# INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

For

2 & 3 Place Divan Installations

**Document No.: AF-543** 

Revision "IR"

Revision Date: 12/10/12

Applicable to:

Falcon 10 Aircraft

Modified by FAA STC SA2885SW

The information in the Instructions for Continued Airworthiness is FAA accepted material and complies with 14 CFR 25.1529, Instructions for Continued Airworthiness. It supersedes or adds to that provided in the Maintenance Manual for the Falcon 10 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

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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	12/10/12	JRL							

Per the requirement of Appendix H of 14 CFR Part 25 paragraph H25.1 (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 2 & 3 divan installation, per part numbers 62-0262K, 62-0263K, 62-0292K, and 62-0293K, when installed in the aircraft passenger cabin in accordance with Aviation Fabricators design data included on STC Drawing List AF-298 and per Supplement Type Certificate (STC) No. SA2885SW.

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 25.1529, Instructions for Continues Airworthiness and supplements the basic Airplane Maintenance Manual only in those areas listed as pertains to the installation of divan assemblies, as installed per the Aviation Fabricators' STC Drawing List AF-298. 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 SA2885SW.

STC Drawing List: AF-298.

Installation: D-10271 for Shoulder Harness Installation

D-10272 for 3 Place Divan Installations, p/n's 62-0262K and 62-0263K D-10304 for 2 Place Divan Installations, p/n's 62-0292K and 62-0293K

Parts: Per manufacturing drawings listed on STC Drawing List AF-298

The new divan assembly with restraint systems is a self contained complete assembly that mounts to the existing seat track, using standard hold down fittings. The restraint systems are attached to the divan with a "pass through" fitting attached to the side wall of the aircraft.

#### **Design Change Control**

All data and changes to the parts and assemblies will be tracked per STC Drawing List AF-298 Rev F or later FAA approved revision.

#### **Applicable Aircraft**

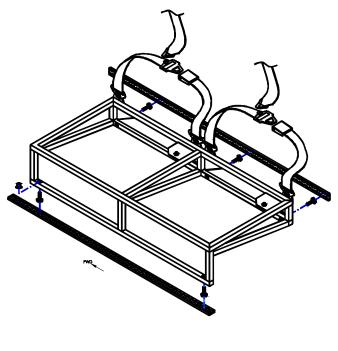
Falcon 10

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# 2 & 3 Place Divans

P/N's 62-0262K, 62-0263K, 62-0292K (shown), and 62-0293K (Top not shown for clarity)



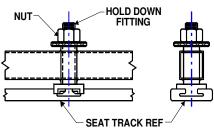


Figure 1.0A

### Inertia Reel Attachment

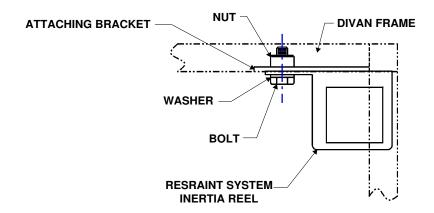


Figure 1.0B

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# Seat Belt Attachment

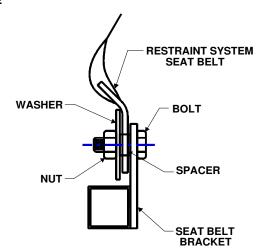
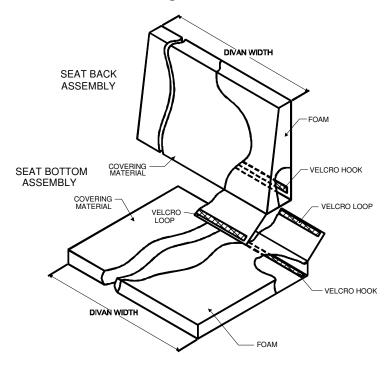


Figure 1.0C

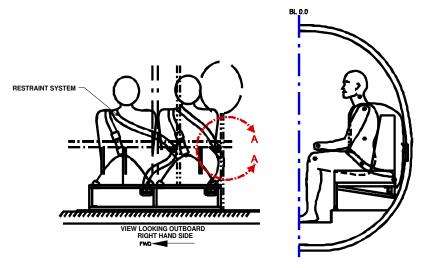


**CUSHION ASSEMBLY REFERENCE** 

Figure 1.0D

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# Shoulder Harness Kit



#### SHOULDER HARNESS INSTALLATION

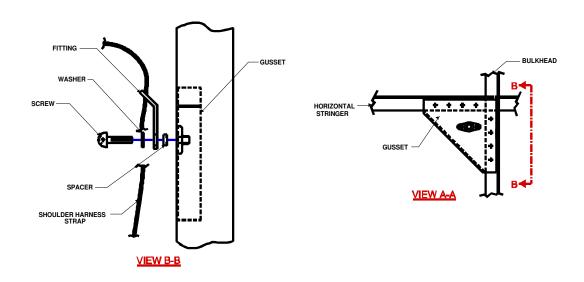


Figure 1.0E

# **Close-out Panel Assembly**

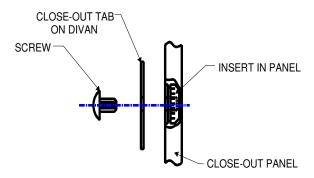


Figure 1.0F

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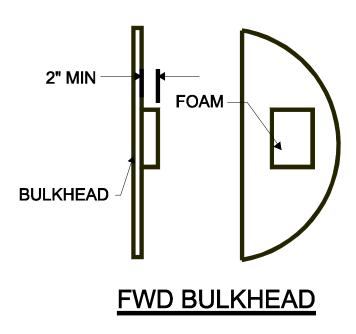


Figure 1.0G

#### 2.0 INSPECTION REQUIREMENTS AND OVERHAUL SCHEDULE

- 1. To comply with 14 CFR 25.1529, continue the new divan assembly (with restraint system) on the same inspection and maintenance schedule used per the Falcon 10 Maintenance Manual for cabin section inspections.
  - a. The new cabin configuration components require no service other than inspection at normal inspection interval of 200 hours.
  - b. The safety belts require no service other than inspection at normal inspection interval of every 200 hours.
  - c. Perform a detailed visual inspection of each passenger seat bottom and back cushions and covering of all cabin interior components to detect apparent or obvious defects or irregularities.

On the cushion assembly, check for cracks and punctures within a 4" diameter circle. The cushion assembly can have no more than three defects found within the 4" diameter circle. If a cushion develops a "lump", check to see if there are no more than two lumps within a 4" diameter circle. Any damage to the cushions outside of the described limits will require them to be replaced.

Visually inspect the covering assemblies for holes, punctures, and tears. If the damage to the covering is holes smaller than ½" in diameter or a cut at a maximum of 2" in length then the covering is satisfactory. The sewing of the cover assemblies is not to exceed 1" tearing. Any damage to the covering assemblies outside of the described limits will require them to be replaced.

d. Visually inspect the divan and seat assembly tubes and diaphragm for cracks and deformation. Damaged conditions could be detected as a crack at the edge of the tube or along the length of the tubes or as a crack, tear or cut found on the seat bottom or back diaphragm. Visually inspect all hardware for excessive wear before and after installation.

Replace the seat back and bottom diaphragm if two cracks or deformations are found with a 4" diameter circle. If a tear or cut is found with a maximum of 6", replace the diaphragm.

There shall be no broken tubes. There shall be no sharp corners, edges, or protrusions that may injure passengers. Replace the tubes if they are bent in such a way that they are more than 2" off center. Replace the seat tubes if crack length is found to be .125" or greater. Replace the tube if a dent is found running longer than 3". Replace the seat tubes if deformation is greater than .25" the overall thickness of the tube diameter.

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Cracked or broken fasteners or fittings are to be replaced with new immediately.

For repair or replacement of damaged or broken parts or assemblies contact Aviation Fabricators Inc.

2. Inspection Time Limit for the cabin configuration installations:

200 +/- hour inspection for the new cabin configuration components

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.				

A. The new divan assembly and restraint system are on the same inspection and maintenance schedule used per the Falcon 10 Maintenance Manual for passenger seats.

### 3.0 DIMENSION AND ACCESS:

The installation of this divan installation 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

2 Place Divan = 12.5 lbs

3 Place Divan = 18.0 lbs

Seat Belt and Hardware = 1.5 lbs per seat place

Close-out Panel 2 plc = 3.0 lbs

3 plc = 4.5 lbs

Top Access Panel = 6.5 lbs per seat place

### 6.0 TOWING AND TAXIING

No change.

#### 7.0 PARKING AND MOORING

No change.

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#### 8.0 PLACARDS AND MARKINGS

Three (2) placards are required in conjunction with this modification:

1. A placard stating "to install harness over seat occupant's fwd shoulder" is sewn on to restraint system part numbers 3088-4-021-2396 and should be legible and easily viewed by the seat occupant.



Figure 8.0A

2. If optional close out panels are installed, placard part number 15-0060 must be installed on the top outside of the close-out panel door so that it is visible when the door is closed.

MAX WEIGHT 10 LBS.

Figure 8.0B

#### 9.0 SERVICE INFORMATION

## **Typical Passenger Seating Service Instructions:**

### A. Upholstery Cleaning:

#### **Service Instructions**

- 1. Remove seat back and seat bottom cushion assemblies from the interior seating components.
- 2. Clean the cushions in accordance with instructions issued by the company responsible for the upholstery covering so that knowledge of the upholstery material's fire retardant properties are known and will not be compromised.
- 3. Clean and inspect restraint system for damage, fraying, cuts or seam deterioration.
- 4. Inspect all attachment fittings and replace if necessary.
- 5. Inspect overall interior component for fit and function.

# **Typical Maintenance Instructions:**

### Divan Assembly

The divans are self contained complete assemblies that mount to the existing aircraft cabin seat track using standard hold down fittings. Refer to Figure 1.0A.

#### Divan Installation

Installation of the divan requires aligned the feet on the existing seat track and attaching the divan using hold down fittings. Refer to Installation Instruction drawing D-10272 for 3 place divans and D-10304 for 2 place divans for complete installation details and hardware part numbers.

#### Divan Removal

Removal of the divan requires loosening the hold down fitting nuts and lifting the divan from its location on the seat track.

#### Cushions

Seat back and seat bottom cushion assemblies are removed by simply pulling the cushion inboard away from the Velcro on the sidewall or up away from the Velcro on the pan of the divan assembly, respectively. All covering and upholstery materials must comply with 14 CFR 25.853. The cushion design and layout were determined & manufactured by the seat installer to match the design of the cabin interior in the aircraft. Refer to Figure 1.0D for Cushion Assembly Reference for basic assemblies.

#### Inertia Reel

Inertia reel removal is accomplished by loosening attaching hardware and removing from the divan frame bracket. Refer to Installation Instruction drawing D-10272 for 3

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place divans and D-10304 for 2 place divans for complete installation details and hardware part numbers. Refer to Figure 1.0B.

#### Seat Belt

Seat belt and removal is accomplished by loosening attaching hardware and removing from the divan frame. Refer to Installation Instruction drawing D-10272 for 3 place divans and D-10304 for 2 place divans for complete installation details and hardware part numbers. Refer to Figure 1.0C.

#### Forward Bulkhead Pad

Per the installation instructions, D-10272 or D-10304, of the divan assembly, if the divan is installed next to a forward bulkhead, the bulkhead must be properly padded to comply with 14 CFR 25.785. Figure 1.0G

### Oxygen Dispensing Unit Availability

Per the installation instructions, D-10272 or D-10304, of the divan assembly, the divan installation must comply with 14 CFR 25.1441. 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 and requirements apply to the Aviation Fabricators' interior cabin configuration.

#### 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 new (or additional) Airworthiness Limitations associated with this equipment and /or installation.

# 11.0 TROUBLESHOOTING INFORMATION

Refer to the existing Aircraft Maintenance Manual for troubleshooting the 2 or 3 place divan installation that is required beyond the information found on the installation drawing D-10272 for 3 place divans and D-10304 for 2 place divans.

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.