**Aviation Fabricators**
**805 North Fourth Street**
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Document No: AF-503
Revision: (E)
Date: October 1, 2019

# *INSTRUCTIONS FOR CONTINUED AIRWORTHINESS*

For

## Beech 300 Series Aft Jump Seat Installation Kits

## Document No.: AF-503

**Revision "E"**

**Revision Date: 10/01/19**

**Applicable to:**

**Textron Aviation models 300, 300LW, B300, B300C**

**Modified by FAA STC SA00635WI**

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 Beech 300 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 | 06/14/09 | |
| A | All | *Added Note to Section 9A, Seat Upholstery Cleaning, on page 17<br>*Changed Note 9A2 to refer to company responsible for upholstery covering for cleaning recommendations on page 17<br>*Corrected installation description in Section 10 to say "aft jump seat installation" on page 19<br>*Added Section 12, Troubleshooting Information, page 23<br>*Added Figures 1.0B thru 1.0E for Oxygen, Air Vent, and Light installation diagrams pages 8 thru 11 | 10/11/10 | JRL |
| B | All | *Updated Section 10 to latest format | 02/05/13 | JRL |
| C | All | *Corrected drawing # for installation drawing to D-10704 in Section 1.0 DATA, page 5; and in Section 12.0, page 23<br>*Added -27, -28, and -29 Kit callouts for 350i aircraft in Section 1.0 DATA, page 5<br>*Added Figure 1.0F for 350i Interior Air Vent installation ref, page 12<br>*Updated Section 5.0 with W&B tables for model and installation kit breakdowns, pages 15 & 16 | 09/25/13 | JRL |
| D | All | *Referenced alternate oxygen container P/N P25123 in Figure 1.0C (2 places), page 10 | 11/29/18 | JRL |
| E | All | *Added Figure 1.0G for Optional Inboard Armrest, p 14<br>*Added "Optional Inboard Armrest Removal and Installation" paragraph in Section 9.0, p 20 | 10/01/19 | 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.

# *TABLE OF CONTENTS*

## 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 aft jump seat installation, per installation numbers 32-0210K-XX, when installed in accordance with Aviation Fabricators design data included on STC Data List AF-251-3 and per Supplement Type Certificate (STC) SA00635WI.

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 Continues Airworthiness and supplements the basic Airplane Maintenance Manual only in those areas listed as pertains to the installation of the aft jump seat assemblies, as installed per the Aviation Fabricator STC Data List AF-251-3. 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 SA00635WI

STC Data List: AF-251-3.

Installation: Installation Instruction:
D-10704 for Beech 300 series aircraft P/N's 32-0210K-8, 32-0210K-9, 32-0210K-10, 32-0210K-27, 32-0210K-28, or 32-0210K-29 Installations

Oxygen, Air, & Light System Installation Drawings:
D-10409 for Beech 300 series aircraft

Parts: Part number 32-0210K-8 Dual Aft Jump Seat Installation Kit,
Part number 32-0210K-9 LH Aft Jump Seat Installation Kit,
Part number 32-0210K-10 RH Aft Jump Seat Installation Kit,

Part number 32-0210K-27 Dual Aft Jump Seat Installation Kit for aircraft with 350i Interior
Part number 32-0210K-28 RH Aft Jump Seat Installation Kit for aircraft with 350i Interior
Part number 32-0210K-29 LH Aft Jump Seat Installation Kit for aircraft with 350i Interior

As listed on respective drawing per STC Data List AF-251-3.

The installation of the new aft jump seats require the installation the floor boards, side wall parts, and the oxygen, air, & light system installations. The new seats are installed on to floor fittings that are attached to the floor board panels and they are attached at the outboard points with "U" brackets into existing side wall supports. The restraint system is also attached to a floor fitting on the floorboard on the inboard side of the seat and through the side wall support on the outboard side of the seat. The harness is looped through a footman loop attached to the aft bulkhead. An additional 3 mask oxygen container assembly is plumbed into the existing aircraft system in the aft section of the passenger cabin.

**Design Change Control**
All data and changes to the parts and assemblies will be tracked per STC Data List AF-251-3 Rev G or later approved revision.

**Applicable Aircraft**
Textron 300, 300LW, B300, B300C Aircraft

Seat Installation

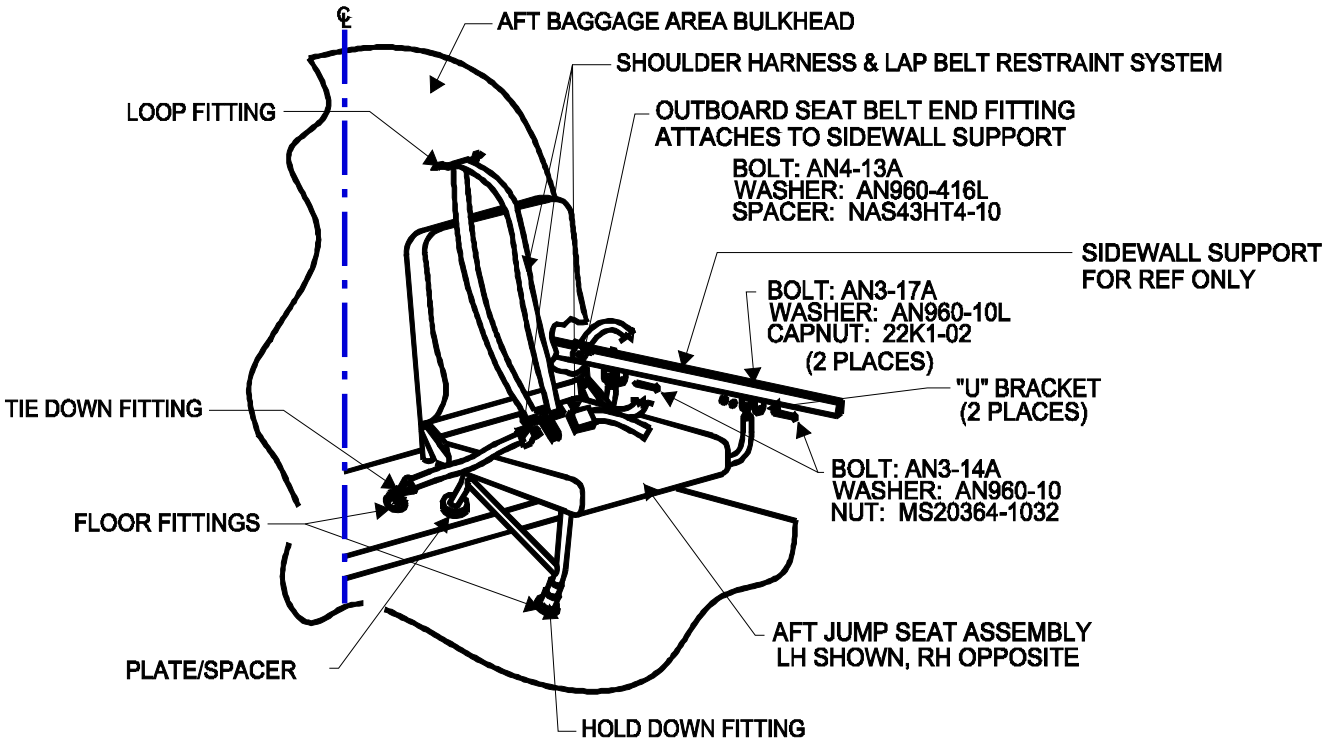
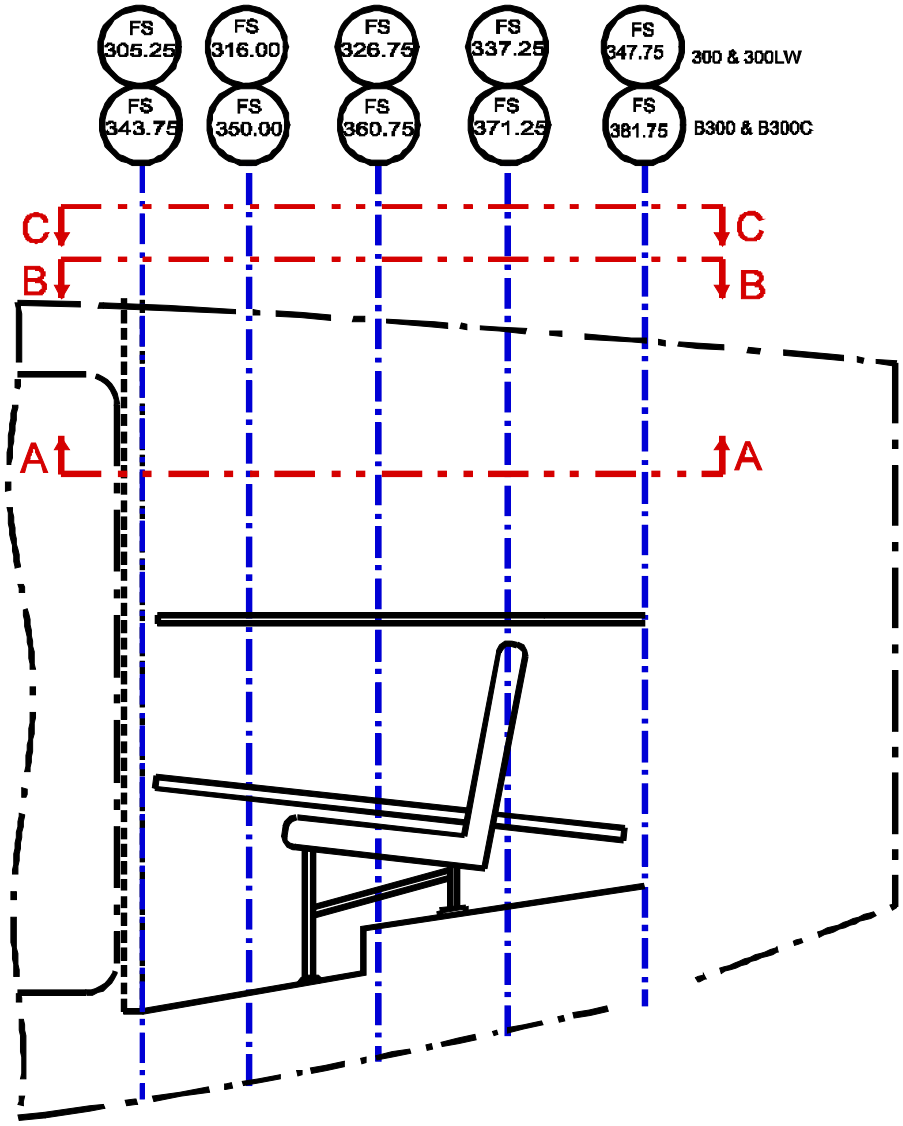



**Figure 1.0A**

Oxygen, Air Vent, and Light Installation




PLAN VIEW

VIEW LOOKING AT RH SIDE OF AIRCRAFT

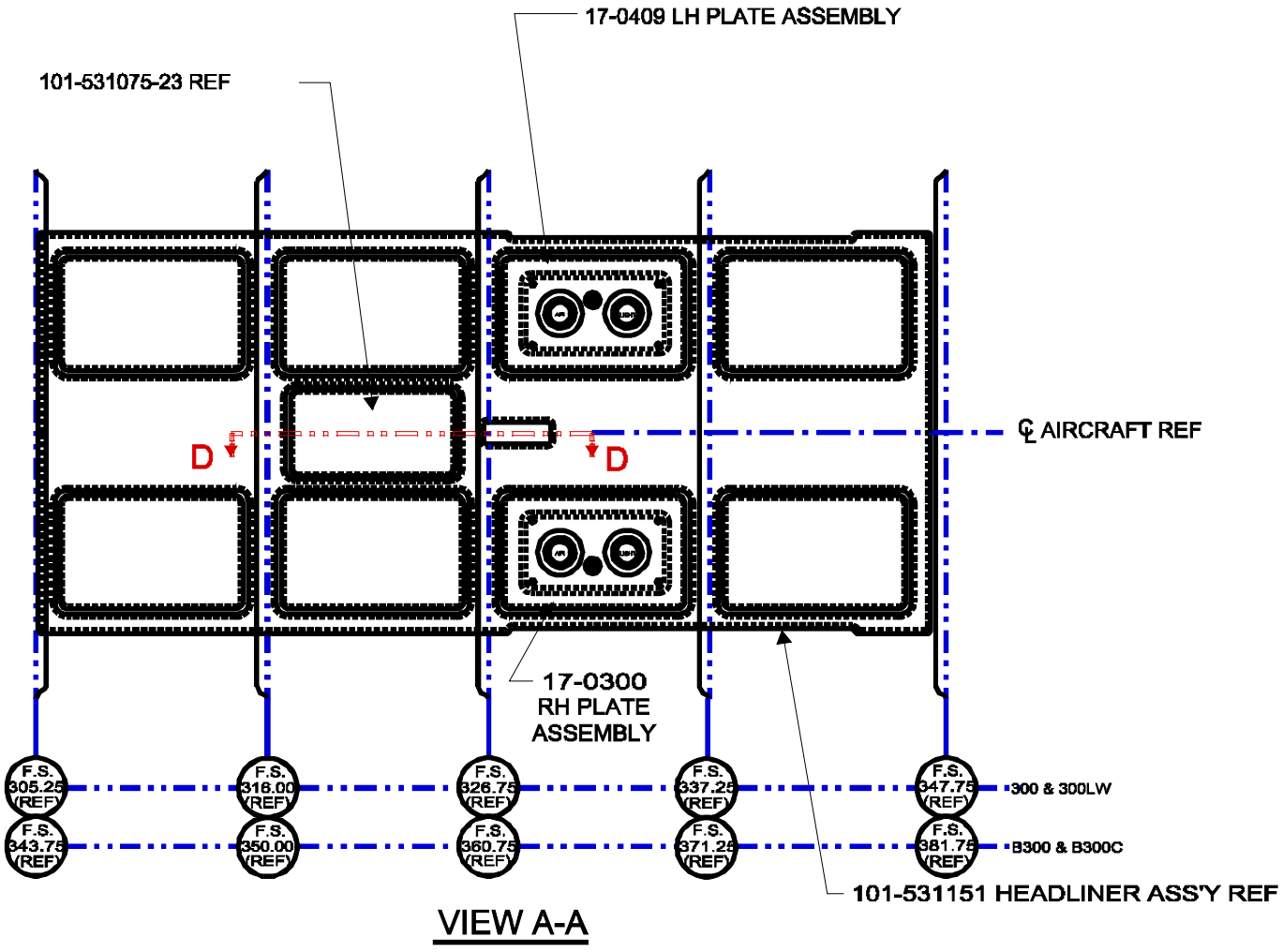

17-0409 LH PLATE ASSEMBLY
101-531075-23 REF
D
D
℄ AIRCRAFT REF
17-0300
RH PLATE
ASSEMBLY
F.S. 305.25 (REF)
F.S. 316.00 (REF)
F.S. 326.75 (REF)
F.S. 337.25 (REF)
F.S. 347.75 (REF)
300 & 300LW
F.S. 343.75 (REF)
F.S. 350.00 (REF)
F.S. 360.75 (REF)
F.S. 371.25 (REF)
F.S. 381.75 (REF)
B300 & B300C
101-531151 HEADLINER ASS'Y REF
VIEW A-A

**Figure 1.0B**

Oxygen Container Assembly

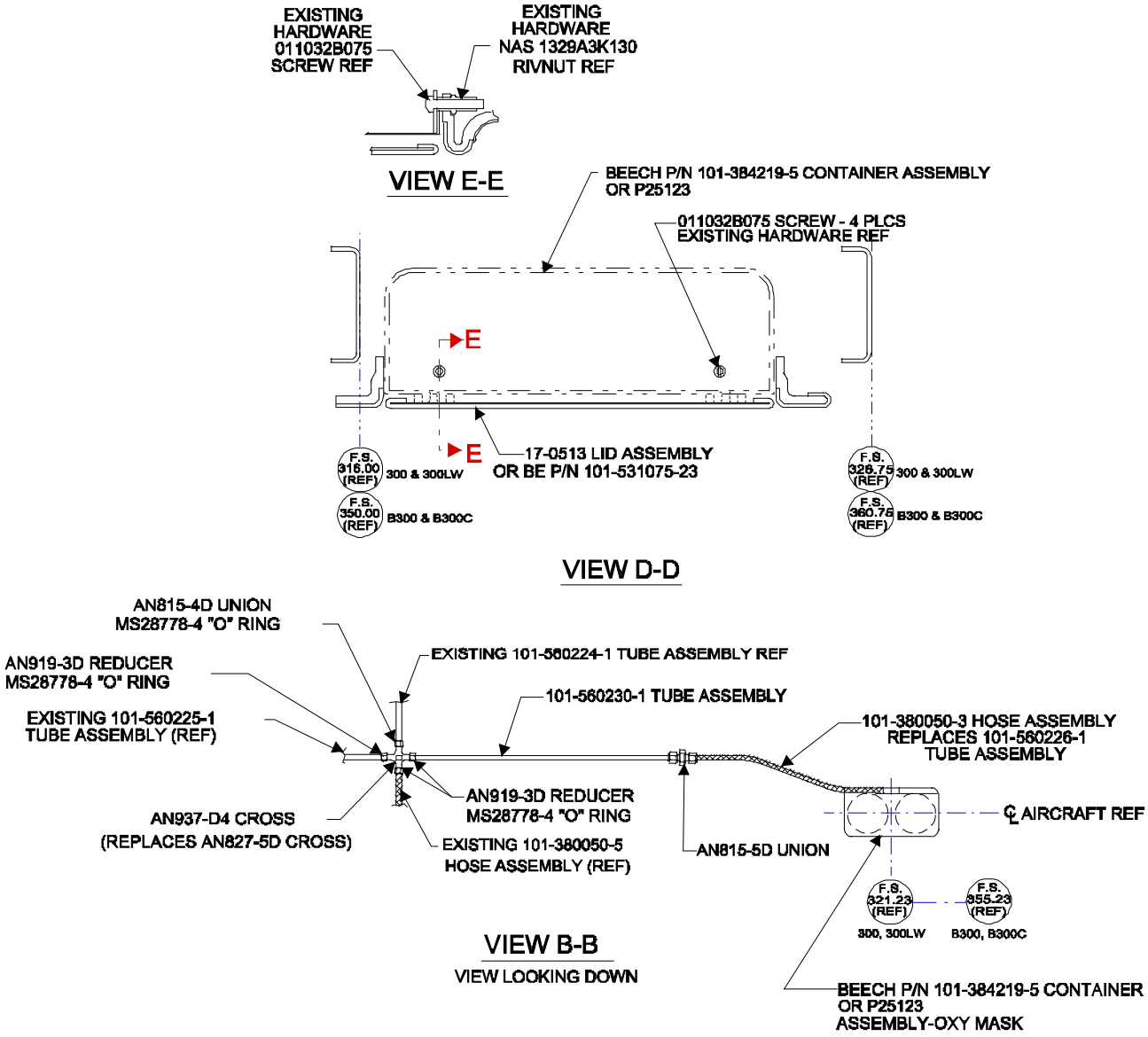



**Figure 1.0C**

300 & B300 Series Air Vent and Light Assembly

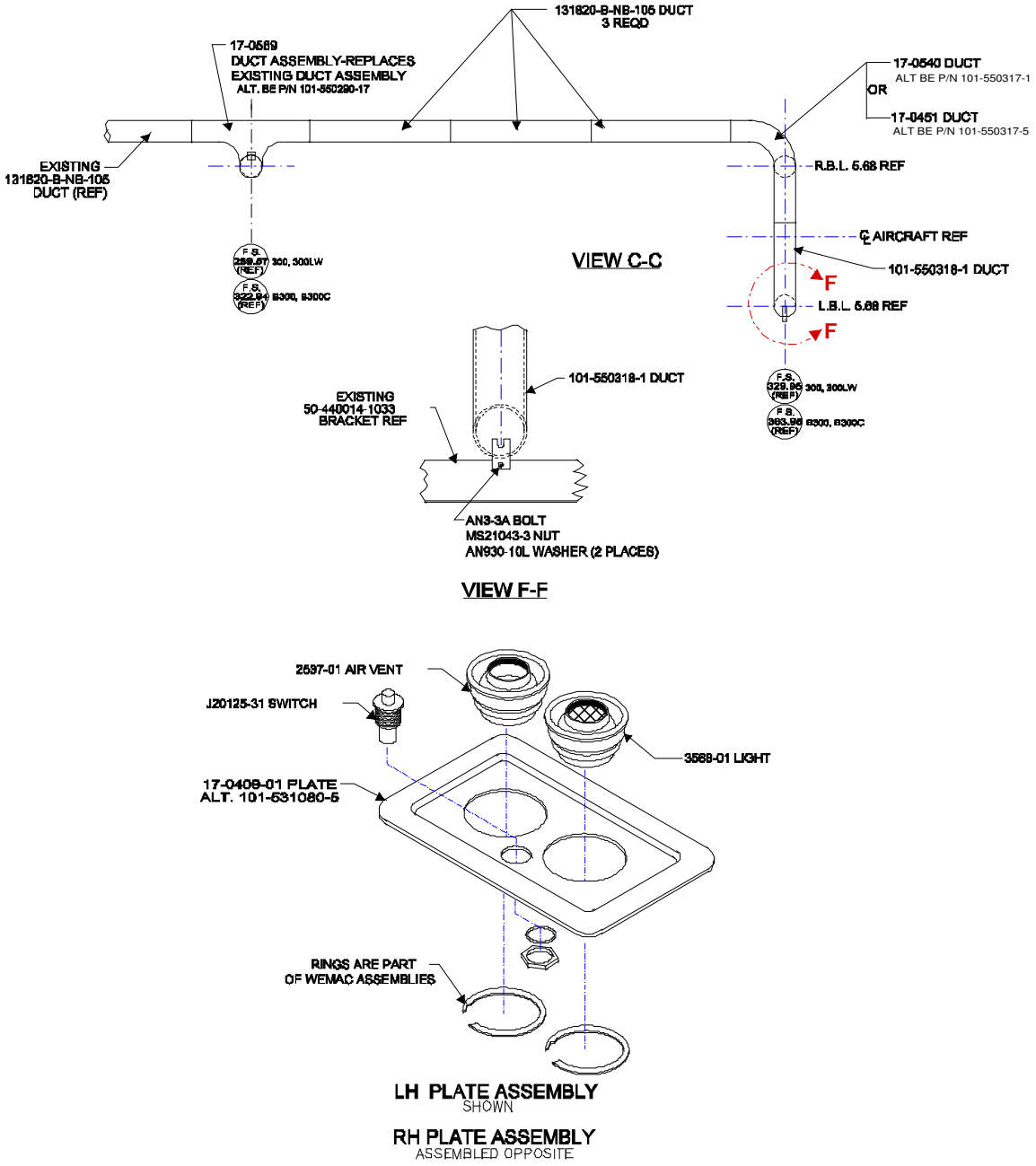
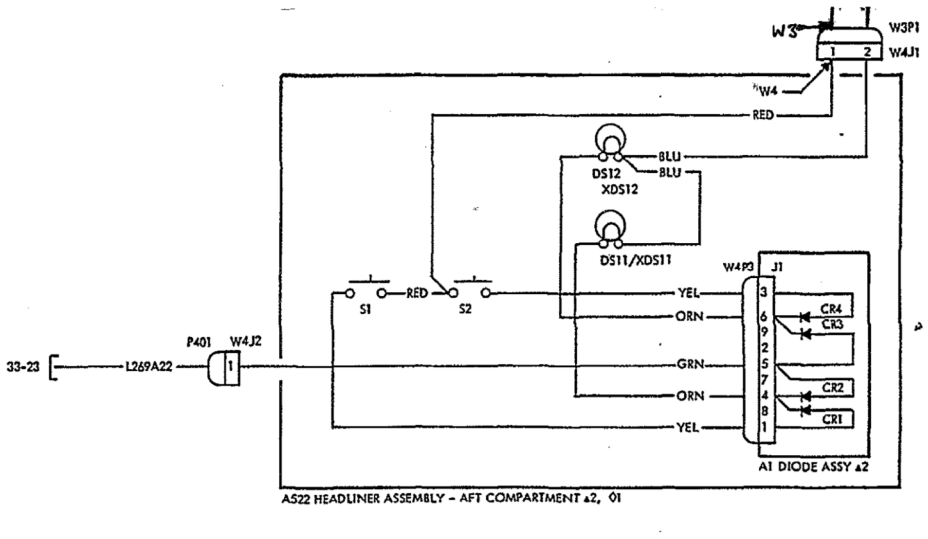



**Figure 1.0D**

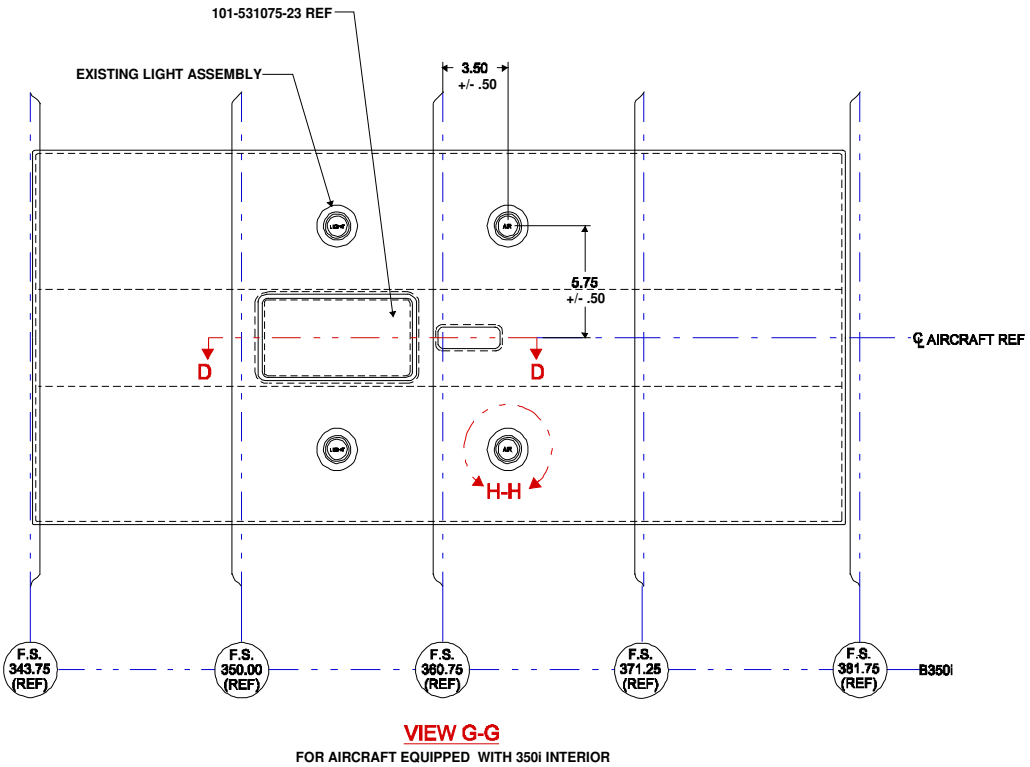
Light Wiring Diagram



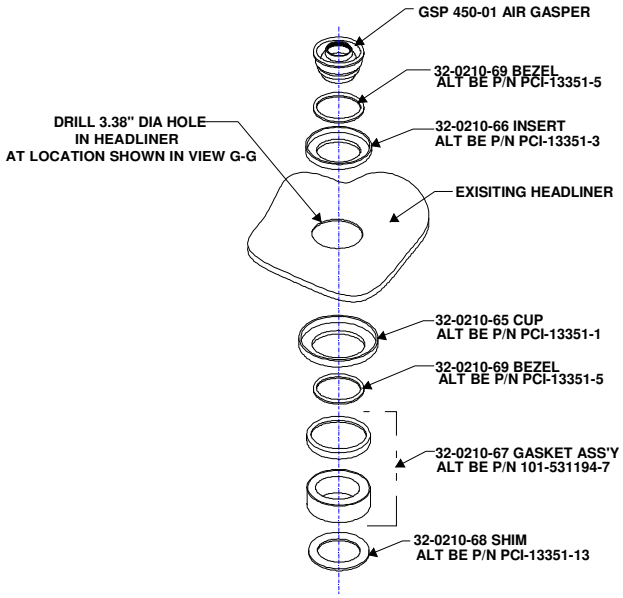

For complete Wiring Diagram Details see Section 33-22-00 of the appropriate Wiring Diagram Manual for the applicable aircraft serial number.

**Figure 1.0E**

## 350i Interior Air Vent Installation




VIEW G-G
FOR AIRCRAFT EQUIPPED WITH 350i INTERIOR




VIEW H-H

**Figure 1.0F**

Optional Inboard Armrest

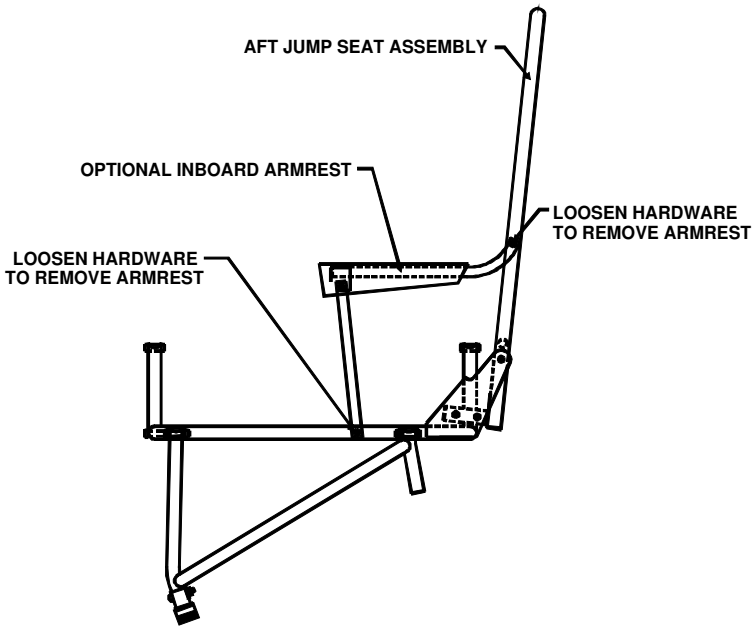



**Figure 1.0G**

## *2.0 INSPECTION REQUIREMENTS AND OVERHAUL SCHEDULE*

1. To comply with 14 CFR Part 23.1529, continue the seat installation on the same inspection and maintenance schedule used per the Hawker Beechcraft Maintenance Manual for passenger seating.

   a. The new seat requires 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 24 months.

   c. Perform a detailed visual inspection of the seat bottom and back cushions and the covering of the seat 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 ½" 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 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.

e. The additional oxygen container assembly is to be added to the normal aircraft inspection system at Phase 1 & 3 Inspection of 200 hours or 24 months whichever occurs first.

Annual and/or 200 hour inspection

| **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. | | | | |
| | | | | | | |
| AF-106 | g. | Inspect oxygen mask and container. | | | | |
| | | | | | | |
| AFI-107 | h. | Function Test Oxygen Container assembly. See Section 11. | | | | |

A. Continue the new aft jump seat assembly, and restraint system on the same inspection and maintenance schedule used per the Hawker Beechcraft Maintenance Manual for passenger seats.

B. Continue the additional oxygen container assembly installation on the same inspection and maintenance schedule used per the Hawker Beechcraft Maintenance Manual for the oxygen system.

## *3.0 DIMENSION AND ACCESS*

The installation of the new seat installation kit 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*

MODELS 300, 300LW

| KIT NO. | WEIGHT LB. | H-ARM (IN) | H-MOMENT (LB – IN) |
|---|---|---|---|
| 32-0210K-8 (LH AND RH SEATS) w/ -11 kit | +72 | +331 | +23832 |
| 32-0210K-9 (LH ONLY) w/ -13 kit | +51 | +330 | +16830 |
| 32-0210K-10 (RH ONLY) w/ -12 kit | +50 | +330 | +16500 |

MODELS B300, B300C

| KIT NO. | WEIGHT LB. | H-ARM (IN) | H-MOMENT (LB – IN) |
|---|---|---|---|
| 32-0210K-8 (LH AND RH SEATS) w/ -11 kit | +72 | +365 | +26280 |
| 32-0210K-9 (LH ONLY) w/ -13 kit | +51 | +364 | +18564 |
| 32-0210K-10 (RH ONLY) w/ -12 kit | +50 | +364 | +18200 |

MODELS 350i INTERIORS

| KIT NO. | WEIGHT LB. | H-ARM (IN) | H-MOMENT (LB – IN) |
|---|---|---|---|
| 32-0210K-27 (LH AND RH SEATS) w/ -22 kit | +70 | +365 | +25550 |
| 32-0210K-28 (LH ONLY) w/ -23 kit | +50 | +364 | +18200 |
| 32-0210K-29 (RH ONLY) w/ -24 kit | +49 | +364 | +17836 |

NOTE: WEIGHTS INCLUDE OXYGEN, AIR, & LIGHT SYSTEM INSTALLATIONS, AND UPHOLSTERED SEATS

**Refer to aircraft flight manual for occupant weight and balance calculations.

For aircraft that already include acceptable aft floor panels deduct 20 lbs from total weight shown above.

Upholstery allowance is 5 lbs per seat.

## *6.0 TOWING AND TAXIIING*

No change.

## *7.0 PARKING AND MOORING*

No change.

## *8.0 PLACARDS AND MARKINGS*

Up to 5 placards are required in conjunction with this modification:

1. Placard P/N 15-0288 is to be installed just below the window on each side a seat is installed.


**Figure 8.0A**

2. Placard P/N 32-0210-22 is to be installed on the aft side of the LH aft divider in plain sight of the seat occupant.

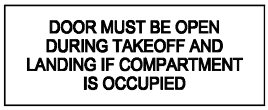



**Figure 8.0B**

3. Placard P/N 32-0210-40 is to be installed on the aft bulkhead center line just above W.L. 119.0

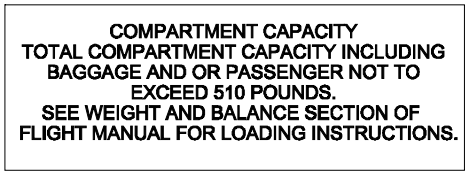



**Figure 8.0C**

4. Placard P/N 32-0210-23 is to be installed on the aft side of the LH aft divider in plain sight of the seat occupant.

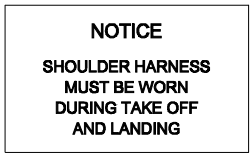



**Figure 8.0D**

5. Placard P/N 32-0210-41 is to be installed on the aft side of the aft right hand divider above W.L. 119.0, 2.00" from the IB edge.


**Figure 8.0E**

## *9.0 SERVICE INFORMATION*

**Typical Seat Service Instructions:**

**A. Seat Upholstery Cleaning:**

1. Remove seat back and seat bottom cushion assemblies from seat assembly.
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 seat for fit and function.

Note: Limit the cleaning area of the aft jump seats them only so that the cleaner used will not affect the fire retardant properties of any other components in the aircraft.

**B. Oxygen System Service Instructions:**

See Section 11.0

**Typical Seat Maintenance Instructions:**

Seat Assembly:
The aft jump seats are installed on to existing floor fittings that are attached to the floor board panels and attached at the outboard points with "U" brackets into existing side wall supports. See Figure 1.0.

Seat Removal:
To remove the seat from the aircraft: (1) remove the nut, bolt, and washer from the outboard "U" bracket that attaches the seat to the sidewall support, and (2) then lift the hold down fitting keeper to remove the leg from the floor board fitting.

The “U” bracket can be removed by loosening the vertical bolt, nut, and washer that goes through the sidewall support.

Seat Installation:
To install the seat into the aircraft: (1) attach the hold down fitting into the floor board fitting, (2) attach the “U” bracket to the sidewall support using a bolt, nut, and washer, and (3) attach the seat’s outboard fittings into the “U” bracket and secure with a bolt, nut, and washer.

Restraint System:
The seat belt of the restraint system is removed by unhooking the tie down fitting from the floor board fitting on the inboard side of the seat and by loosening the bolt, washer, and spacer from the outboard location in the sidewall support. The shoulder harness is removed from the loop fitting attached to the aft bulkhead. Reverse this procedure to install the restraint system. See Figure 1.0.

Cushions
Seat back and seat bottom cushion assemblies are removed by lifting the back cover from over the seat back frame or by simply pulling the cushion away from the Velcro on the seat frame, respectively. The seat bottom and seat back cushions should weigh no more than 5 lbs total. All covering and upholstery materials must comply with 14 CFR 23.853.

Optional Inboard Armrest Removal and Installation:
The optional inboard armrest is can be removed as desired by loosening the attaching hardware at two points as shown in Figure 1.0G. It can be installed by using the same hardware and tightening into place at two the same two points.

## Typical Oxygen System Maintenance Instructions:

Oxygen System:
The passenger oxygen mask is an airline conical, constant flow type. When the system is actuated, the initial high pressure surge operates an actuator that opens the cover assembly. After the mask is removed from the container, a lanyard pin must be pulled from the mask valve. With the oxygen turned on, the mask supply tube contains a positive-flow indicator that is readily visible to the user when the mask is being worn. To shut off the flow of oxygen to the mask, install the lanyard pin in the mask valve.

See Section 11.0 for oxygen system maintenance instructions.

## *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 aft jump seat installation kits installed by this STC.

## *11.0 SERVICE INSTRUCTIONS FOR OXYGEN SYSTEM*

## PASSENGER OXYGEN MASK AND CONTAINER INSPECTION

It is recommended that the passenger oxygen masks be inspected at the proper interval (See Section 2.0)
Check that none of the following exist:

a. The oxygen mask sticks to the container or to itself.
b. Contamination of the oxygen mask or the container.
c. Excessive force (over four pounds) to remove lanyard pin.
d. Improper installation of lanyard pin in valve actuator.
e. Tears, cracks or deterioration of the mask or reservoir bag (unfold bag if necessary).
f. Hose linking.
g. Improper connection of oxygen hose to oxygen outlet.

## PASSENGER OXYGEN MASK CLEANING

Should the oxygen masks need cleaning, wipe the surface to be cleaned with a clean, soft, lint-free cloth that has been moistened with a mild detergent and warm solution (not to exceed 110° F; 43° C). Rinse thoroughly with clean water and allow to completely air dry.

### NOTE

Isopropyl alcohol (3, Chart 1) can also be used for cleaning as well as for disinfecting. Refer to CABIN OXYGEN MASK AND CONTAINER DISINFECTING.

## PASSENGER OXYGEN MASK AND CONTAINER DISINFECTING

a. Clean the mask and container as instructed in CABIN OXYGEN MASK CLEANING.
b. Disinfect the mask and container with an aqueous solution of zephiran chloride (5, Chart 1), disinfectant (4, Chart 1) or isopropyl alcohol (3, Chart 1).
c. Use a clean, lint-free cloth moistened with a solution per step b. Wipe quickly and lightly over the entire area.

d. After disinfecting, thoroughly air dry the mask or container.
e. After drying, lightly dust the outside of the face piece with neo-novacite (6, Chart 1).
f. Install passenger mask in container per PASSENGER OXYGEN MASK PACKING.

## PASSENGER OXYGEN MASK PACKING

**WARNING**

**Packing and installation of the passenger masks shall be performed by personnel familiar with the procedures and warnings presented in these instructions. Failure to properly pack and install the passenger masks can result in damage to the mask or failure of the mask to deploy properly.**

**All procedures describe in these instructions shall be performed in an area free of oil, grease, flammable solvents or other contaminants.**

a. Inspect the mask and container as instructed in PASSENGER OXYGEN MASK AND CONTAINER INSPECTION.
b. Fold the outside thirds of the reservoir bag over the center third,
c. Place the head strap inside the face piece. Then fold the reservoir bag into the face piece on top of the head strap.
d. Coil the oxygen hose on top of the reservoir bag.
e. If disconnected, connect the end of the oxygen hose to the valve outlet.
f. Install the lanyard pin in the valve actuator.
g. Place the mask in the container with the coiled hose on top.
h. Position the door so that the plunger can strike the block on the door, when activated.
i. Close the door, making sure that the hose is not crimped and the lanyard cord is free of obstructions and not caught in the container door.

## OXYGEN SYSTEM PLUMBING MAINTENANCE

When oxygen lines are being connected, the first three male (external) threads of the fittings should be wrapped with anti-seize tape (1, Chart 1) prior to being connected back into the system.

When the oxygen system plumbing has been connected after maintenance, the new connections should be checked for leakage by applying leak detector fluid (2, Chart 1) to the connections and pressurized. Wipe dry immediately after testing.

When connections leak, check that they are tightened to the proper torque value for that fitting. If this does not stop the leakage, disassemble the connection and check all mating surfaces for damage. Smooth rough mating surfaces if possible to provide a tight connection or install new fittings.

# CABIN SECTION OXYGEN MASK FLOW CHECK

This procedure checks the oxygen system for flow to the mask outlets (manifold) and system pressure at the outlets.

a. Pull out the PULL ON SYSTEM READY control knob located on the left side of the pedestal.
b. Wait 25 to 30 seconds for the system to load. Then pull out the PASSENGER MANUAL DROP OUT control knob located on the right side of the pedestal. The passenger oxygen masks should drop out of their containers.
c. Individually check each passenger mask for flow by removing the lanyard pin located in the mask container assembly and observing the mask flow indicator. If flow is indicated reinstall the lanyard pin and check the next mask. If flow in not indicated mark the mask for replacement.
d. After each passenger mask has been checked, remove the cover from the first-aid oxygen-mask container located overhead in the toilet compartment of the aft fuselage.
e. Remove the first-aid oxygen mask from its container.
f. Place the ON/OFF valve located in the first-aid oxygen-mask container in the ON position. Check for flow n the first aid mask by observing the flow indicator. If flow in not indicated mark the mask for replacement. Place the ON/OFF valve in the OFF position.
g. Push in the PASSENGER MANUAL DROP OUT control knob.
h. Push in the PULL ON SYSTEM READY control knob.
i. Replace any oxygen masks that have been marked for replacement.
j. Stow the masks and close the containers.

## CHART 1
## RECOMMENDED MATERIALS

| MATERIAL | SPECIFICATION | PRODUCT | SUPPLIER |
|---|---|---|---|
| 1. Tape, anti-seize, polytetrafluoroethylene | MIL-T27730 | | Obtain locally |
| 2. Leak Detector Fluid, Oxygen System | MIL-L-25567 | | Obtain locally |
| 3. Isopropyl | TT-I-735 | | Obtain locally |
| 4. Disinfectant, Oxygen system | | QS4 | Brulin and Co., Inc. 2920 Dr. Andrew J. Brown Ave. PO Box 270 Indianapolis, IN 46206 |
| 5. Zephiran Chloride | | 00-2572 | Scott Aviation 123 E. Montecito Ave. Sierra Madre, CA 91024 |
| 6. Neo-novacite | | 00736 | Scott Aviation 123 E. Montecito Ave. Sierra Madre, CA 91024 |

## *12.0 TROUBLESHOOTING INFORMATION*

**Refer to the existing Aircraft Maintenance Manual for troubleshooting the aft jump seat kit, and oxygen, air vent, and light systems that is required beyond the information found on the installation drawings D-10162 and D-10409.**

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.