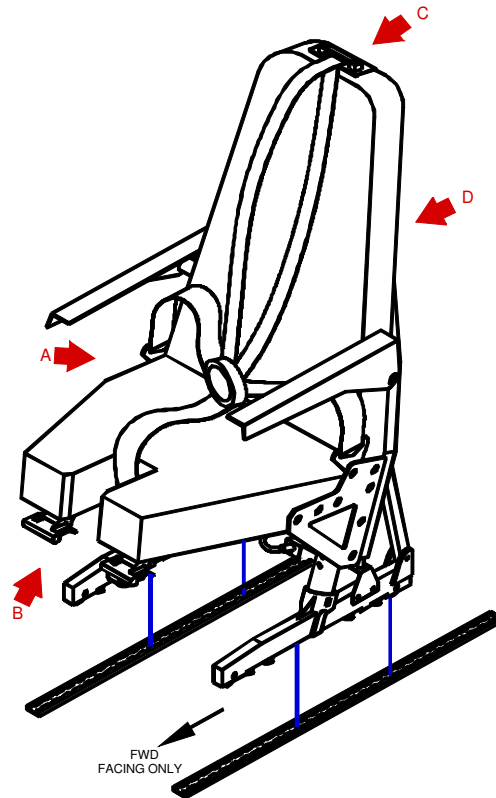
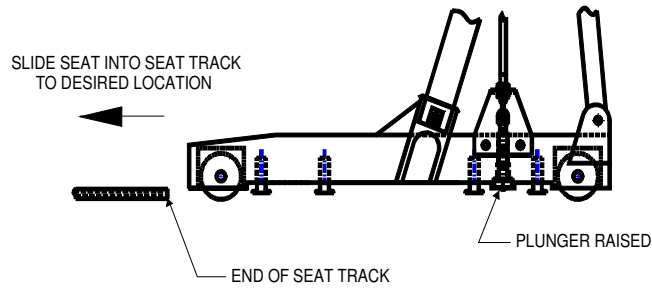


Figure 1.0A

Seat Installation

P/N's 32-0397, 32-0503, 32-0504, 32-0505, 32-0509, 32-05010, 32-0511, 32-0512



P/N's 32-0493, 32-0506, 32-0507, 32-0508, 32-0513, 32-0514, 32-0515, 32-0516

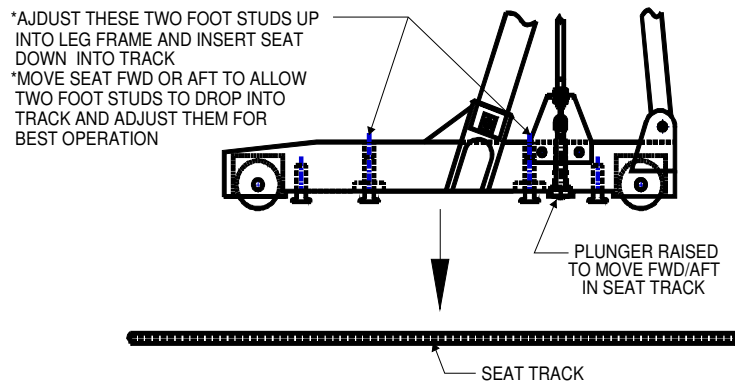
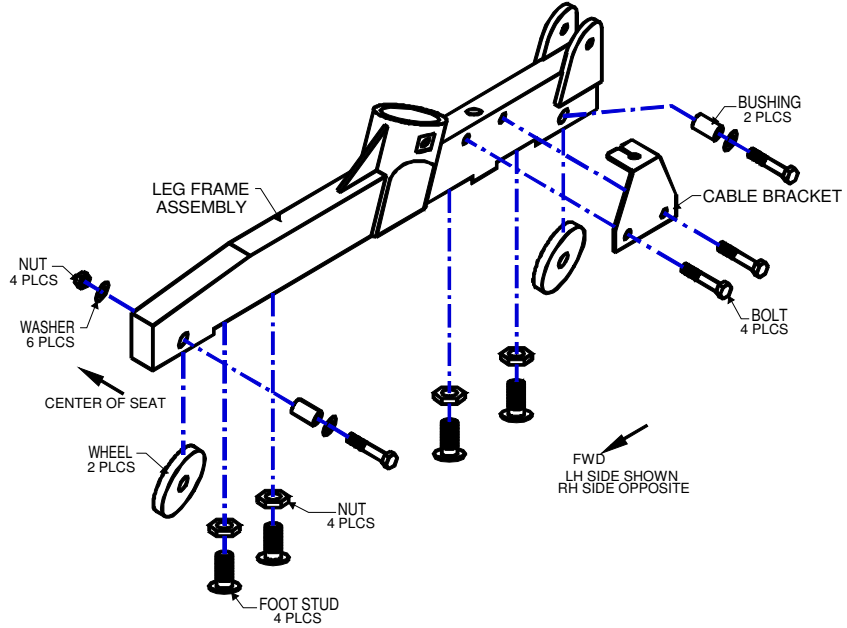


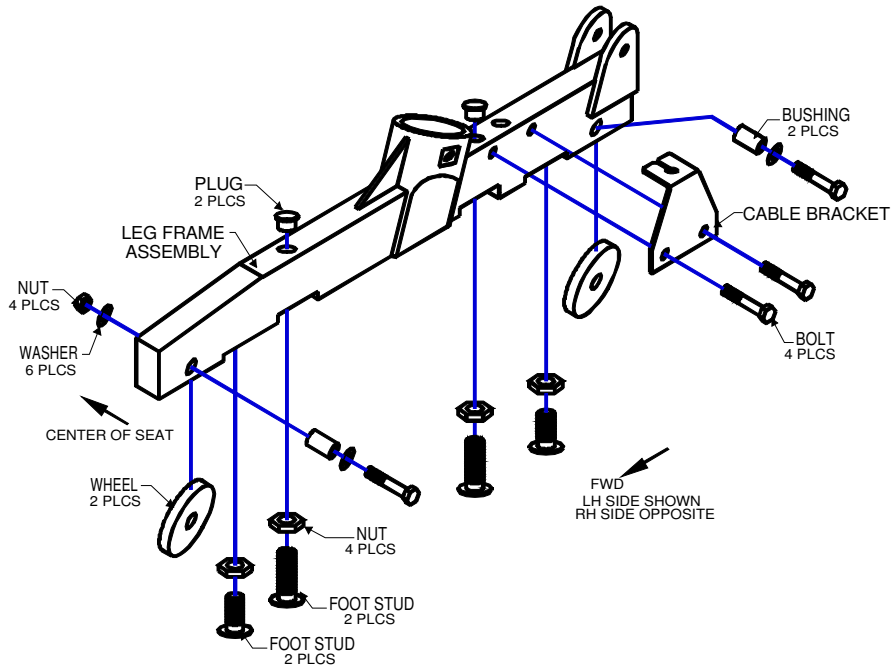
Figure 1.0B

Foot Attachment & Installation

P/N's 32-0397, 32-0503, 32-0504, 32-0505, 32-0509, 32-0510, 32-0511, 32-0512



P/N's 32-0493, 32-0506, 32-0507, 32-0508, 32-0513, 32-0514, 32-0515, 32-0516



Restraint System Attachment

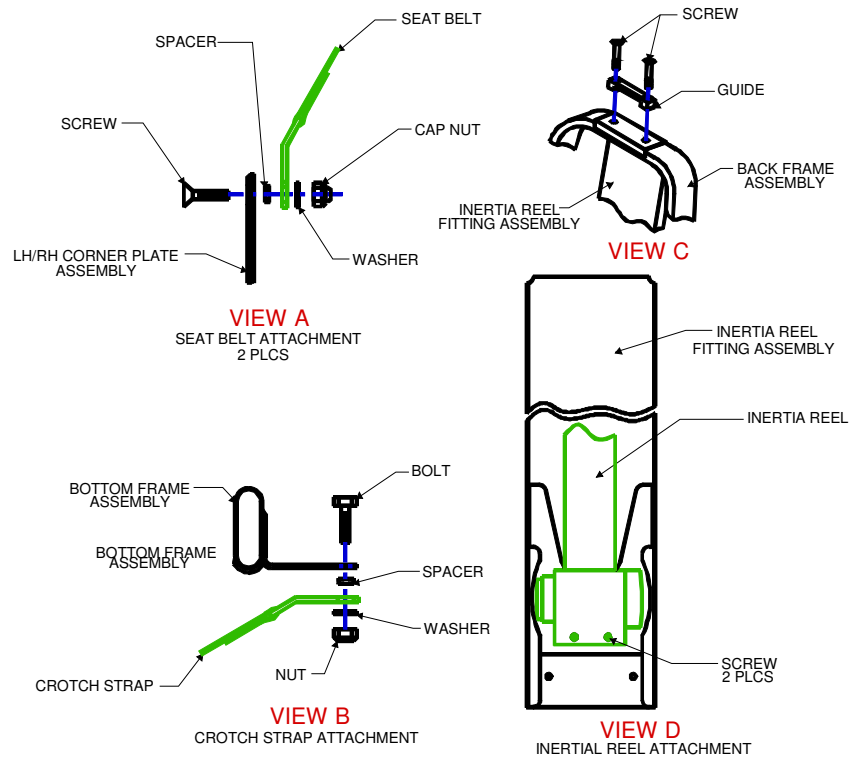


Figure 1.0D

2.0 INSPECTION REQUIREMENTS AND OVERHAUL SCHEDULE

1. To comply with 14 CFR 23.1529, continue the operator seat and restraint system(s) on the same inspection and maintenance schedule used per the applicable Beechcraft Maintenance Manual for seats.
 - a. The new seat assembly and restraint system require no service other than inspection at normal Phase 4 inspection schedule of 800 hours or 24 months whichever occurs first.
 - b. Perform a detailed visual inspection of each bottom and back cushion and cover to detect apparent or obvious defects, deterioration in the form of wear, tears, rips, punctures or irregularities that cause the cushion assembly to become worn or distorted. Replace the cushion assembly if this cover does not fit properly or the cushion develops a “lumpy” or irregular feel.
 - c. Perform a detailed visual inspection of each seat frame assembly including weld joints, diaphragm, fasteners and anchors, track fittings, and restraint systems to detect apparent or obvious defects, corrosion, cracks, large deformations (permanent deformation in frame tubes more than $\frac{1}{4}$ the overall thickness of the tube diameter), irregularities that cause the frame assembly and/or anchor/fitting to become distorted and not fit into the intended seat track/anchor locations. If deformities are found, the seat frame assembly must be removed from the aircraft and returned to Aviation Fabricators for repair or replacement.

2. Inspection Time Limit for high density seat assemblies:

Phase 4 inspection at 800 hours or 24 months whichever occurs first for the seat assembly and restraint systems

Task Code			Schedule	Date	Mech	Insp
AFI-100	a.	Inspect for damage to upholstery.				
AFI-101	b.	Inspect safety belts for wear, cuts, fraying, damage, and deterioration.				
AFI-102	c.	Inspect safety belt attachment fittings for wear and damage				
AFI-103	d.	Inspect foot fittings for damage, security, and function.				
AFI-104	e.	Inspect seat frame for damage, and corrosion.				
AFI-105	f.	Inspect overall seat for fit and function.				

3.0 DIMENSION AND ACCESS

The installation of the operator seat assembly does not change the dimensions of the aircraft or alter the access to any existing aircraft system.

4.0 LIFTING AND SHORING

No change.

5.0 LEVELING AND WEIGHING

Due to variable seat upholstery weights it is the responsibility of the installer to determine the exact final seat weight when installing and removing the operator seat. For reference, the typical frame assembly and sub part weights are listed as follows:

Seat frame assembly w/ 2 arms	= 27.5 lbs
Seat frame assembly w/ 1 arm	= 26.5 lbs
Seat frame assembly w/ No arms	= 25.5 lbs
Restraint System	= 2.5 lbs
Maximum Allowable Seat Weight with Cushions & Upholstery	= 40 lbs

6.0 TOWING AND TAXIING

No change.

7.0 PARKING AND MOORING

No change.

8.0 PLACARDS AND MARKINGS

There are no placards required in conjunction with this modification.

9.0 SERVICE INFORMATION

Typical Seat Service Instructions:

A. Upholstery Cleaning:

Seat Service Instructions

1. If possible remove seat back and seat bottom cushion assemblies from the seat frame assembly.
2. If possible dry clean fabric cushions.
3. If dry cleaning is not possible clean fabric with Armour All fabric cleaner or equivalent.
4. Clean leather with Armour All leather cleaner or equivalent.
5. Clean and inspect restraint system for damage, fraying, cuts or seam deterioration.

6. Inspect all attachment fittings and replace if necessary.
7. Inspect overall seat for fit and function.

Typical Seat Maintenance Instructions:

Seat Assembly

The operator seat is a self-contained complete assembly that mounts in the cabin to the existing seat track using standard fittings. Refer to Figure 1.0A.

Seat Installation

P/N's 32-0397, 32-0503, 32-0504, 32-0505, 32-0509, 32-0510, 32-0511, 32-0512
Install seat with the plungers raised while sliding the foot onto the end of seat track so that foot studs are in the track. Then move the seat forward or aft so that the plungers snap down into place in the track and lock the seat into position. Refer to Figure 1.0B.

P/N's 32-0493, 32-0506, 32-0507, 32-0508, 32-0513, 32-0514, 32-0515, 32-0516
Install seat down into seat track with two foot studs adjusted up into the leg frame assembly using a straight screwdriver. With plunger raised adjust seat forward or aft in seat track so that the two raised foot studs can be adjust down into the seat track for best operation. Release plungers and make sure seat snap down into seat track locking the seat in place. Refer to Figure 1.0B.

Seat Removal

Remove seat by raising the plungers and sliding the foot to the end of seat track.

Restraint System

Restraint system removal is accomplished by loosening attaching hardware and removing from the brackets on the seat assembly. Refer to Figures 1.0D.

Cushions

The seat cushions and upholstery assemblies should weigh no more than 10 lbs total. All covering and upholstery materials must comply with 14 CFR 23.853 as stated on the installation instructions.

Oxygen Dispensing Unit Availability

Per the installation instructions, the operator seat installation must comply with 14 CFR 23.1441. Each dispensing unit must be capable of being readily available to be placed into position on the face of the seat occupant.

B. RECOMMENDED OVERHAUL PERIODS

No additional overhaul time limitations.

10.0 AIRWORTHINESS LIMITATIONS

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Sec. 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

There are no Airworthiness Limitations to the aircraft with the addition of the operator seat installed by this STC

11.0 TROUBLESHOOTING

Refer to the existing Aircraft Maintenance Manual for troubleshooting the seat installation that is required beyond the information found on the STC Drawing List AF-571.

For replacement parts or repair of damage parts:

Contact Aviation Fabricators at (660) 885-8317.

Troubleshooting this installation should only be accomplished by FAA approved repair stations with the appropriate ratings or appropriately rated operator/individuals, with required test equipment and service data.