

**Aviation Fabricators Inc.
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INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

For
1, 2, 3, & 4 Place Side Facing Divans

**Document No.: AF-447
Revision “E”
Revision Date: 03/16/15**

Applicable to:

Hawker Beechcraft models DH-125 Series, BH-125 Series,
HS-125 Series, BAe-125 Series, 800, 800XP, & 1000

Modified by FAA STC SA4147SW

The information in the Instruction 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 Hawker DH-125 Series, BH-125 Series, HS-125 Series, BAe-125 Series, 800, 800XP, & 1000 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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Reviewed By: Brian C. Adamson

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				
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Orig. Issue	All	Initial Release	07/21/09	GRL
A	All	*Added divan installation and removal procedures under "Typ Divan Maintenance Instructions" in Section 9.0 *Added Figure 1.0G to Section 1.0 for Fwd Bulkhead padding and referred to it in "Typ Divan Maintenance Instructions" *Added Oxygen dispensing unit info to Section 9.0 in the "Typ Divan Maintenance Instructions" *Added divan weight information in Section 5.0 *Added Figure 1.0H to Section 1.0 for Typical Cushion Assembly information and added description in Section 9.0 in the "Typ Divan Maintenance Instructions"	09/24/09	GRL
B	12, 13, 17	*Updated Section 2.0C to better describe upholstery deformations requiring replacement *Updated Section 2.0D to better describe divan frame deformations requiring replacement *Updated Section 9.0A(6) to define "excessive wear" for the seat belt inspection	11-05-09	GRL
C	11	*updated Note 2.1.a. for seat to be checked at normal inspection of 800 hours to match new MM update *updated Note 2.1.b. for seat belt to be checked at 300 hrs per MM	08-05-11	GRL

Log of Revisions

REV. NO.	EFFECTED PAGE(S)	DESCRIPTION	DATE	APPROVED BY
D	All	*Added Section 11, Troubleshooting, p18 *Updated Section 10 with latest layout, p18	05/06/13	JRL
E	All	*Corrected Maintenance Schedule hours to match OEM manual for models 800XP and 100 per ECO # AF00523, p 11 & 12	03/16/15	JRL

Distribution:

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 1, 2, 3 or 4 place divans, per installation numbers 62-0166K, 62-0167K, 62-0168K, 62-0172K, 62-0188K, 62-0232K, 62-0233K, 62-0234K, 62-0235K, 62-0236K, 62-0359K, 62-0360K, and 62-0361K, when installed onto existing seat track in the aircraft passenger cabin in accordance with Aviation Fabricators design data included on STC Drawing List AF-177 and per Supplement Type Certificate (STC) No. SA4147SW.

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 Fabricator STC Drawing List AF-177. 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 SA4147SW.
STC Drawing List: AF-177.

Installation: Installation Instructions AF-178 for p/n's 62-0166K, 62-0167K, 62-0168K, 62-0172K
Installation Instructions AF-202 for p/n's 62-0188K, 62-0232K, 62-0233K, 62-0234K, 62-0235K, 62-0236K, 62-0359K, 62-0360K, 62-0361K

Parts: p/n 62-0166, 1 Place Side Facing Divan
p/n 62-0167, 2 Place Side Facing Divan
p/n 62-0168, 3 Place Side Facing Divan
p/n 62-0172, 4 Place Side Facing Divan
p/n 62-0188, 3 Place LH Aft Side Facing Divan
p/n 62-0232, 2 Place LH Aft Side Facing Divan
p/n 62-0233, 4 Place LH Aft Side Facing Divan
p/n 62-0234, 2 Place RH Aft Side Facing Divan

p/n 62-0235, 3 Place RH Aft Side Facing Divan
p/n 62-0236, 4 Place RH Aft Side Facing Divan
p/n 62-0359, 2 Place RH Aft Side Facing Divan (1000 Series only)
p/n 62-0360, 3 Place RH Aft Side Facing Divan (1000 Series only)
p/n 62-0361, 4 Place RH Aft Side Facing Divan (1000 Series only)

The divan is a self contained complete assembly that mounts to anywhere in the cabin on the existing seat track, using standard fittings.

Design Change Control

All data and changes to the parts and assemblies will be tracked per STC Drawing List AF-177 Rev O or later approved revision.

Applicable Aircraft

Hawker DH-125 Series, BH-125 Series, HS-125 Series, BAe-125 Series, 800, 800XP, & 1000 Aircraft

1, 2, 3, & 4 Place Divans

P/N's 62-0166 (shown), 62-0167, 62-0168, 62-0172
Top not shown for clarity

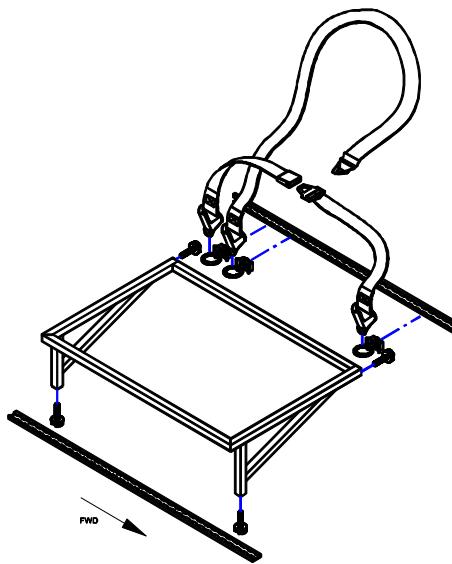


Figure 1.0A

2, 3, & 4 Place Aft Divans

P/N's 62-0188, 62-0232 (shown), 62-0233, 62-0234, 62-0235, 62-0236, 62-0359, 62-0360,

62-0361

Top not shown for clarity

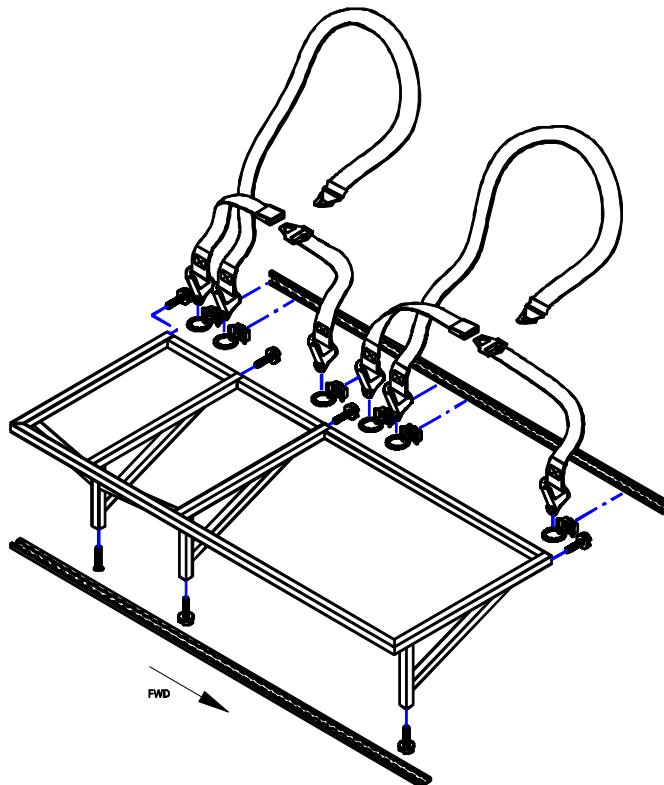


Figure 1.0B

Inertia Reel Kit

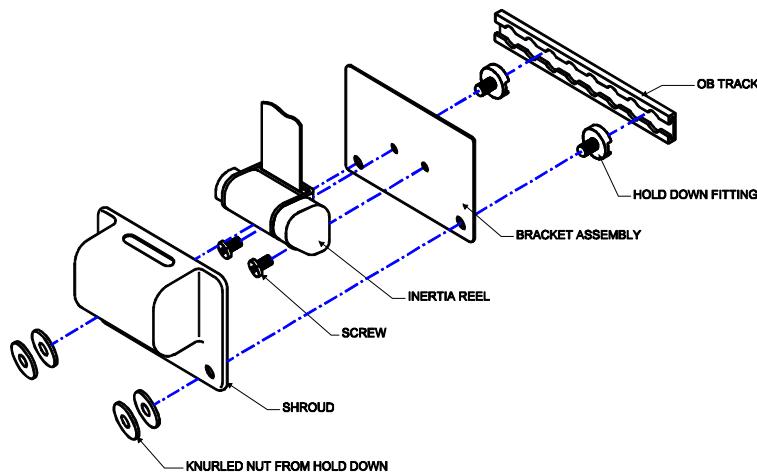


Figure 1.0C

Seat Belt & Strap Shoulder Harness Attachment

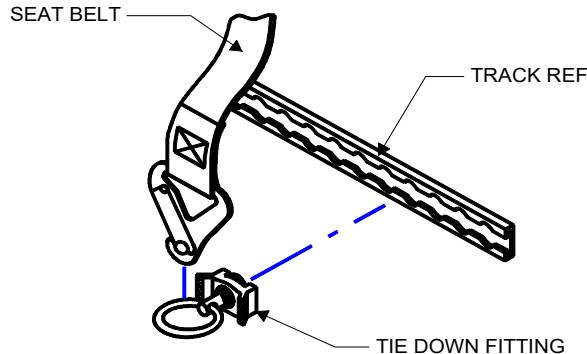


Figure 1.0D

Close-out Panel Assembly

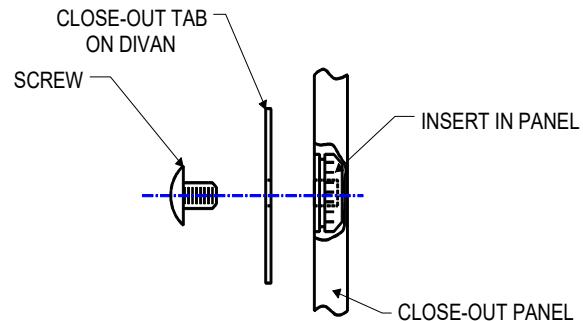


Figure 1.0E

Underseat Drawer

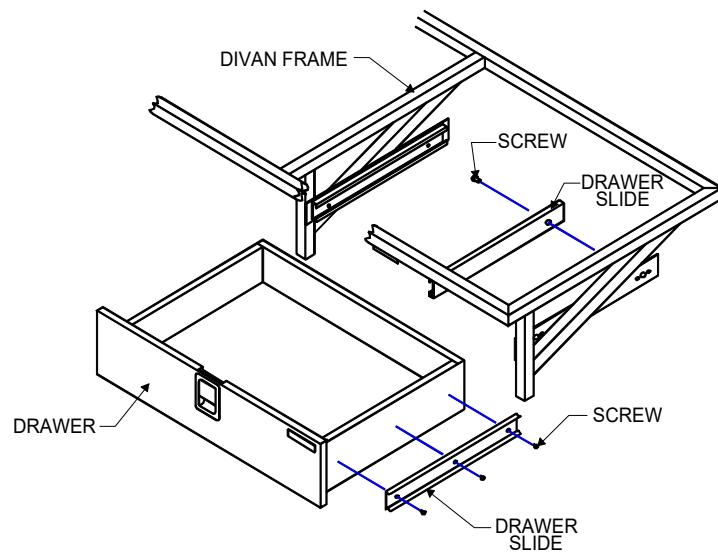
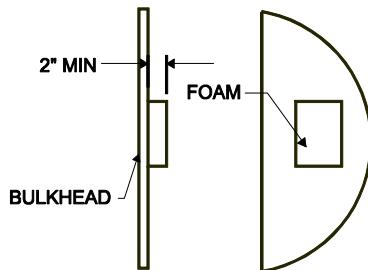
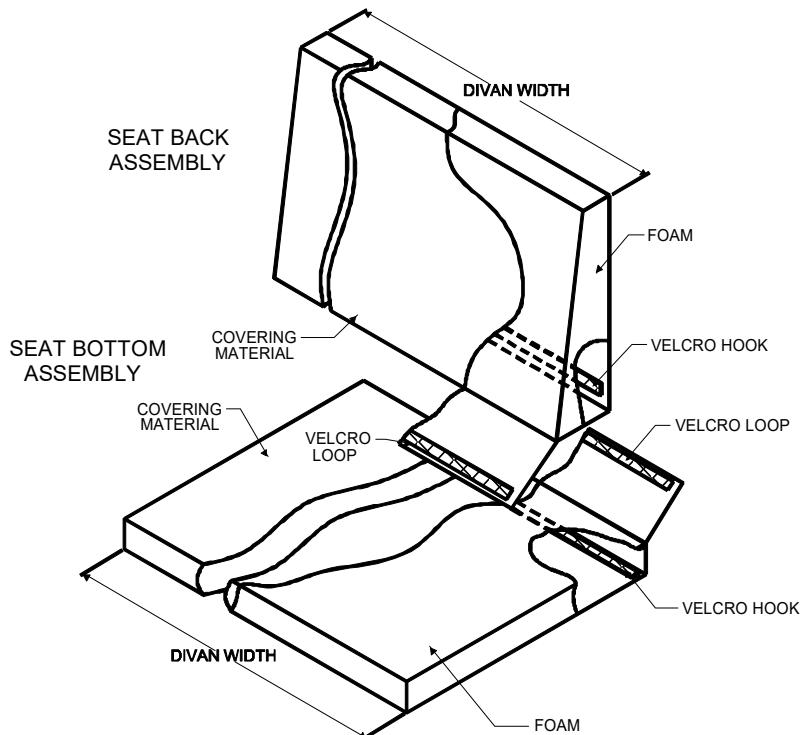


Figure 1.0F



FWD BULKHEAD

Figure 1.0G



CUSHION ASSEMBLY REFERENCE

Figure 1.0H

2.0 INSPECTION REQUIREMENTS AND OVERHAUL SCHEDULE

1. To comply with 14 CFR 25.1529, continue the new divan and restraint system on the same inspection and maintenance schedule used per the Hawker Beechcraft Maintenance Manual for seats and divans.
 - a. The new divan requires no service other than inspection at normal inspection interval of: 600 hours +/- 50 for DH-125 series, BH-125 series, HS-125 series, Bae-125 series, and 800 series aircraft
800 hours +/- 50 for 800XP and 1000 series aircraft
 - b. The safety belts require no service other than inspection at normal inspection interval of every: 300 hours +/- 50 for DH-125 series, BH-125 series, HS-125 series, Bae-125 series, and 800 series aircraft
400 hours +/- 50 for 800XP and 1000 series aircraft
Or every 12 months, whichever occurs first.
 - c. Perform a detailed visual inspection of the divan bottom and back cushions and the covering of the divan assembly to detect apparent or obvious defects or irregularities.

On the cushion assemblies, 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 $\frac{1}{2}$ " in diameter or a cut at a maximum of 2" in length then the covering is satisfactory. The sewing of the cover assemblies cannot have a tear or cut exceeding 1" in length. 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 tubing and diaphragm for cracks and deformation. Damaged conditions can 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 diaphragm. Visually inspect all hardware for excessive wear before and after installation.

Replace the bottom diaphragm if two cracks or deformations are found within a 4" diameter circle. If a tear or cut is found with a maximum 6" length, 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.

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 1, 2, 3, & 4 Place Side Facing Divan Assembly Installations:

600 hours +/- 50 for DH-125 series, BH-125 series, HS-125 series, BAe-125 series, and 800 series aircraft

800 hours +/-50 for 800XP and 1000 series aircraft

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 and restraint system are on the same inspection and maintenance schedule used per the Hawker Beechcraft Maintenance Schedule for passenger seats.

3.0 DIMENSION AND ACCESS:

The installation of the 1, 2, 3, & 4 place side facing divan assemblies do 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 divan options and weights it is the responsibility of the installer to determine the exact final divan weight and location when installing and removing the divan. For reference, the typical divan frame assembly and sub part weights are listed as follows:

1 Place Divan	= 6 lbs
2 Place Divan	= 8.5 lbs
3 Place Divan	= 12.5 lbs
4 Place Divan	= 17 lbs
Seat Belt and Hardware	= 1.5 lbs per seat place
Plug in Armrest	= 2 lbs each
Armrest Box Assembly	= 3 lbs each
Drawer Assembly	= 5 lbs each
Stowable Armrest	= 5 lbs each
Collapsible Armrest	= 1.5 lbs each
Fold Down Armrest	= 4 lbs each
Close-out Panel	1 plc = 2.5 lbs 2 plc = 3.5 lbs 3 plc = 6 lbs 4 plc = 7 lbs
Maximum Weight Of Upholstery Assemblies	1 plc = 15 lbs 2 plc = 30 lbs 3 plc = 45 lbs 4 plc = 60 lbs
Maximum Allowable Seat Weight w/ Seat Bottom Cushion and Underseat Storage	1 plc = 56 lbs 2 plc = 107 lbs 3 plc = 161 lbs 4 plc = 214 lbs

6.0 TOWING AND TAXIING

No change.

7.0 PARKING AND MOORING

No change.

8.0 PLACARDS AND MARKINGS

Up to 4 placards are required in conjunction with this modification:

1. If optional drawers are installed, placard part number 15-0025 must be installed at the top of the face of the drawer where visible when open or closed.



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.



Figure 8.0B

3. If optional center armrest is installed, placard part number 15-0074 must be installed in plain view of the seat occupant.



Figure 8.0C

4. A placard stating "to install harness over seat occupant's fwd shoulder" is sewn on to restraint system part numbers 3091-8-111-2396 or 3088-7-041-2396 and should be legible and easily viewed by the seat occupant.



Figure 8.0D

9.0 SERVICE INFORMATION

Typical Divan Service Instructions:

A. Upholstery Cleaning:

Divan Service Instructions

1. Remove seat back and seat bottom cushion assemblies from sidewall and divan top.
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 drawer and/or close-out panel finish using Armour All multi-purpose cleaner or equivalent.
6. Clean and inspect restraint system for damage, fraying, cuts or seam deterioration.
7. Inspect all attachment fittings and replace if necessary.
8. Inspect overall seat for fit and function.

Typical Divan Maintenance Instructions:

Divan Assembly

The divans are self contained complete assemblies that mount to the existing aircraft cabin seat track using standard fittings in accordance with approved floor plans. Refer to Figures 1.0A & 1.0B.

Divan Installation:

The installation of the divan requires (1) setting the divan into the correct location, (2) sliding the divan forward or aft on the track to allow the hold down fitting keeper to lock in place and (3) tightening provided hold down fitting knurled nuts on to the existing seat track on the floor and the outboard sidewall.

Divan Removal:

Removal of the divan assembly requires (1) loosening the attaching hold down fitting hardware, (2) sliding the divan forward or aft to remove the hold down fitting keeper from locking into the seat track, and (3) lifting the divan from its previous location.

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. The seat bottom cushion should weigh no more than 10 lbs. All covering and upholstery materials must comply with 14 CFR 25.853 as stated on the installation instructions, AF-178 or AF-202. Refer to Figure 1.0H for Cushion Assembly Reference.

Inertia Reel Kit

The inertia reel kit is removed by loosening the knurled nuts on the attaching hold down fittings and removing the shroud and inertia reel plate from the outboard track. Ref. to Figure 1.0C

Seat Belt and Strap Shoulder Harness

Seat belt and the Strap Shoulder Harness removal is accomplished by unhooking the belt end fittings from the tie down fittings attached to the existing seat track. Ref. to Figure 1.0D

Closeout Panels

Underseat close-out panel removal is accomplished by removing screws from under the divan that are attached to inserts in back of panel and attached through tabs on divan frame. Ref. Figure 1.0E

Drawers

Underseat drawers are removed from the divan by removing slide screws attached to the drawer sides. The drawer slides are removed from the divan by removing attaching screws. Figure 1.0F

Forward Bulkhead Pad

Per the installation instructions, AF-178 or AF-202, 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, AF-178 or AF-202, 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 1, 2, 3, & 4 Place Side Facing Divans.

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 1, 2, 3, and 4 Place Side Facing Divans installed by this STC.

11.0 TROUBLESHOOTING

Refer to the existing Aircraft Maintenance Manual for troubleshooting the divan installations that is required beyond the information found on the installation drawings AF-178 or AF-202.

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.