B757 MANUAL SUPPLEMENT - ATP 3510
SECTION 1 CHAPTER 35
CONTROL PAGE - ISSUE 1

A. File the attached Temporary Revision/Alerts in the Manual Supplement in ATA Chapter/Section/Subject/Page sequence

B. File this Control Page in front of the Chapter TRs/Alerts.

C. The following list shows active TRs/Alerts together with TRs/Alerts added by this control page.

Chapter Section Subject	Page	TR/Alert No.
35-21-00	1	Alert 35-517
35-21-04	201	Alert 35-518
35-21-04	201	* Boe 35-1001

D. Remove and Destroy the following TRs/Alerts:

* Indicates TRs/Alerts issued with this control page

A/C PEP

29 September, 1998

MAINTENANCE MANUAL

ALERT No. 35-517

THIS ALERT IS ISSUED BY BRITISH AIRWAYS ENGINEERING (TECHNICAL INFORMATION SERVICES, G2, TBA, S401, P. O. BOX 10, HEATHROW AIRPORT, HOUNSLOW, MIDDLESEX TW6 2JA) AND COMPLIES WITH BCAR'S CHAPTER A5-3, B5-3 AND/OR TSS No. 0-2 AS REQUIRED. CAA DESIGN APPROVAL No. DAI/8566/78.

G Litchfield For CHIEF ENGINEER QUALITY AND TRAINING

Manual Reference 35-21-00 Page 1

REASON FOR REVISION

To alert individuals to the new legal requirements concerning the handling and carriage of chemical oxygen generators as cargo.

ACTION

CHEMICAL OXYGEN GENERATORS

A. Chemical oxygen generators are used to provide oxygen from units in the main cabin, in the lavatories, and for Cabin crew.

B. These Generators are classified as DANGEROUS CARGO when not installed as part of the aircraft fit.(UN 3356).They may not be carried as cargo on a passenger aircraft.

C. At all times during transportation TWO (2) means of maintaining each generator in a safe condition must be in place.

D. Every PSU, LSU, ASU and POU, which contains a generator is also classified as dangerous cargo, UN 3356, and each generator must similarly have TWO (2) means of making it safe during transportation.

E. Unfired time-expired generators are totally prohibited from carriage by air, as are fired generators.

F. The two means of making a unit safe may be, as appropriate,
(1) Release pin + safety pin.
(2) Two (2) safety pins.
(3) Release pin + safety cap.
(4) Safety pin + safety cap.

(Safety pin kits are held under P/N A35001-10)

G. PBEs (smoke hoods) are also classified UN 3356 and the same restrictions apply, except that serviceable units in their original containers do not require additional means of making them safe.

ALERT No. 35-518

THIS ALERT IS ISSUED BY BRITISH AIRWAYS ENGINEERING (TECHNICAL INFORMATION SERVICES, G2, TBA, S401, P. O. BOX 10, HEATHROW AIRPORT, HOUNSLOW, MIDDLESEX TW6 2JA) AND COMPLIES WITH BCAR'S CHAPTER A5-3, B5-3 AND/OR TSS No. 0-2 AS REQUIRED. CAA DESIGN APPROVAL No. DAI/8566/78.

J Litchfield For CHIEF ENGINEER QUALITY AND TRAINING

Manual Reference 35-21-04 Page 201

REASON FOR REVISION

To alert individuals to the new legal requirements concerning the handling and carriage of chemical oxygen generators as cargo.

ACTION

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A. Chemical oxygen generators are used to provide oxygen from units in the main cabin, in the lavatories, and for Cabin crew.

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C. At all times during transportation TWO (2) means of maintaining each generator in a safe condition must be in place.

D. Every PSU, LSU, ASU and POU, which contains a generator is also classified as dangerous cargo, UN 3356, and each generator must similarly have TWO (2) means of making it safe during transportation.

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(4) Safety pin + safety cap.

(Safety pin kits are held under P/N A35001-10)

G. PBEs (smoke hoods) are also classified UN 3356 and the same restrictions apply, except that serviceable units in their original containers do not require additional means of making them safe.

OXYGEN GENERATOR - MAINTENANCE PRACTICES

TEMPORARY REVISION 35-1001

FILING INSTRUCTIONS

This temporary revision applies only to document D633N132. For the printed manual, file this temporary revision adjacent to the page(s) affected.

For the microfilm supplement, file this temporary revision in sequence by ATA number. Mark the microfilm cartridge to indicate that it has been changed by temporary revision(s).

This temporary revision will be incorporated in the revision dated May 28/01.

Revision reason: Added the data for SRP 35-0021.

This temporary revision furnishes an advance copy of the enclosed page(s) which supersede any previously issued page(s). The information thereon is to be used until this revision is either incorporated or rescinded.

At the end of this TR there is a TR Status Report for document D633N132.

REVISED LIST OF EFFECTIVE PAGES FOR THIS DOCUMENT

PAGE	DATE	CODE	PAGE	DATE	CODE	PAGE	DATE	CODE
* 201	JAN 29/01	01.1						
* 202	JAN 29/01	01.1						
* 203	JAN 29/01	01.1						
* 204	JAN 29/01	01.1						
* 205	JAN 28/01	01						
* 206	JAN 29/01	01.1						
207	JAN 28/01	01						
208	JAN 28/01	01						

* INDICATES PAGE INCLUDED IN THIS TEMPORARY REVISION.

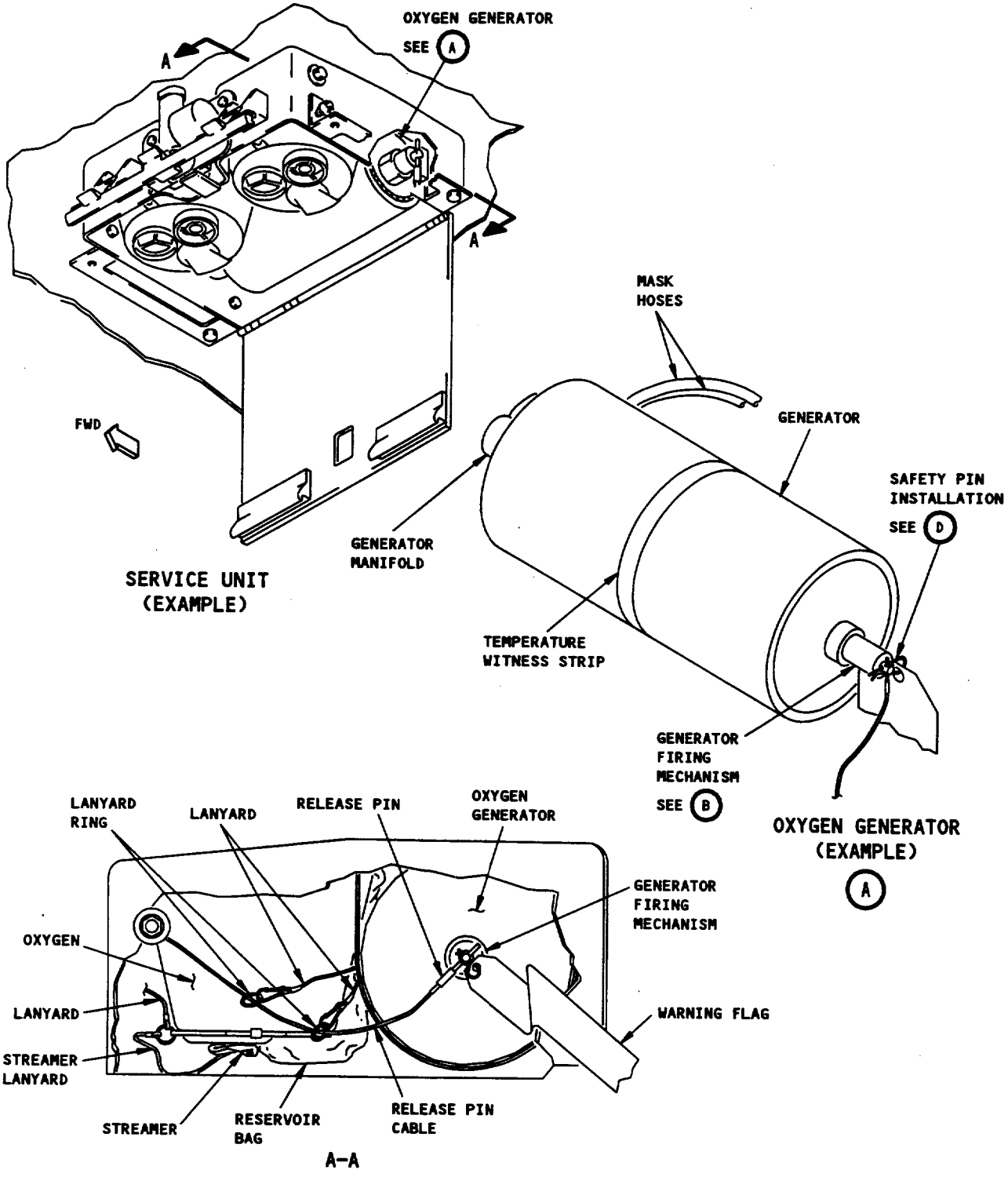
OXYGEN GENERATOR - MAINTENANCE PRACTICES

1. General
   A. This procedure contains instructions to deactivate and activate the oxygen generator. All spare oxygen generators, oxygen modules, and service units (Passenger Service Units (PSUs), Attendant Service Units (ASUs), and Lavatory Service Units (LSUs)) are supplied with a safety pin. The safety pin is installed in the firing mechanism of the oxygen generator. The generator cannot fire when the safety pin is correctly installed. It is safe to touch the generator when the safety pin is installed.
   B. In addition to the safety pin, a secondary safety device is used for the transport of the spare oxygen generator. This secondary safety device must be removed from the firing pin's release pin hole, before the release pin can be installed.
   C. You must install the safety pin before you remove a generator, service unit or oxygen module from the airplane.
   D. After you install a generator, service unit, or an oxygen module, you must remove the safety pin before flight.
   E. The retraction equipment shown in the Equipment paragraph contains a set of pliers and the safety pins for the oxygen generator deactivation. When you activate a generator, keep the safety pin with the retraction equipment for future use.
   F. Instructions for the deactivation and activation of oxygen generators are given in this section. Oxygen generators are installed within all of the service units.

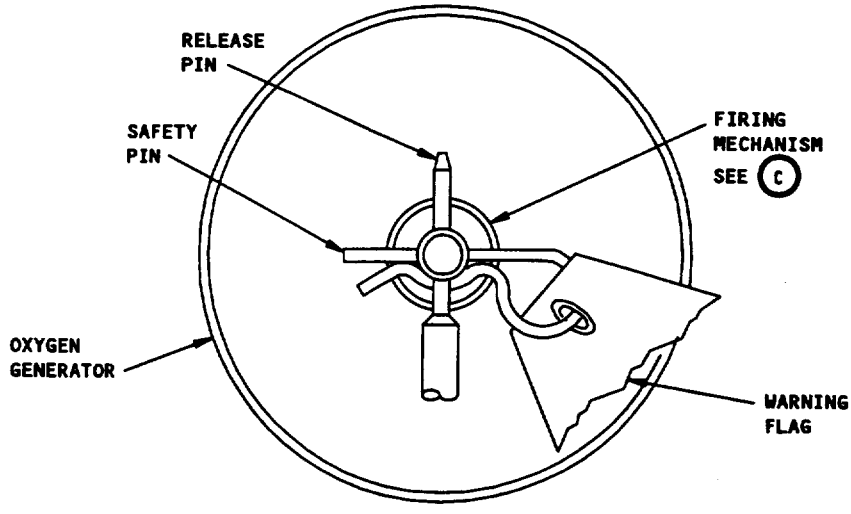
TASK 35-21-04-042-001

2. Generator Oxygen - Deactivation (Fig. 201)
   A. Equipment
      (1) Firing Pin Oxygen System Retraction Equipment, Oxygen system - A35001
      (2) Draeger Firing Pin Oxygen System Retraction Pliers, Oxygen system - E71516-00
   B. References
      (1) AMM 35-21-04/401, Oxygen Generator
   C. Access
      (1) Location Zone
          200 Upper Half of Fuselage
   D. Procedure - Deactivate the Oxygen Generator

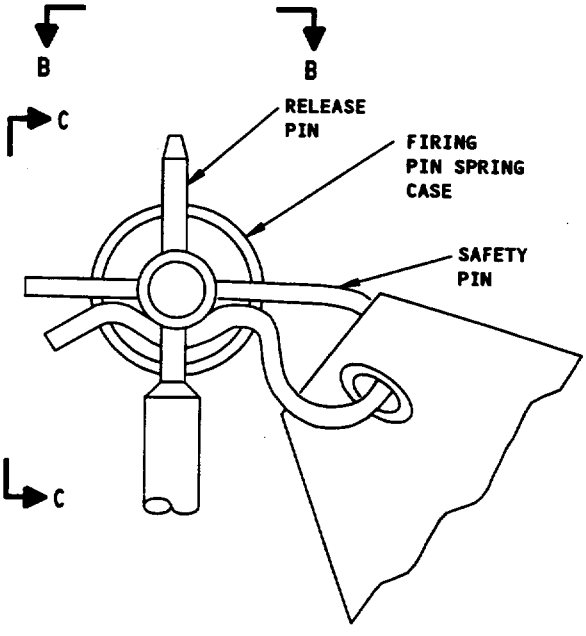
      S 012-003
      (1) Get access to the oxygen generator, if necessary.



Oxygen Generator Activation/Deactivation
Figure 201 (Sheet 1)



OXYGEN GENERATOR FIRING MECHANISM
B



FIRING MECHANISM
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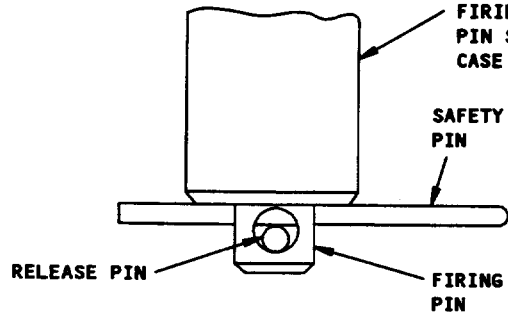

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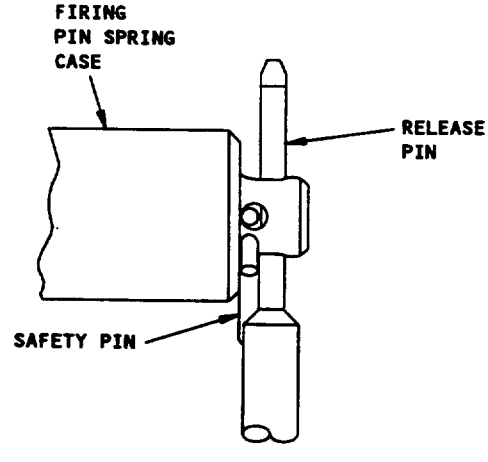

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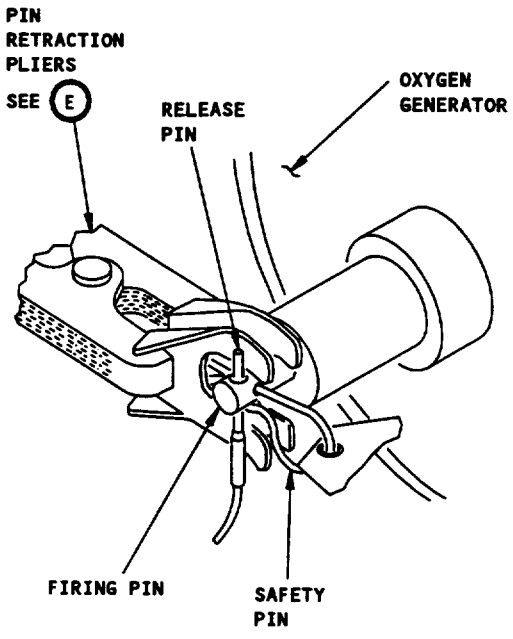
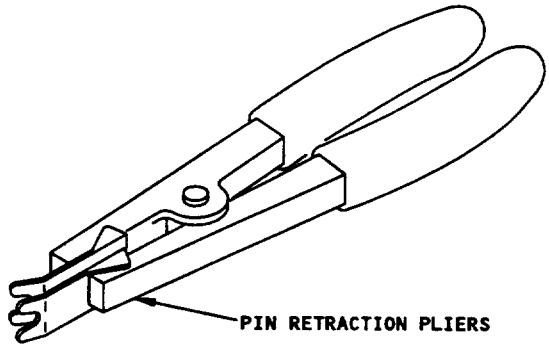
Oxygen Generator Activation/Deactivation
Figure 201 (Sheet 2)



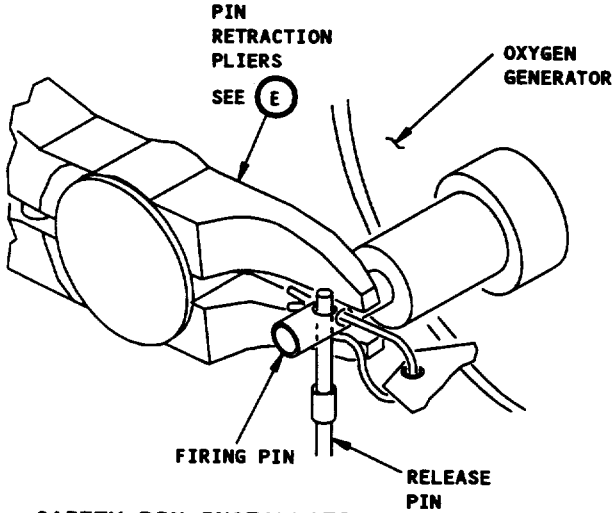
SAFETY PIN INSTALLATION

D 1



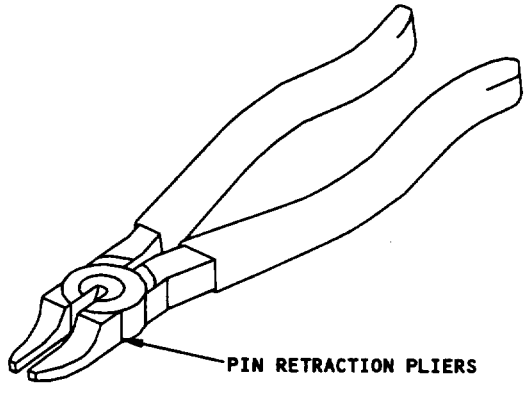
PIN RETRACTION PLIERS

E 1



SAFETY PIN INSTALLATION

D 2



PIN RETRACTION PLIERS

E 2

1 PURITAN BENNETT/B.E. AEROSPACE OXYGEN GENERATORS
2 DRAEGER OXYGEN GENERATORS

Oxygen Generator Activation/Deactivation
Figure 201 (Sheet 3)

S 212-016

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THE RELEASE PIN OR SAFETY PIN WITH THE WARNING FLAG IS INSTALLED ON THE GENERATOR. IF THE RELEASE PIN OR SAFETY PIN IS REMOVED AND THE GENERATOR FIRES, THE GENERATOR SURFACE TEMPERATURE WILL GET HOT (450 DEGREES F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

WARNING: MAKE SURE YOU OBEY ALL APPLICABLE REGULATORY REQUIREMENTS FOR THE TRANSPORT OF OXYGEN GENERATORS. IF THE SERVICE LIFE OF THE GENERATORS HAS EXPIRED, YOU MUST DISCHARGE THE GENERATORS TO MAKE SURE THE OXIDIZER CORE IS EMPTY. THIS MUST BE DONE BEFORE PREPARING THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT DISCHARGED AND EMPTY, THEY COULD ACCIDENTALLY DISCHARGE DURING TRANSPORT AND IGNITE A FIRE. THIS COULD CAUSE DEATH OR INJURY TO PERSONS.

CAUTION: YOU MUST BE VERY CAREFUL WHEN YOU HANDLE OXYGEN GENERATORS. DO NOT APPLY FORCE TO AN OXYGEN GENERATOR OR LET IT FALL. THESE ACTIONS CAN PREVENT THE OPERATION OF THE OXYGEN GENERATOR.

DO NOT TRY TO REMOVE THE FIRING MECHANISM FROM THE OXYGEN GENERATOR. IT CANNOT BE ASSEMBLED AGAIN.

CAUTION: MAKE SURE THAT THE RELEASE PIN IS INSTALLED IN THE LARGER OF THE TWO HOLES, AND THAT THE SAFETY PIN IS INSTALLED IN THE SMALLER OF THE TWO HOLES IN THE FIRING PIN.

FAILURE TO DO SO COULD PREVENT THE OXYGEN GENERATOR FROM PROPERLY ACTIVATING WHEN OXYGEN MASKS ARE DEPLOYED.

(2) Do these checks to find if the generator fired:
  (a) If the color band on the generator is black, the generator fired.
  (b) If the firing pin is in the fired position (you cannot install the safety pin), the generator has fired.

S 042-006

(3) If the generator did not fire, deactivate the generator as follows:
  (a) Put the retraction pliers between the release pin and the generator firing mechanism.
  (b) Carefully retract the firing pin and move the release pin away from the firing mechanism with the use of the retraction pliers, until the safety pin hole is visible; do not release the pliers.
  (c) Put the safety pin into the firing pin's safety pin hole. The safety pin hole is the smaller of the two holes found in the firing pin.

    NOTE: Make sure the safety pin is between the release pin and the firing pin spring case (Fig. 201).

  (d) Carefully release and remove the pliers.

S 962-007

(4) If the generator fired, do these steps:
  (a) Remove the generator (AMM 35-21-04/401).
  (b) Install a new generator (AMM 35-21-04/401).

TASK 35-21-04-442-002

3. Oxygen Generator - Activation (Fig. 201)
  A. Equipment
    (1) Firing Pin Oxygen System Retraction Equipment, Oxygen System - A35001
    (2) Draeger Firing Pin Oxygen System Retraction Pliers, Oxygen system - E71516-00
  B. References
    (1) AMM 35-21-04/401, Oxygen Generator
  C. Access
    (1) Location Zone
      200 Upper Half of the Fuselage

TEMPORARY REVISION STATUS REPORT FOR DOCUMENT D633N132

THIS LIST CONTAINS ALL TRs WITH TR DATES AFTER JAN 28/00. THIS LIST CREATED AT 2001/01/10.18:36:13 UTC

TR NUMBER	TR DATE	DATE INCORPORATED	SUBJECT
27-1001	JUN 05/00	SEP 28/00	27-81-18
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32-1001	OCT 26/00	JAN 28/01	32-42-11
35-1001	JAN 29/01	* ACTIVE	35-21-04
70-1001	DEC 14/00	JAN 28/01	70-12-04
71-1001	FEB 18/00	MAY 28/00	71-51-00
72-1001	FEB 29/00	MAY 28/00	72-00-00
73-1001	JUN 26/00	SEP 28/00	73-11-06

TR NUMBER	TR DATE	DATE INCORPORATED	SUBJECT

* INDICATES TR WAS ACTIVE AT THE TIME OF THIS REPORT;
REMOVE IT WHEN YOU RECEIVE THE REGULAR REVISION DATED MAY 28/01.
\# INDICATES TR WAS SUPERSEDED BY THE TR LISTED.

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CHAPTER 35 - OXYGEN

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CHAPTER 35 – OXYGEN

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OXYGEN-GENERAL - DESCRIPTION AND OPERATION

1. General
   A. The oxygen systems supply gaseous oxygen at low pressure to the crew and passengers.
   B. Oxygen for the flight crew is kept in a cylinder in the forward cargo compartment. An oxygen line connects the cylinder to oxygen masks at each crew station and oxygen box assembly.
   C. Chemical oxygen generators are in the passenger service units. The generators supply oxygen to the passengers, flight attendants, and lavatories.
   D. There is one portable oxygen cylinder in the flight compartment. The passenger compartment has several portable oxygen bottles.

OXYGEN - INSPECTION/CHECK

1. General
   A. This procedure gives the instructions to examine the oxygen generators. A heat-sensitive band on the oxygen generator becomes black if the generator was fired.
   B. Refer to the Portable Oxygen Cylinder - Inspection/Check procedure (AMM 35-31-02/601) for instructions to examine the portable oxygen cylinder for leakage and correct pressure.

TASK 35-00-00-206-001

2. Oxygen Generator Check (Fig. 601)
   A. Access
      (1) Location Zone
          200 Upper Half of Fuselage

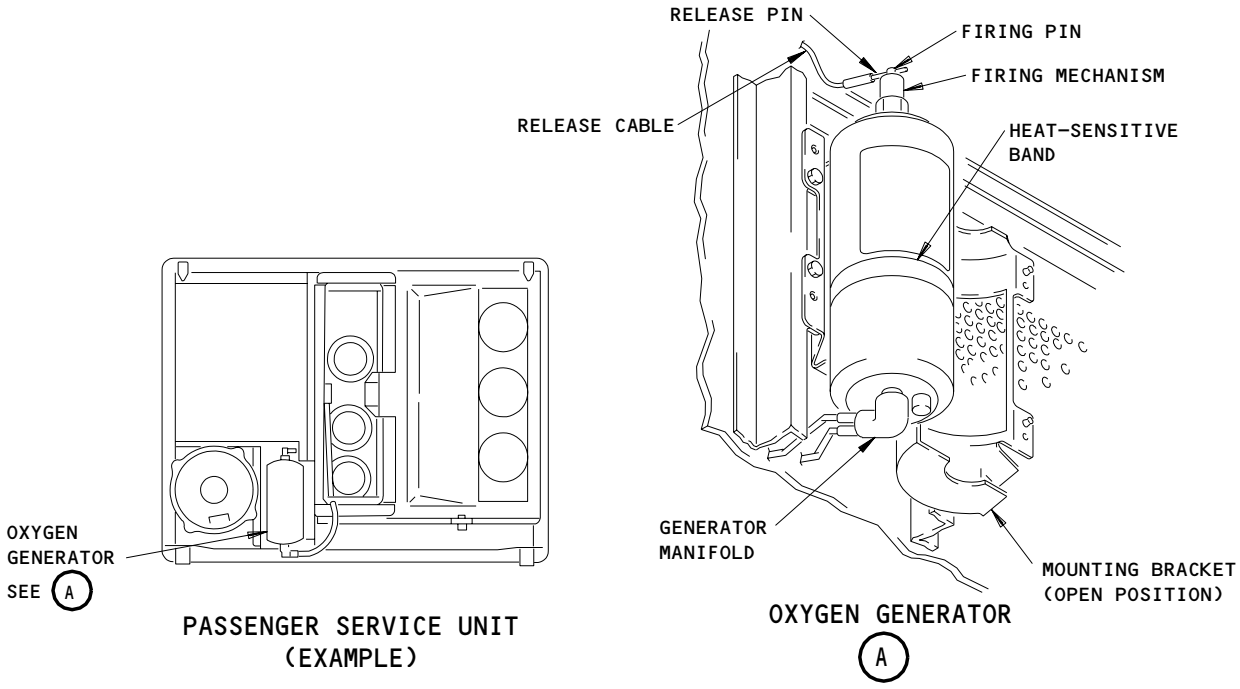
   B. Procedure

      S 016-004
      (1) Lower the passenger, attendant, and lavatory service units.

      S 216-005
      (2) Look at the heat-sensitive band on the oxygen generator (Fig. 601). If the band is black, then the oxygen generator was fired.

      S 216-006
      (3) Look at the position of the firing pin on the oxygen generator. If the firing pin is pulled into the firing mechanism, then the oxygen generator was fired or is defective.

      S 426-007
      (4) If the oxygen generator was fired or is defective, then replace the oxygen generator.



Passenger Oxygen Generator
Figure 601

OXYGEN - CLEANING/PAINTING

1. General
   A. These tasks are included in the procedure:
      (1) PSU Mask Door and Adjacent Surfaces and Latch Cleaning
      (2) Oxygen System Component Cleaning
   B. Make sure that when you do the installation and maintenance of the oxygen system that all work is done under clean conditions. You must make sure all work in the the oxygen system is done under clean conditions for two causes. One, the system is used in an emergency for breathing. Secondly, oxygen supports combustion when a combustible contaminant and ignition conditions are present. Thus, the contamination within the system could provide noxious or toxic fumes to the user. It could also prevent the system components from operating properly, or produce a fire and explosion. Contamination on the exterior surfaces of the oxygen system components can cause fires in the presence of oxygen leaks or ignition conditions.

      NOTE: All oxygen system components must be clean and dry when installed.

TASK 35-00-00-107-001

2. PSU Mask Door and Adjacent Surface and Latch Cleaning
   A. General
      (1) After an extended period of time, a dust nicotine layer can collect on the PSU mask door and adjacent surfaces and latches. Due to this dust/nicotine layer, the PSU mask doors could remain closed in an emergency. These surfaces should be cleaned periodically to make sure the mask doors operate correctly.
   B. References
      (1) AMM 25-00-00/701, Equipment and Furnishings
      (2) AMM 35-11-00/201, Oxygen
      (3) AMM 35-21-05/201, Oxygen Masks
      (4) AMM 35-21-05/601, Passenger Oxygen Masks
   C. Access
      (1) Location Zone
          200 Upper Half of Fuselage

   D. Procedure

      S 917-002
      (1) Read and obey the safety precautions and general instructions before you do the maintenance (AMM 35-11-00/201).

S 017-003
(2) Manually open the oxygen box doors and let the masks drop (AMM 35-21-05/201).

S 127-004
(3) Do the task: "Clean the Airplane Equipment and Furnishings" (AMM 25-00-00/701) to clean the oxygen box door, adjacent surface, and latches.

NOTE: It is only necessary to do up to the paragraph "Clean the Opaque Plastic and Painted Surfaces" which is in the task "Clean the Airplane Equipment and Furnishings".

S 217-005
(4) Do the Passenger Oxygen Masks - Inspection/Check procedure (AMM 35-21-05/601).

S 867-006
(5) Do this task: "Pack the Passenger Oxygen Masks" (AMM 35-21-05/201).

TASK 35-00-00-107-007

3. Oxygen System Component Cleaning
   A. Standard Tools and Equipment
      (1) Cylinder - Portable Test
      (2) Caps and Plugs - Package of Clean, Protective
      (3) Bags - Polyethylene
   B. Consumable Materials
      (1) G00669 Nitrogen per MIL-P-27401 (to be used with portable test cylinder) (or)
      (2) G00000 Air - Clean, Dry, with no particles or fibers more than 100 microns in the longest dimension per cubic foot of air. It must not have more than 3 PPM total hydrocarbon by weight or 7 PPM by volume. A moisture content not to exceed 0.00002 grams per liter of air at 70°F and 760 MM mercury. This is equivalent to a dew point of -63.6°F at 760 MM mercury. This air is to be used with a portable test cylinder.
      (3) D00173 Krytox 240AC, MIL-G-27617 (Lubricate O-rings if neccessary)
      (4) G00713 Cloth - Clean, Dry, Lint-Free, White, Cotton
   C. References
      (1) AMM 20-30-02/201, Cleaners and Polishes
      (2) AMM 35-11-00/201, Oxygen

D. Access
(1) Location Zone
122 Forward Cargo Compartment (Right)
211/212 Control Cabin

E. Procedure

S 917-008
(1) Read and obey the safety precautions and general instructions before you do the maintenance (AMM 35-11-00/201).

S 167-009
(2) Clean the contamination that cannot be removed with a dry cloth with solvent, then rub the area dry (AMM 20-30-02/201).

S 167-010

CAUTION: ONLY USE CLEANING SOLVENTS ON THE OUTSIDE OF THE COMPONENTS FOR AN INSTALLED SYSTEM. DO NOT USE CLEANING SOLVENTS ON THE INSIDE OF THE OXYGEN SYSTEM COMPONENTS.
(3) Clean the components that cannot be cleaned by the above instructions by vapor degreasing method (Ref. BAC 5408):

NOTE: Components must be removed from the airplane before they are cleaned.

(a) Disassemble the components such as the valves, regulators and oxygen cylinders.
(b) Clean these components per the manufacturers overhaul manual.
(c) Clean the thermal compensators by ultrasonic or vapor degreasing processes.
(d) Clean the tubing and fittings by the vapor degreasing process.

S 167-011
(4) If you have cleaned the components, remove the debris that remains with air and dry with nitrogen or air.

S 167-012
(5) Rub with a clean, dry, lint-free white cotton cloth to clean the oxygen system components.

S 557-015

WARNING: USE ONLY OXYGEN CLEAN COMPONENTS IN THE OXYGEN SYSTEM. IF YOU DO NOT USE OXYGEN-CLEAN COMPONENTS, A FIRE OR AN EXPLOSION CAN OCCUR. THIS CAN CAUSE DAMAGE TO EQUIPMENT OR INJURIES TO PERSONS.

(6) Store the components that are not to be installed in the airplane immediately:
(a) Individually seal the fittings in the polyethylene bags immediately after you have cleaned the standard BAC, NAS, AN and MS fittings.

CAUTION: DO NOT USE OTHER LUBRICANTS ON THE O-RINGS THAT HAVE BEEN LUBRICATED WITH KRYTOX 240AC.

(b) Discard and replace the O-rings after the hoses are cleaned:
1) If the flexible hoses for the low pressure system for oxygen contains O-rings in the coupling asemblies.

WARNING: USE ONLY OXYGEN-CLEAN COMPONENTS IN THE OXYGEN SYSTEM. IF YOU DO NOT USE OXYGEN-CLEAN COMPONENTS, A FIRE OR AN EXPLOSION CAN OCCUR. THIS CAN CAUSE DAMAGE TO EQUIPMENT OR INJURIES TO PERSONS.

(c) Install protective caps or plugs to all openings of the tube assemblies and system components (35-11-00/201):

NOTE: Oxygen clean fittings come from a sealed package labeled for oxygen system installation. Make sure that you use only oxygen clean fittings. Some fittings used in the oxygen system are the same as fittings used in other systemsthat are not oxygen clean. If it is necessary to clean parts, use the applicable oxygen procedures to clean the parts. This also applies to tube caps and plugs, which must be as clean as the installation connections.

1) Use the protective caps or plugs on the standard BAC, NAS, AN and MS fittings, which were individually sealed in polyethylene bags.
2) You can use protective caps that are visually clean on B-nuts and other fittings:
a) If the protective caps do not touch the threads or permit plastic shreads to get inside the oxygen system.
3) Do not use the plastic protective plugs and caps that have been used before.
4) Protective metal caps can be used again after they are cleaned.
5) Do not use the plugs which can be manually pushed down in to the tubes.
6) Seal the protective caps and plugs in polyethylene bags and do not open until they are ready for use.

NOTE: If the polyethylene bags have been used they must be sealed again immediately to prevent contamination.

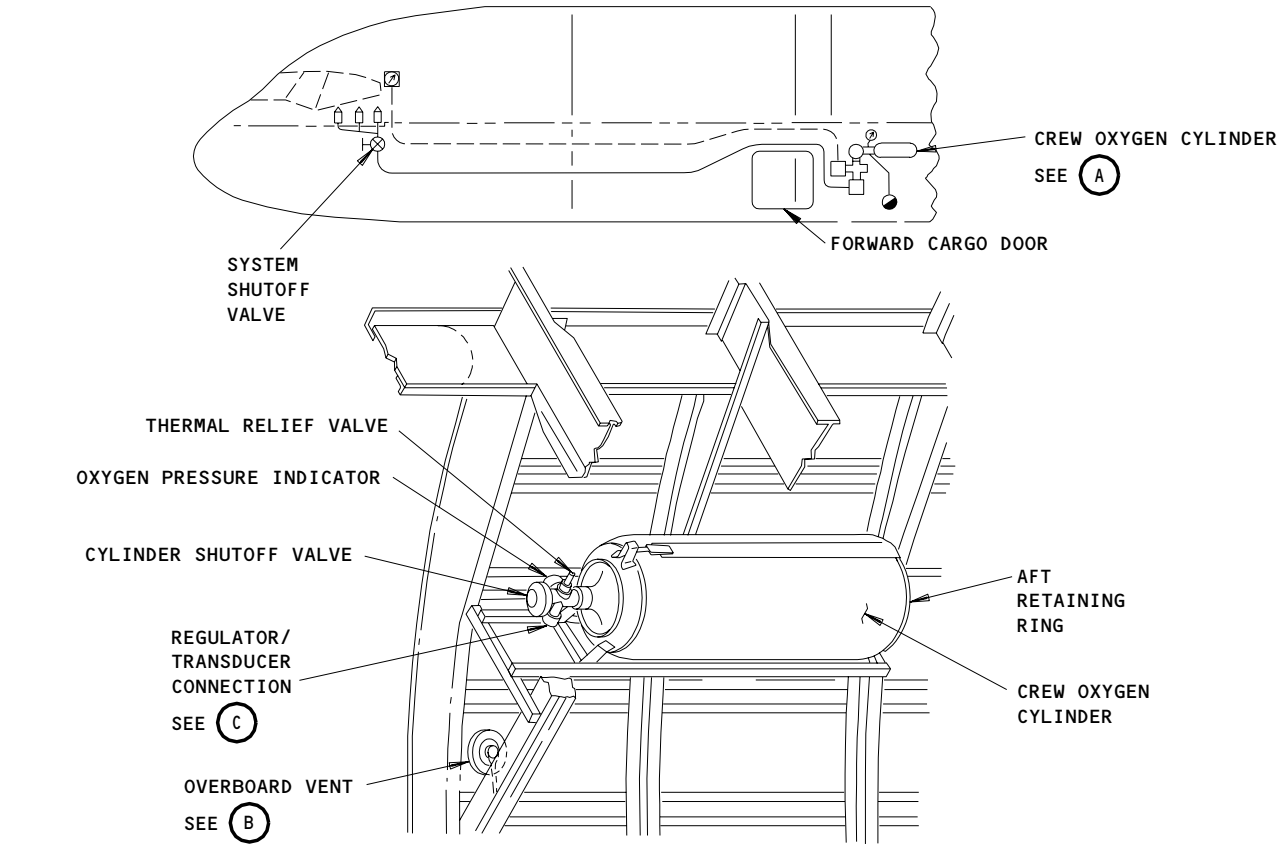
(d) Seal all tube assemblies or tube assembly ends in polyethylene bags.
(e) Put the protective caps or plugs on the tube nuts.
(f) Do not open polyethylene bags that hold oxygen system components until immediately before the installation.

NOTE: If a bag contains such components and is torn or unsealed during the storage, the parts must be cleaned again.

(g) Indentify all bags that contain oxygen system components and protective caps and plugs that have been cleaned:
1) "Breathing Oxygen System Components"
2) Part number and the date when the part was cleaned and sealed.
(h) If the components are sealed, put them where they will be protected from dust, moisture, lubricants and all other contaminants.

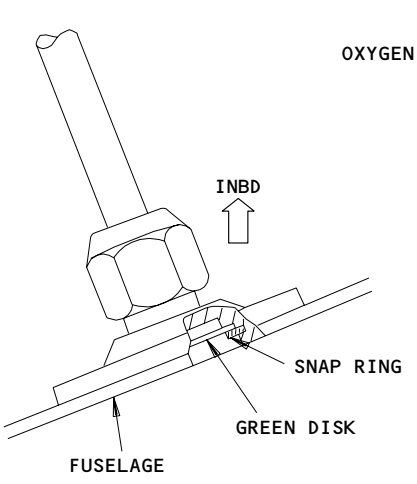
CREW OXYGEN SYSTEM - DESCRIPTION AND OPERATION

1. General
   A. The crew oxygen system supplies each crew station with oxygen from a pressurized cylinder. The crew oxygen system includes: a crew oxygen cylinder; a pressure regulator; a pressure transducer; oxygen masks with regulators (called mask/regulators); oxygen pressure indication; and an overboard vent.
2. Oxygen Cylinder (Fig. 1)
   A. GUI 001-099;
      The crew oxygen cylinder is on the right side of the forward cargo compartment. The cylinder has a volume of 76 cubic feet and is normally pressurized to 1850 psi (12755 kPa) at 70° F (21.1C). There is a cylinder shutoff valve, an oxygen pressure indicator, a thermal relief port, and a pressure regulator connection on the neck of each cylinder.
3. Pressure Regulator and Pressure Transducer (Fig. 1)
   A. The pressure regulator attaches to a cross-fitting on the neck of the crew oxygen cylinder. A hinged bracket, installed on the airplane structure, holds the cross fitting. The inlet port of the pressure regulator receives the high pressure oxygen from the crew oxygen cylinder. The regulator decreases this pressure to about 85 psi (586 kPa). An oxygen line connects the pressure regulator to the crew oxygen masks. The pressure transducer attaches to the pressure regulator. The pressure transducer sends electrical signals to the EICAS which shows cylinder pressure.
4. Crew Oxygen Masks (Fig. 2)
   A. GUI 001-099;
      Each crew station has an oxygen mask with a self-adjusting pneumatic harness. The masks receive oxygen at 60 to 85 psi (413 to 586 kPa) from the pressure regulator. The masks have a diluter demand regulator which decreases the oxygen pressure to a small quantity above cabin pressure. There is a selector on each mask which supplies 100 percent oxygen, or oxygen mixed with cabin air, to each crew member. A check valve in the mask/regulator will vent the oxygen to the cabin if pressure to the mask increases to 100 psi (689 kPa).



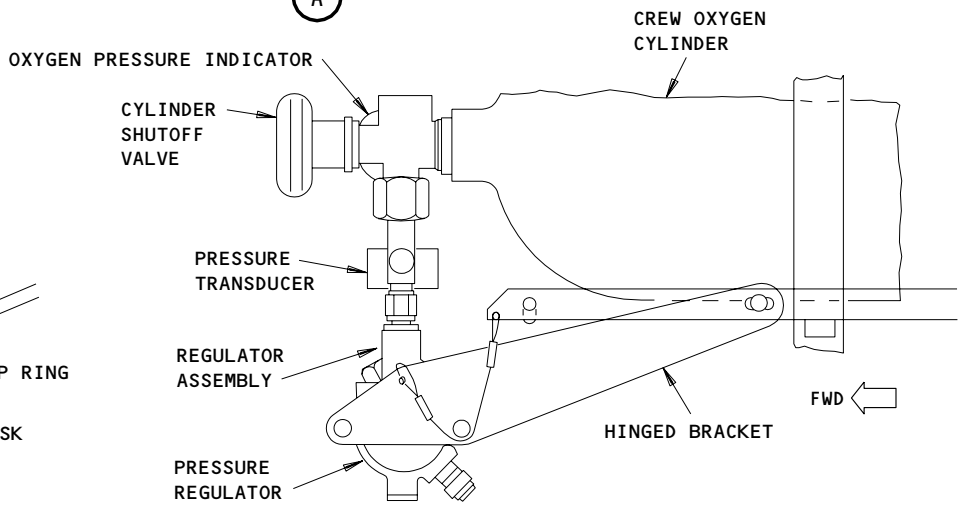
CREW OXYGEN CYLINDER

A



OVERBOARD VENT

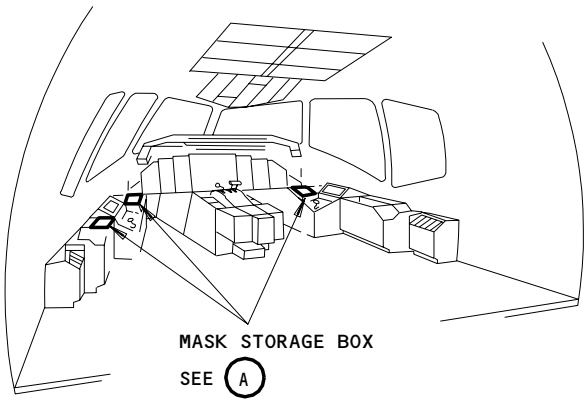
B



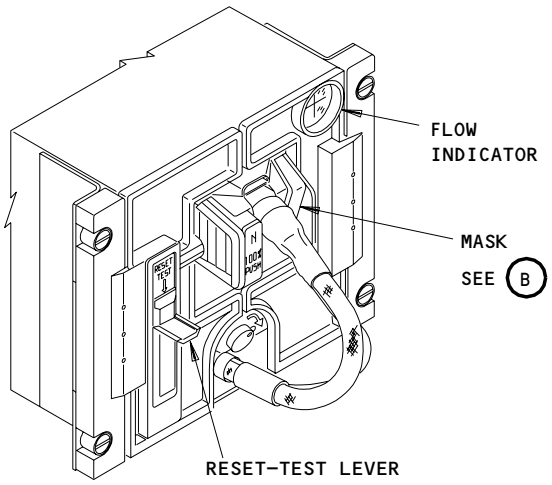
REGULATOR/TRANSDUCER CONNECTION

C

Crew Oxygen Components
Figure 1

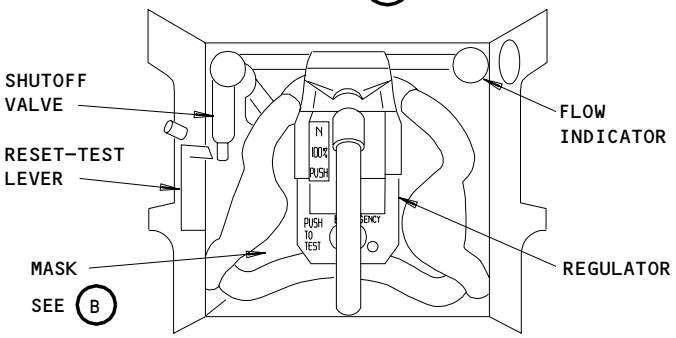


FLIGHT COMPARTMENT



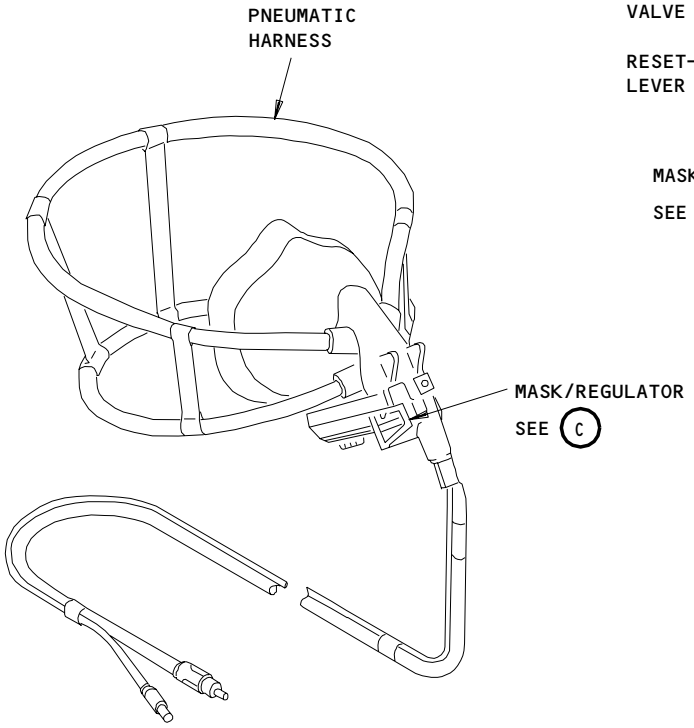
MASK STORAGE BOX (DOORS CLOSED)

A



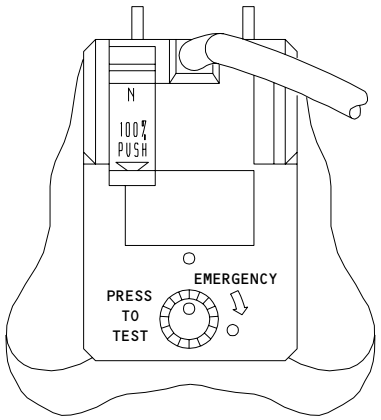
MASK STORAGE BOX (DOORS OPEN)

A



MASK (SHOWN INFLATED)

B

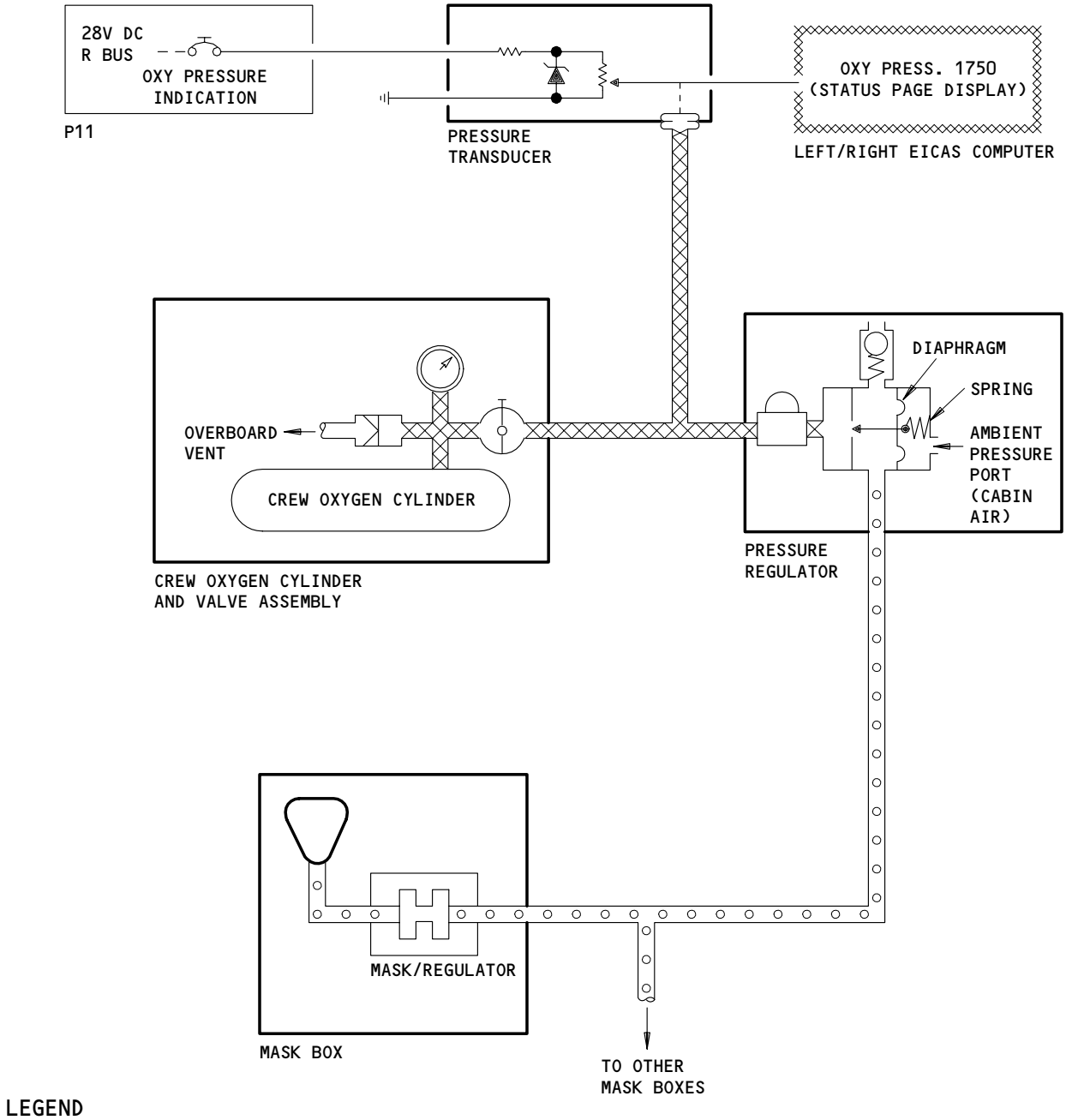


MASK/REGULATOR

C

Crew Oxygen Masks
Figure 2

5. Overboard Vent (Fig. 1)
   A. If the crew oxygen cylinder becomes overpressurized, a thermal relief disk on the cylinder neck breaks. The high pressure oxygen flows through an overboard vent line to the overboard vent. When pressure in the vent line reaches about 500 psi, a green disk in the overboard vent is blown out and the oxygen is vented to the air. The disk is held in place by a snap-ring. The overboard vent is just aft of the forward cargo door on the lower right side of the fuselage. The green disk is easily seen during the pre-flight check.
6. Operation (Fig. 3)
   A. Functional Description
      (1) High pressure oxygen flows from the crew oxygen cylinder to the pressure regulator. The pressure regulator decreases the pressure to about 85 psi. At the crew masks, the diluter-demand regulators decrease the pressure to 0-5 psi. A pressure transducer sends an electrical signal to the EICAS computers which show the pressure of the crew oxygen cylinder.
      (2) In the normal mode, an air/oxygen mixture is available on demand. In the 100 percent mode pure oxygen is available on demand. The emergency mode supplies a constant flow of oxygen through the mask.
   B. Control
      (1) The cylinder shutoff valve on the neck of the crew oxygen cylinder controls the flow of oxygen from the cylinder. A switch and a knob, on each diluter-demand regulator, control the flow of oxygen from each mask. For normal operation, place the selector switch to NORMAL and the emergency knob to OFF. For 100 percent oxygen mode, place the selector switch to 100% and the emergency knob to OFF. For emergency oxygen mode, put the selector switch to 100% and the emergency knob to ON.



Crew Oxygen System Schematic
Figure 3

CREW OXYGEN

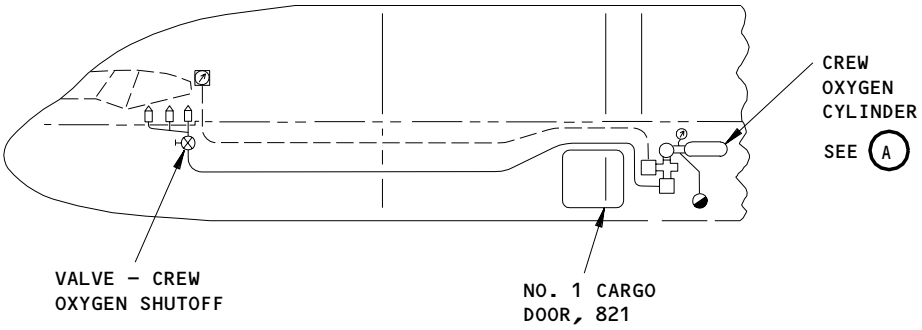
COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER –	2		FLIGHT COMPARTMENT, P11	
OXYGEN PRESSURE, C1320		1	11S31	*
CIRCUIT BREAKER –	2		FLIGHT COMPARTMENT, P34	
OXYGEN PRESSURE IND, C4220 1		1	34B2	*
CYLINDER – CREW OXYGEN	1	1	821, AFT OF THE NO. 1 CARGO DOOR	35-11-00
FILLER VALVE 1	1	1	821, ON THE OXYGEN FILL PANEL	35-11-12
INDICATORS –				
OXYGEN PRESSURE (CYLINDER)	1	1	821, AFT OF THE NO. 1 CARGO DOOR	35-11-00
OXYGEN PRESSURE (EXTERNAL FILL PANEL) 1	1	1	821, ON THE OXYGEN FILL PANEL	35-11-05
MASK/REGULATOR	2	4	FLIGHT COMPARTMENT	35-11-00
REGULATOR – PRESSURE	1	1	821, AFT OF THE NO. 1 CARGO DOOR	35-11-03
RELAY – (FIM 31-01-37/101)				
GROUND HANDLING POWER TRANSFER, K10277 1				
TRANSDUCER – PRESSURE, TS120	1	1	821, AFT OF THE NO. 1 CARGO DOOR	35-11-00
VALVE – CREW OXYGEN SHUTOFF	3	1	FLIGHT COMPARTMENT	35-11-02

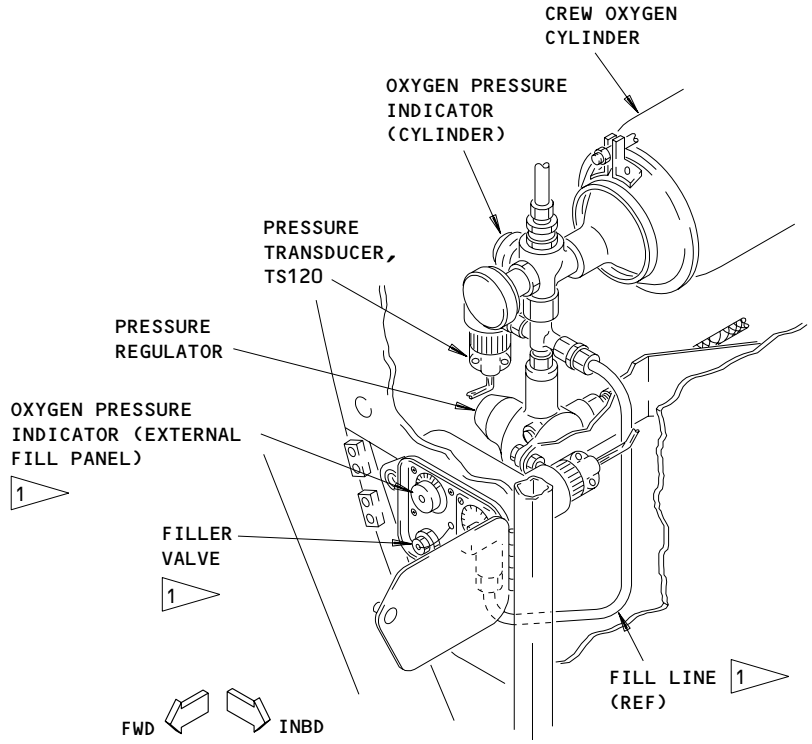
* SEE THE WDM EQUIPMENT LIST

1 GUI 115

Crew Oxygen – Component Index
Figure 101

E48716



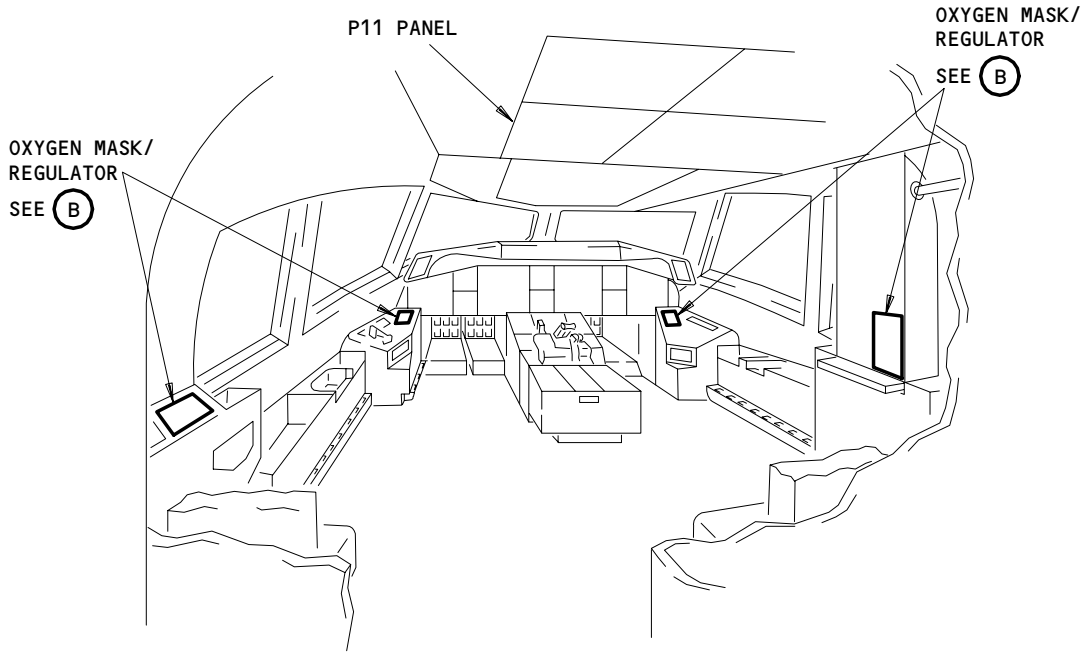


CREW OXYGEN CYLINDER

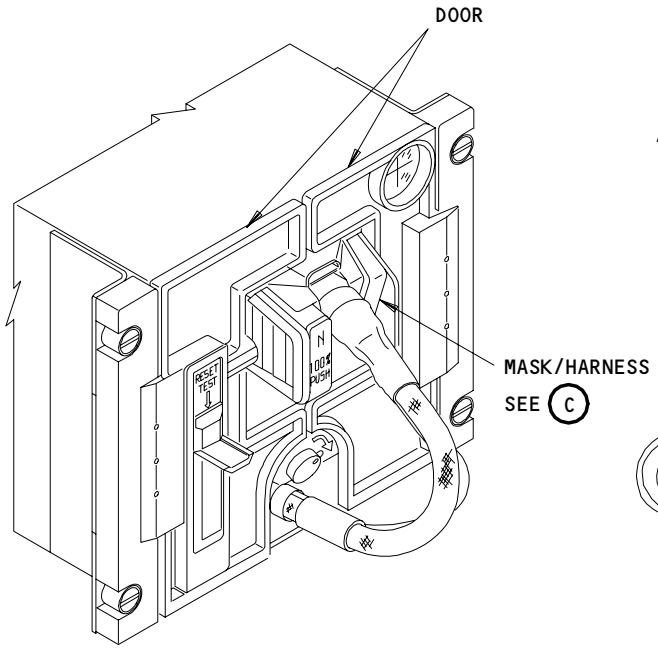
(A)

1 GUI 115

Crew Oxygen – Component Location
Figure 102 (Sheet 1)

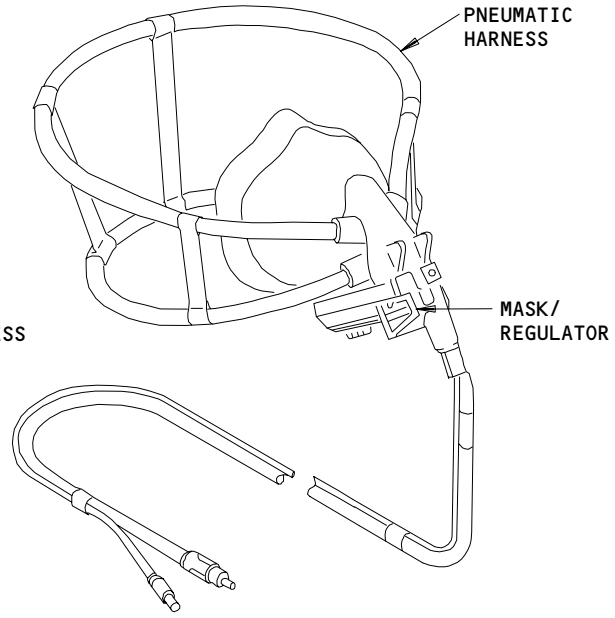


FLIGHT COMPARTMENT



OXYGEN MASK/REGULATOR
(SHOWN IN THE BOX WITH THE DOORS CLOSED)

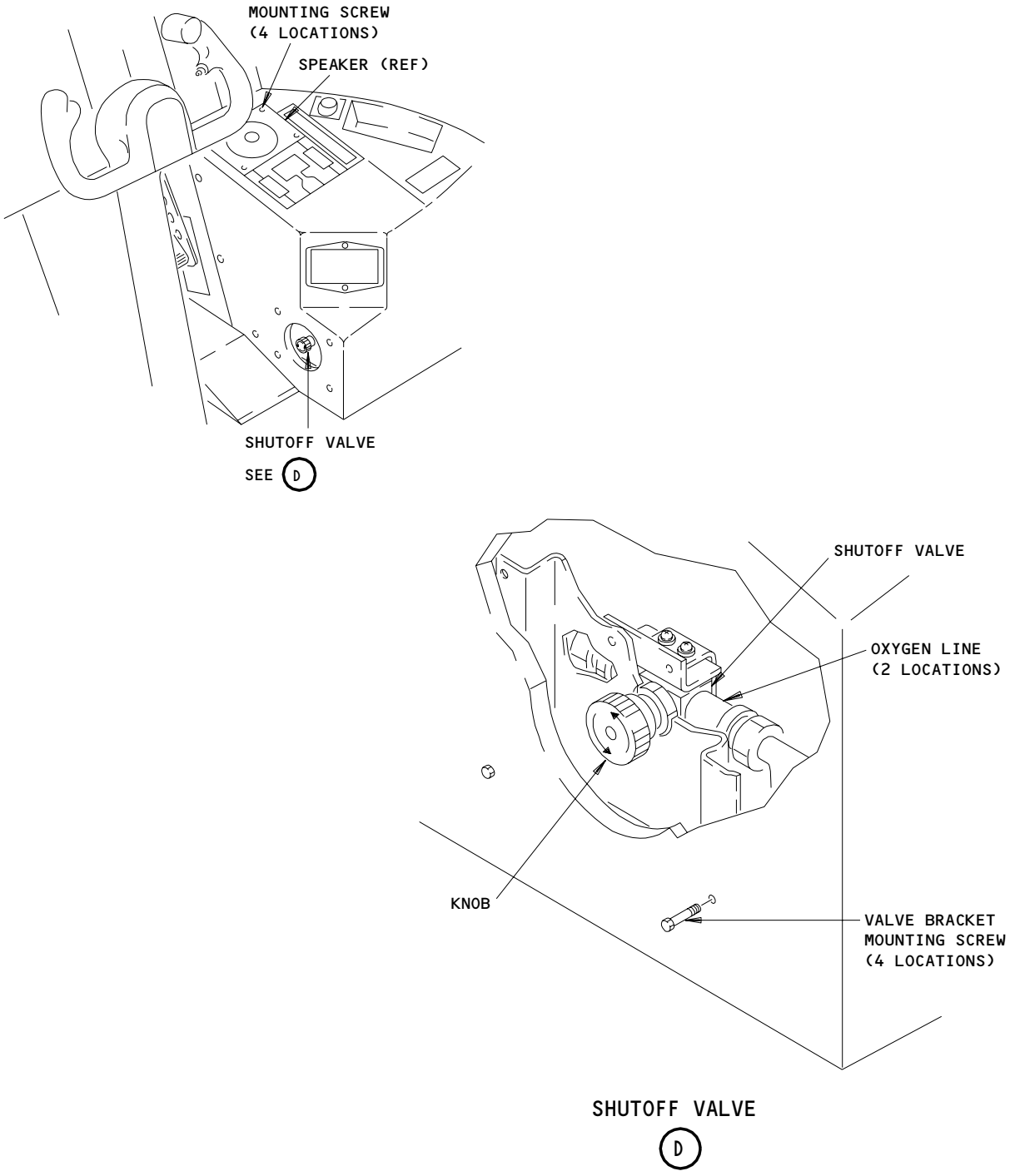
B



MASK/HARNESS
(SHOWN INFLATED)

C

Crew Oxygen – Component Location
Figure 102 (Sheet 2)



Crew Oxygen - Component Location
Figure 102 (Sheet 3)

CREW OXYGEN SYSTEM - MAINTENANCE PRACTICES

1. General
   A. Read these maintenance practices before you do any maintenance on the crew oxygen system.
   B. For crew oxygen cylinder removal and installation refer to oxygen servicing (AMM 12-15-08/301).
   C. These tasks are included in the procedure:
      (1) Standard Maintenance Practices for the Crew Oxygen System
      (2) Installation of Caps on Open Oxygen Lines

TASK 35-11-00-912-001

2. Crew Oxygen System - Standard Practices
   A. Consumable Materials
      (1) G00092 Oxygen System Leak Detection Compound - MIL-L-25567
      (2) G50310 Teflon Tape - Permacel 412 Specification A-A-58092
      (3) G00713 Cloth - Clean, Dry, Lint-Free, White Cotton
      (4) G02479 Inspection wire, 0.020 cad/copper MS20995CY20
      (5) G50263 - Lint free, nylon gloves
   B. References
      (1) AMM 20-41-00/201, Static Grounding
      (2) AMM 12-15-08/301, Oxygen Servicing
   C. Access
      (1) Location Zone
          200/100 Upper and Lower Half of Fuselage
   D. Procedure

      S 912-002
      (1) Safety Precautions

      WARNING: KEEP MATERIALS THAT WILL BURN AWAY FROM THE PRESSURIZED OXYGEN, OIL, GREASE, FLAMMABLE SOLVENTS, DUST, LINT, METAL FILINGS, OR OTHER COMBUSTIBLE MATERIALS CAN EXPLODE IF IT GETS NEAR PRESSURIZED OXYGEN.

      (a) Do not let oil, grease, flammable solvents, dust, lint, metal filings, or other combustible materials touch the surface of any pressurized oxygen component.
      (b) Make sure the airplane is electrically grounded (AMM 20-41-00/201).
      (c) Keep oxygen away from all sources of ignition, such as hot exhaust, sparks, flame, and cigarettes.
      (d) Keep oxygen away from flammable material such as fuel, paint, thinners, and cleaning solvents.
      (e) Make sure your hands, clothing, equipment, and tools are clean and have no signs of petroleum products.
      (f) Use lint free, nylon gloves, to do the work on the oxygen
      (g) Use only approved leak detection compounds.

(h) Remove the leak detection compounds with a clean cloth immediately after the leak detection test.
(i) Have a good flow of air through the area when you work on the oxygen system.

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

WARNING: DO NOT USE GASKETS OR LUBRICANTS WHEN YOU CONNECT THE FITTINGS IN THE CREW OXYGEN SYSTEM. THE GASKETS OR LUBRICANTS CAN CAUSE A FIRE OR AN EXPLOSION WHEN THEY ARE NEAR PRESSURIZED OXYGEN WHICH CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(j) When you install a component in the oxygen system, make sure all protective caps are removed.
(k) Make sure the fittings are clean and free of contaminants, and thread chips.

NOTE: Oxygen clean fittings come from a sealed package and a label for oxygen system installation. Make sure that you use only oxygen clean fittings. Some fittings used in the oxygen system are the same as fittings in other systems and are not oxygen clean. If it is necessary to clean parts, use the applicable oxygen procedures to clean the parts. This also applies to tube caps or plugs which must be as clean as the installation connections.

(l) Make sure the components are aligned correctly before you tighten the B-nut.

NOTE: This will prevent a crack which could result in a fire and explosion.

(m) Do not tighten the fittings while the oxygen system is pressurized.

WARNING: OPEN THE OXYGEN SYSTEM VALVES SLOWLY OR THE TEMPERATURE MAY INCREASE TOO MUCH.

(n) Open all valves slowly or the pressure and the temperature can increase too much.

S 912-003

(2) General Maintenance Information

(a) Leak Detection

1) Find the small leaks with an approved leak detection compound.
2) Apply leak detection compound with a soft brush on connections that may have leaks.
3) Examine the connections for bubbles.
4) Use a mirror and a light when it is necessary to examine areas that you cannot directly see.
5) Remove the leak detection compound immediately after you examine the connections.

(b) Pipe Thread Sealing

1) If it is necessary, seal the pipe threads with teflon tape.

CAUTION: DO NOT APPLY TEFLON TAPE TO THE FIRST 1 1/2 TO 2 1/2 THREADS. TAPE THAT BECOMES LOOSE FROM THE THREADS CAN CAUSE DAMAGE TO THE EQUIPMENT.

2) Apply teflon tape to the male threads. Keep 1 1/2 to 2 1/2 threads without tape at the end of the fitting.
3) Apply 1 1/2 turns of the tape. Pull the tape tight against the threads.

S 912-004

(3) Oxygen System Installation Practices

(a) Prepare for Maintenance

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

1) Read the safety precautions before you do maintenance.
2) Clean all tools, equipment, and fittings before you do any maintenance. Use clean gloves and clean clothing during maintenance.
3) Release the pressure in the oxygen system through a flight compartment mask before you do maintenance.

(b) Maintenance Instructions

WARNING: SOME OXYGEN LINES MAY STILL HAVE PRESSURE. CARELESS REMOVAL OF THE CONNECTION MAY CAUSE AN INCREASE IN TEMPERATURE AND CAUSE A FIRE OR EXPLOSION.

1) Loosen the fitting connections slowly. Use two wrenches: one for the male fitting and one for the female fitting.

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG.
MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

2) Install clean caps or plugs as soon as possible to the open fittings and ports (35-11-00/201).

NOTE: Oxygen clean fittings come from a sealed package and a label for oxygen system installation. Make sure that you use only oxygen clean fittings. Some fittings used in the oxygen system are the same as fittings in other systems and are not oxygen clean. If it is necessary to clean parts, use the applicable oxygen procedures to clean the parts. This also applies to tube caps or plugs which must be as clean as the installation connections.

3) Seal the caps and plugs in polyethylene bages.

NOTE: Do not open the bag until the caps and plugs are to be used. Seal the bags immediately to prevent contamination to the remaining caps and plugs.

4) Install only clean components. If a component is not clean discard the component and install a clean component.
5) When you install a component, start all connectors with your hand.
6) Make sure the connector engages the fitting threads at least two full turns before you use a wrench.

NOTE: Use two wrenches; one wrench for the male fitting and one wrench for the female fitting.

7) Tighten the T-bolt nut on the retaining ring for the oxygen cylinder to 10-15 pound-inches (1-1.5 newton meters).
8) Examine all the connections for signs of leaks.

NOTE: Use the leak detection tasks specified in this procedure.

9) If you cannot stop a leak, replace the bad part.

E. Return the Airplane Back to its Usual Condition.

S 862-017

WARNING: OPEN THE OXYGEN SYSTEM VALVE SLOWLY. IF YOU OPEN OR CLOSE THE VALVES QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR AN EXPLOSION.

(1) Open the oxygen shutoff valve slowly with your hand.

NOTE: The maximum torque is 25 pound-inches (2.8 newton meters).

S 862-016
(2) Close the valve one quarter of a turn.

S 422-015
(3) Install an Inspection Wire on the valve.

NOTE: Use G02479 Inspection wire, 0.020 cad/copper MS20995CY20.

TASK 35-11-00-402-014

3. Installation of Caps on Open Oxygen Lines

A. Consumable Materials
(1) G50310 Teflon Tape - Permacel 412
Specification A-A-58092

B. Equipment
(1) Cap - Protective, Aluminum, Flareless Tube, BACC14AG
(2) Plug - Protective, Aluminum, Flareless Tube, BACP20BG

C. Access
(1) Location Zone
200/100 Upper and Lower Half of Fuselage

D. Procedure - Installation of Caps on Open Oxygen Lines

NOTE: These rules and steps are to be done every time an oxygen line is left open.

S 422-013

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(1) Add tube cap or tube plug to the open oxygen lines within 5 minutes.

NOTE: Oxygen clean fittings come from a sealed package and a label for oxygen system installation. Make sure that you use only oxygen clean fittings. Some fittings used in the oxygen system are the same as fittings in other systems and are not oxygen clean. If it is necessary to clean parts, use the applicable oxygen procedures to clean the parts. This also applies to tube caps or plugs which must be as clean as the installation connections.

S 862-009

(2) Make sure the threads are clean.

S 412-018

CAUTION: DO NOT APPLY TEFLON TAPE TO THE FIRST 1 1/2 TO 2 1/2 THREADS. TAPE THAT BECOMES LOOSE FROM THE THREADS CAN CAUSE DAMAGE TO THE EQUIPMENT.

(3) Install the teflon tape (G50310) to the exterior threaded fittings.

S 412-011

(4) Install connectors or adjacent parts to the open oxygen lines within 5 minutes from when the tube cap or tube plug are removed.

S 412-012

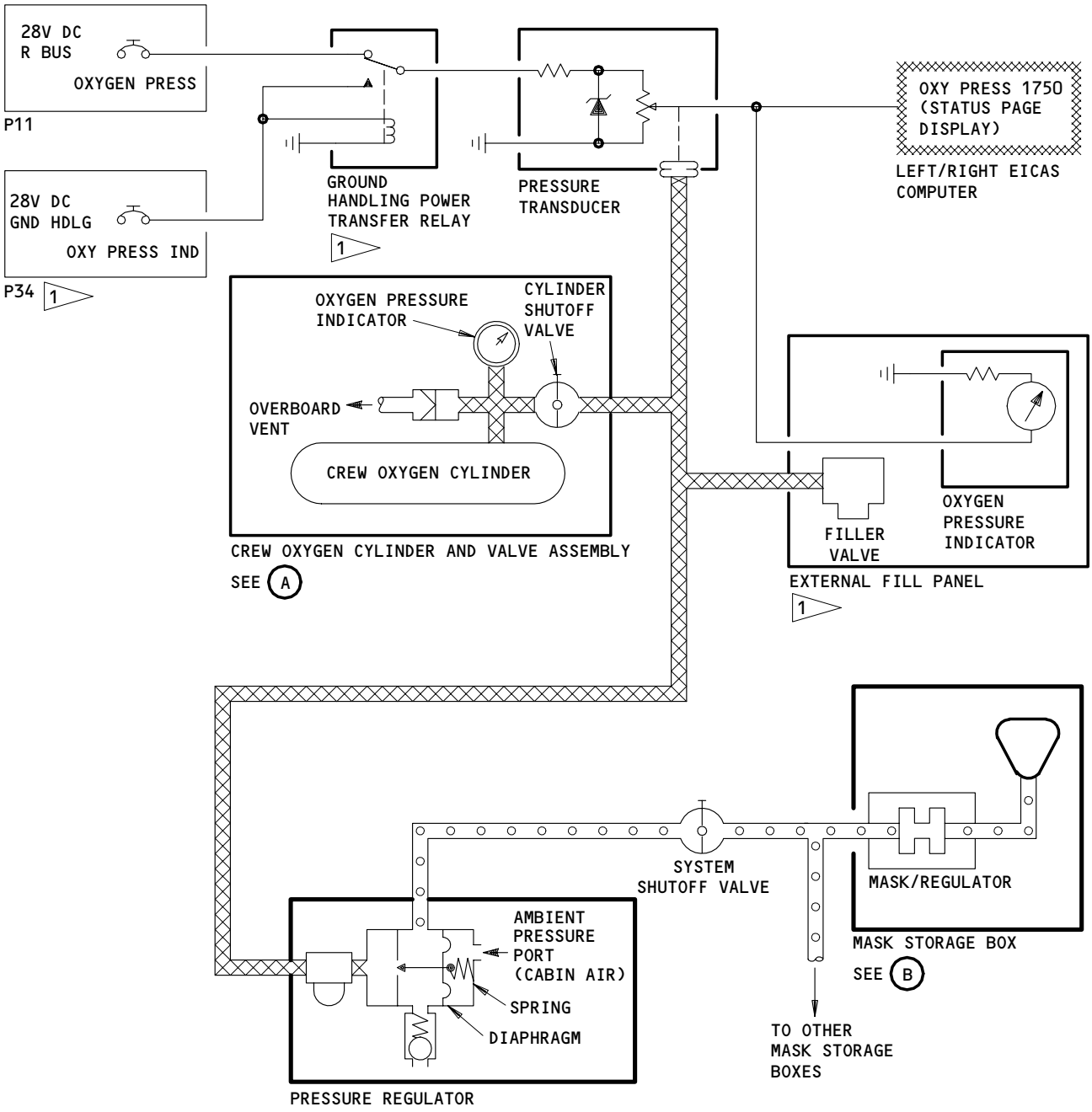
(5) Tighten oxygen lines connectors to 190 +/- 5 pound-inches within 8 hours.

CREW OXYGEN SYSTEM - ADJUSTMENT/TEST

1. General
   A. This procedure has instructions for an operational test of the crew oxygen system. The leak test of the crew oxygen system is done with a portable test cylinder. It also includes a high pressure leakage test and a low pressure line test. You must do the operational test with a fully assembled oxygen system. Do this test at each flight crew station.

TASK 35-11-00-715-001

2. Crew Oxygen System Operational Test (Fig. 501)
   A. Equipment
      (1) Portable Test Cylinder O-1850 p si Scott Aviation 255 Erie Street, Lancaster N,Y, (if applicable).
      (2) Low Pressure Gage - 0 to 150 psig, for low pressure testing.
      (3) High Pressure Gage - 0 to 2000 psi, with an accuracy of 2 1/2 percent with no more than 100 psi graduations, and a diameter of not less than 4 inches.
      (4) Package of clean, protective caps or plugs.
      (5) Clean flexiable high pressure hoses.
      (6) Clean Tee-Fittings (as applicable).
   B. Consumable Materials
      (1) G00669 Nitrogen per MIL-P-27401 (to be used with portable test cylinders) or
      (2) G0019 Oxygen-Chemical Gaseous per MIL-O-27210 Type 1 (to be used with portable test cylinder) or
      (3) G00000 Air - Clean, Dry, with no particles or fibers greater than 100 microns in the longest dimension per cubic foot of air, it must not have more than 3ppm total hydrocarbon by weight or 7ppm by volume.
      A moisture content not to exceed 0.00002 grams per liter of air at 70 degrees F and 760 mm mercury.
      This is equivalent to a dew point of -63.6 degrees F at 760 mm mercury.
      This air is to be used with a portable test cylinder.



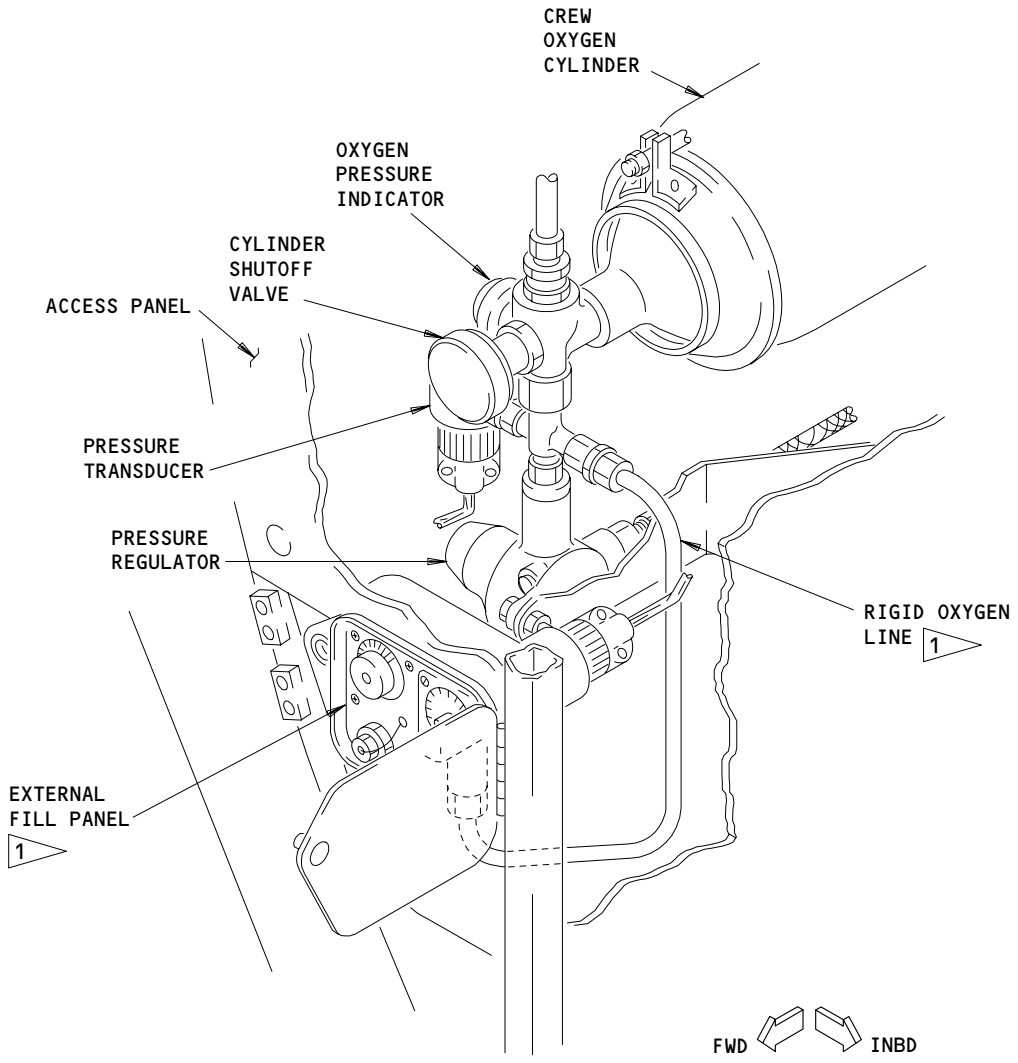
LEGEND

HIGH PRESSURE OXYGEN

LOW PRESSURE OXYGEN

1 AIRPLANES WITH EXTERNAL FILL PANEL

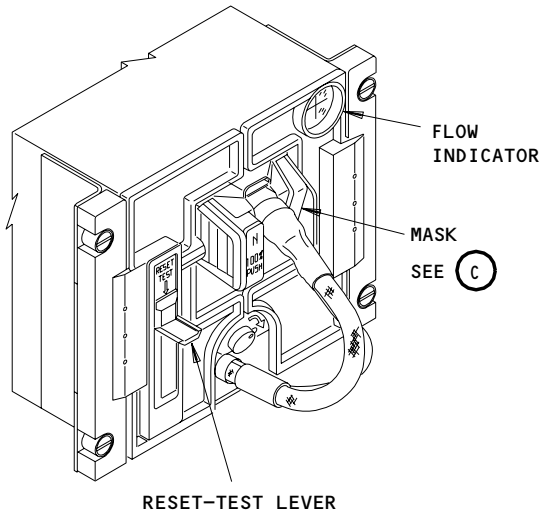
Crew Oxygen Flow Diagram
Figure 501 (Sheet 1)



CREW OXYGEN CYLINDER AND VALVE ASSEMBLY

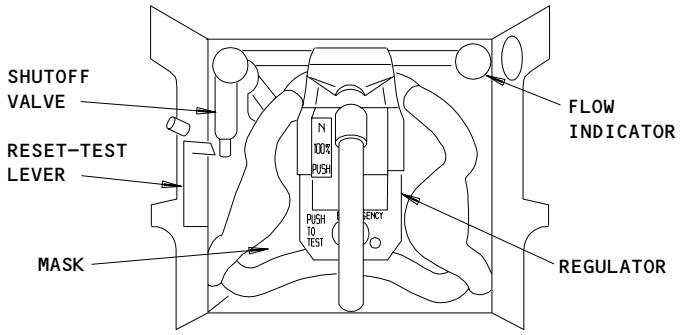
A

Crew Oxygen Flow Diagram
Figure 501 (Sheet 2)



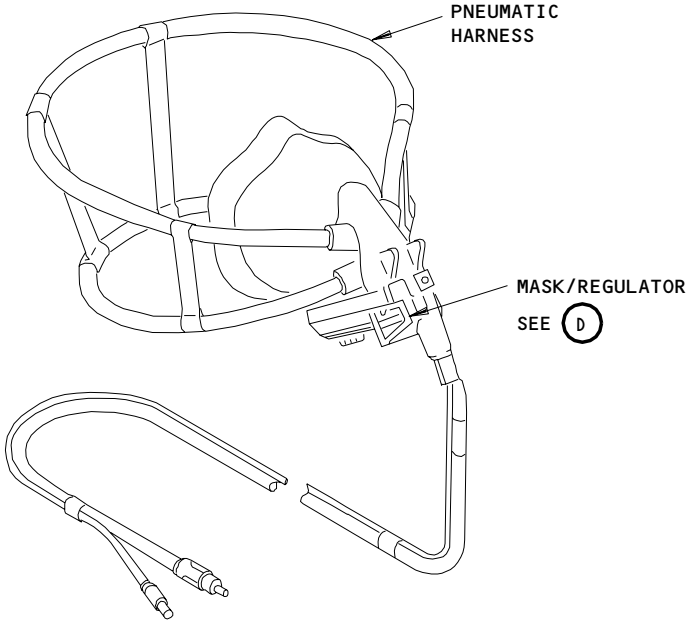
MASK STORAGE BOX (DOORS CLOSED)

B



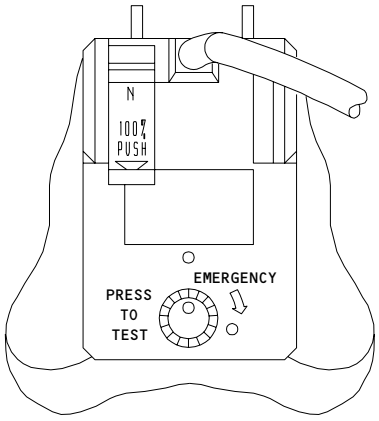
MASK STORAGE BOX (DOORS OPEN)

B



MASK (SHOWN INFLATED)

C



MASK/REGULATOR

D

Crew Oxygen Flow Diagram
Figure 501 (Sheet 3)

(4) G00091 Compound - Oxygen System Leak Detection (MIL-L-25567).
(5) G00713 Cloth - Clean, Dry, Lint-Free, White Cotton
(6) G02479 Lockwire - Copper (0.020 inch Diameter) (NASM20995CY20)

C. References
(1) AMM 35-11-00/201, Crew Oxygen System
(2) AMM 24-22-00/201, Electrical Power - Control
(3) AMM 23-51-00/501, Flight Interphone System

D. Access
(1) Location Zones
122 Forward Cargo Compartment (Right)
211/212 Control Cabin

E. Procedure

S 865-042

WARNING: MAKE SURE YOU KNOW THE SAFETY PRECAUTIONS FOR THE GENERAL MAINTENANCE INSTRUCTIONS FOR THE CREW OXYGEN SYSTEM (AMM 35-11-00/201). PRESSURIZED OXYGEN CAN CAUSE INJURY OR DAMAGE IF THE SAFETY PRECAUTIONS ARE NOT OBEYED.

(1) Read the safety precautions and the general maintenance instructions for the crew oxygen system (AMM 35-11-00/201).

S 035-038
(2) Make sure the shutoff valve on the crew oxygen cylinder is open.

S 035-039
(3) AIRPLANES WITH FLIGHT COMPARTMENT CREW OXYGEN SYSTEM SHUTOFF VALVE; Make sure the flight compartment crew oxygen system shutoff valve is open.

S 865-040
(4) Supply electrical power (AMM 24-22-00/201).

S 865-041
(5) Push the STATUS button on the EICAS DISPLAY select panel.

S 715-007
(6) Do an in-box check of the crew oxygen mask/regulator assembly.
(a) Fully push the sliding control lever on the crew oxygen box. Do not release the lever.
(b) Make sure the oxygen flow blinker momentarily becomes yellow, which shows oxygen flow, and then becomes black again.
(c) Push the PRESS TO TEST button on the crew oxygen mask regulator for approximately one second and release.
(d) Make sure the flow blinker becomes yellow when the button is pushed and becomes black when the button is released.
(e) Make sure the oxygen flow is audible.
(f) Squeeze the oxygen mask harness inflation ears while the mask is in the box.

(g) Release the inflation ears.
(h) Release the sliding control lever on the crew oxygen box.
(i) Make sure the control lever goes back to the CLOSED position.
(j) Make sure the oxygen flow is audible while the oxygen is bled from the tube and hose in the box.
(k) Make sure you can move the N-100% control to the 100% position.
(l) Move the control back to the N position.
(m) Do the above procedure at each crew oxygen station.

S 715-017
(7) Do the Operational Test - Crew Oxygen Mask/Regulator

(a) Remove the mask/regulator from the stowage box.
(b) Hold the mask and push the harness inflation control. Do not release the harness inflation control.
(c) Make sure the flow blinker becomes yellow when the button is pushed and becomes black again, which shows that the pneumatic harness is free of leaks.
(d) Release the harness inflation control.
(e) Lift the mask/regulator unit and put it on your head.
(f) Breathe through the mask/regulator unit with the regulator turned to dilution.
(g) Check breathing on the flow blinker.
(h) Breathe through the mask/regulator unit with the regulator turned to the 100 percent position.
(i) Check breathing on the flow blinker.
(j) With the lever in the 100% position, turn the EMERGENCY control knob.
(k) After a few breaths, cancel the emergency pressure.
(l) Do the "Oxygen Mask Microphone Test" portion of the "System Test - Flight Interphone System" task (AMM 23-51-00/501).

WARNING: MAKE SURE YOU PUT THE OXYGEN MASK/REGULATOR UNIT INTO THE BOX CORRECTLY. IF THE HARNESS AND THE COILED HOSE BECOME TWISTED, SAFETY PROBLEMS CAN OCCUR DURING THE USE OF THE CREW OXYGEN SYSTEM.

CAUTION: DO NOT LET FOREIGN OBJECTS OR DEBRIS MAKE CONTACT WITH LENS. IF FOREIGN OBJECTS COME IN CONTACT WITH THE LENS THEY CAN CAUSE SCRATCHING OR DAMAGE.
(m) Put the oxygen mask/regulator unit into the box.
1) Make sure that the N-100% control is in the N position.
2) Make sure the PRESS TO TEST knob is turned to the normal position.

3) If installed, remove protective sheet from lense.
4) Hold the mask by the regulator and let the harness hang free.
5) Make sure all vents on smoke goggles are closed.
6) Make sure the harness is not twisted.
7) Make sure that the cross straps are placed over the manufacturers location marks.
8) Make sure the coiled hose is engaged in the clips at the bottom of the container.
9) Wind the hose into coils in the bottom of the box. Do not twist or tangle the coils.
10) Let the coils expand in the stowage box and push them down carefully with your free hand.
11) Use your free hand to hold back harness spacers and push them down on the coiled hose.

WARNING: DO NOT PUT HARNESS CROSS BETWEEN LENS AND NOSE BRIDGE OF MASK. IF PUT BETWEEN LENS AND NOSE BRIDGE, IT WILL PREVENT CORRECT HARNESS INFLATION.

12) Make sure the mask is seated against the stop in the stowage box.

NOTE: There are two types of stops.

For boxes with the "bar stop", rest the tabs of the mask on the bar.

For masks with the "clip stop", insert the tabs of the mask into the clips until the tabs "click" into place.

13) Make sure the harness does not interfere with the ON-OFF valve on the blinker if the lids are closed.
14) Put the supply hose at the center on the bottom of the box.
15) Push the supply hose in sufficiently so that the disconnects do not touch the face seal.
16) Close the left lid.
17) Operate the RESET control. The flag must go out of view.
18) Engage the pin (of the left lid) in the applicable recess in the mask/regulator and close the right lid.
19) Do the above procedure again at each crew station.

S 725-009

(8) Do a check for the correct operation of the pressure regulator at the crew oxygen cylinder.

S 015-229

(9) Open the access panel for the crew oxygen cylinder.

(a) Close the shutoff valve on the oxygen cylinder.

WARNING: OPEN THE CREW SYSTEM SHUTOFF VALVE SLOWLY. IF YOU OPEN OR CLOSE THE VALVE QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR AN EXPLOSION.

(b) Slowly open the crew system shutoff valve to full open. Then close the valve one-fourth turn. Install an inspection wire on the valve. Use lockwire, GO2479.
(c) Set one crew oxygen mask to 100% oxygen.
(d) Move the test lever on a storage box as many times as necessary to bleed the oxygen lines.
(e) Disconnect the flexible hose on the low pressure side of the pressure regulator.

CAUTION: MAKE SURE THE PRESSURE GAGE IS APPLICABLE IN OXYGEN SYSTEMS. THE PRESSURE GAGE MUST BE FREE OF ANY OIL, GREASE, AND OTHER HYDROCARBONS. THESE MATERIALS ARE FLAMMABLE OR EXPLOSIVE WITH OXYGEN.

(f) Connect the (test) low pressure gage to the low pressure port of the pressure regulator.
(g) Open the shutoff valve on the oxygen cylinder.
(h) Make sure the pressure gage on the pressure regulator shows between 60 and 85 psi.
(i) Close the shutoff valve on the oxygen cylinder.
(j) Remove the (test) low pressure gage from the pressure regulator.
(k) Connect the flexible oxygen line to the pressure regulator.

WARNING: OPEN THE OXYGEN CYLINDER VALVES SLOWLY. IF YOU OPEN OR CLOSE THE VALVES QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR AN EXPLOSION.

(l) Open the oxygen cylinder shutoff valve slowly with your hand.

NOTE: The maximum torque is 25 pound-inches (2.8 newton meters).

(m) Close the valve one quarter of a turn.
(n) Install an inspection wire on the valve.

NOTE: Use GO2479 Lockwire - Copper (0.020 inch diameter) (NASM20995CY20)

S 715-018
(10) Use the boom microphone to make a voice transmission between two flight crew stations (AMM 23-51-00/501).

S 865-013
(11) Remove electrical power if it is not necessary (AMM 24-22-00/201).

TASK 35-11-00-705-020

3. Crew Oxygen System Pressure Indication Test

A. References
(1) AMM 35-11-00/201, Crew Oxygen System
(2) AMM 24-22-00/201, Electrical Power - Control

B. Access
(1) Location Zones
122 Forward Cargo Compartment (Right)
211/212 Control Cabin

C. Procedure

S 865-043

WARNING: MAKE SURE YOU KNOW THE SAFETY PRECAUTIONS FOR THE GENERAL MAINTENANCE INSTRUCTIONS FOR THE CREW OXYGEN SYSTEM (AMM 35-11-00/201). PRESSURIZED OXYGEN CAN CAUSE INJURY OR DAMAGE IF THE SAFETY PRECAUTIONS ARE NOT OBEYED.

(1) Read the safety precautions and the general maintenance instructions for the crew oxygen system (AMM 35-11-00/201).

S 015-230
(2) Open the access panel for the crew oxygen cylinder.

S 035-044
(3) Make sure the shutoff valve on the crew oxygen cylinder is open.

S 035-045
(4) AIRPLANES WITH FLIGHT COMPARTMENT CREW OXYGEN SYSTEM SHUTOFF VALVE; Make sure the flight compartment crew oxygen system shutoff valve is open.

S 865-046
(5) Supply electrical power (AMM 24-22-00/201).

S 865-047
(6) Push the STATUS button on the EICAS DISPLAY select panel.

S 715-006
(7) Do a check of the pressure gage on the crew oxygen cylinder (Fig. 501).
(a) Make sure the pressure shown on the EICAS display is within 100 psi (689 kPa) of the pressure shown on the pressure gage.

TASK 35-11-00-795-157

4. Crew Oxygen High Pressure Leakage Test (Fig. 501)

A. Equipment

(1) Portable Test Cylinder 0-1850 p si Scott Aviation 255 Erie Street, Lancaster N,Y, (if applicable).

(2) High Pressure Gage - 0 to 2000 psi, with an accuracy of 2 1/2 percent with no more than 100 psi graduations, and a diameter of not less than 4 inches.

(3) Package of clean, protective caps or plugs.

(4) Clean flexiable high pressure hoses.

(5) Clean Tee-Fittings (as applicable).

B. Access

(1) Location Zones

122	Forward Cargo Compartment (Right)
211/212	Control Cabin

C. Procedure

S 865-158

(1) Close the crew oxygen cylinder shutoff valve.

S 025-243

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(2) Disconnect the supply line tubing from the pressure regulator.

S 865-233

(3) Put a cap on the outlet of the pressure regulator to prevent contamination of the system (AMM 35-11-00/201).

NOTE: Oxygen clean fittings come from a sealed package and a label for oxygen system installation. Make sure that you use only oxygen clean fittings. Some fittings used in the oxygen system are the same as fittings in other systems and are not oxygen clean. If it is necessary to clean parts, use the applicable oxygen procedures to clean the parts. This also applies to tube caps or plugs which must be as clean as the installation connections.

S 485-166

(4) Connect the portable test cylinder and the high pressure (test) gage to the supply line.

D. Pressurization and Leak Check

S 785-167
(1) Open the control valve on the portable test cylinder and slowly pressurize the system to between 60 and 85 psig.

S 785-168
(2) After the system has become stable, close the control valve on the portable test cylinder.

S 795-169
(3) The pressure drop must not be more than a rate of 15 psig per hour.

S 215-170
(4) Monitor the leakage rate for a minimum of 30 minutes.

S 795-171
(5) If there is leakage, find and repair the source of leakage.

S 795-172
(6) Do the "Pressurization and Leak Check" procedure again until no leakage is found. Leakage is not permitted.

E. Put the Airplane Back to Its Usual Condition

S 085-173
(1) Close the control valve on the portable test cylinder.

S 085-174
(2) Disconnect the portable test cylinder and the high pressure (test) gage from the supply line.

S 435-182
(3) Connect the supply line tubing to the pressure regulator.

S 865-183

WARNING: OPEN THE SHUTOFF VALVE SLOWLY TO PREVENT HIGH TEMPERATURES. HIGH TEMPERATURES CAN CAUSE INJURY TO YOU OR DAMAGE TO EQUIPMENT.

(4) Slowly open the shutoff valve on the crew oxygen cylinder.
(a) Fully open the shutoff valve.
(b) Close the shutoff valve one forth of a turn.

S 435-184
(5) Install the lockwire to hold the valve in this position.

NOTE: Use 0.020 inch diameter copper lockwire (AMM 20-10-23/401).

S 795-185
(6) Do a leakage check on the oxygen cylinder couplings with the leak detection compound.

S 795-186
(7) Remove the leak detection compound with a clean cloth immediately after you do the check.

S 215-187
(8) Make sure the oxygen pressure shown on the EICAS status page and on the crew oxygen cylinder agree to within 100 psi.

S 415-189
(9) Close the access panel to the crew oxygen cylinder.

TASK 35-11-00-785-192

5. Crew Oxygen Low Pressure Line Test

A. References
(1) AMM 24-22-00/201, Electrical Power - Control
(2) AMM 35-11-00/201, Oxygen

B. Access
(1) Location Zones
211/212 Control Cabin

C. Procedure

NOTE: Complete masks with regulators and hose assemblies must be installed at all locations when you do the operational test.

Obey the safety precautions and general maintenance instructions for the oxygen system (AMM 35-11-00/201).

S 865-193
(1) Supply electrical power (AMM 24-22-00/201).

S 865-194
(2) Make sure this circuit breaker on the overhead circuit breaker panel, P11, is closed:
(a) 11R29, 11S31, 11S32, or 11S33, OXYGEN PRESS

S 755-195
(3) Pull one of the crew station oxygen masks from its stowage box. Apply pressure with your fingers on the harness inflation ears.

S 755-196
(4) Make sure the mask harness quickly inflates.

S 415-197
(5) Put the oxygen mask back in its stowage box.

D. Put the Airplane Back to its Usual Condition

S 865-198
(1) Remove the electrical power if it is not necessary (AMM 24-22-00/201).

TASK 35-11-00-705-021

6. Crew Oxygen Mask/Regulator Test

A. References
(1) AMM 23-51-00/501, Flight Interphone System
(2) AMM 24-22-00/201, Electrical Power - Control
(3) AMM 35-11-00/201, Crew Oxygen System

B. Access
(1) Location Zones
122 Forward Cargo Compartment (Right)
211/212 Control Cabin

C. Prepare to do the Test

S 865-048

WARNING: MAKE SURE YOU KNOW THE SAFETY PRECAUTIONS FOR THE GENERAL MAINTENANCE INSTRUCTIONS FOR THE CREW OXYGEN SYSTEM (AMM 35-11-00/201). PRESSURIZED OXYGEN CAN CAUSE INJURY OR DAMAGE IF THE SAFETY PRECAUTIONS ARE NOT OBEYED.

(1) Read the safety precautions and the general maintenance instructions for the crew oxygen system (AMM 35-11-00/201).

S 015-231
(2) Open the access panel for the crew oxygen cylinder.

S 035-049
(3) Make sure the shutoff valve on the crew oxygen cylinder is open.

S 035-050
(4) AIRPLANES WITH FLIGHT COMPARTMENT CREW OXYGEN SYSTEM SHUTOFF VALVE; Make sure the flight compartment crew oxygen system shutoff valve is open.

S 865-019
(5) Supply electrical power (AMM 24-22-00/201).

S 865-022
(6) Push the STATUS button on the EICAS DISPLAY select panel.
(a) Make sure there is sufficient cylinder pressure.

D. Do the Mask/Regulator Test

S 015-199
(1) Grasp the regulator assembly and remove the mask from the stowage box.

NOTE: When the stowage box doors are opened or the RESET-TEST lever is pushed, the regulator is automatically pressurized from an unpressurized state.

S 215-200
(2) Make sure the flow indicator comes on, and then goes off.

NOTE: When the mask regulator is fully pressurized, the flow indicator will go away to indicate that the oxygen system is functional and leak free.

S 715-201
(3) Grasp the regulator and harness inflation button with your fingers and palm of your hand, then squeeze and hold the red harness inflation button.
(a) Make sure that the pneumatic harness inflates smoothly.

S 715-202
(4) Release the red harness inflation button.
(a) Make sure that the pneumatic harness deflates smoothly.

S 755-203
(5) Put the mask/regulator to your face.

S 715-204
(6) Breathe in the oxygen and remove the mask/regulator from your face.

NOTE: Do not exhale into the mask.

(a) Make sure the flow indicator comes on with each breath.

S 755-205
(7) Check for breathing quality with control lever set to the "100%" position first, and then with the EMERGENCY control knob turned on.
(a) Make sure the flow indicator comes on with each breath.

S 865-206

CAUTION: DO NOT KEEP THE EMERGENCY CONTROL KNOB IN THE "ON" POSITION FOR AN EXTENDED TIME, IT CAN DRAIN ALL OF THE OXYGEN SUPPLY FROM THE CREW OXYGEN CYLINDER.

(8) Turn the EMERGENGY control knob off after three breaths.

S 715-207
(9) Do the "Oxygen Mask Microphone Test" (AMM 23-51-00/501).

S 865-208
(10) Set the N-100% control lever to the original position (N or 100%) as required by flight operations.

S 165-209
(11) Wipe the mask clean of any oily residue.

S 415-210
(12) Put the oxygen mask/regulator in its stowage box (AMM 35-11-51/401).

S 725-211
(13) Repeat this test for other crew mask stowage box, if necessary.

E. Put the Airplane Back to its Usual Condition

S 865-212
(1) Remove the electrical power if it is not necessary (AMM 24-22-00/201).

S 415-213
(2) Close the access panel to the crew oxygen cylinder.

CREW OXYGEN SYSTEM - INSPECTION/CHECK

1. General
   A. This procedure has these tasks:
      (1) Oxygen Cylinder Pressure and Leak Check
      (2) Oxygen Cylinder Correct Installation and Condition Check
   B. This procedure is done as a general check of the oxygen cylinder and for general maintenance of the oxygen system.

TASK 35-11-00-206-017

2. Oxygen Cylinder Pressure and Leak Check
   A. References
      (1) AMM 35-11-00/201, Crew Oxygen System
   B. Consumable Materials
      (1) G50306 Compound - Leak Detection, Oxygen System, MIL-PRF-25567 (BAC5402)
      (2) G50316 Cloth - Clean, Dry, Lint-free, White, Cotton
   C. Access
      (1) Location Zones
          122 Forward Cargo Compartment (Right)

   D. Procedure

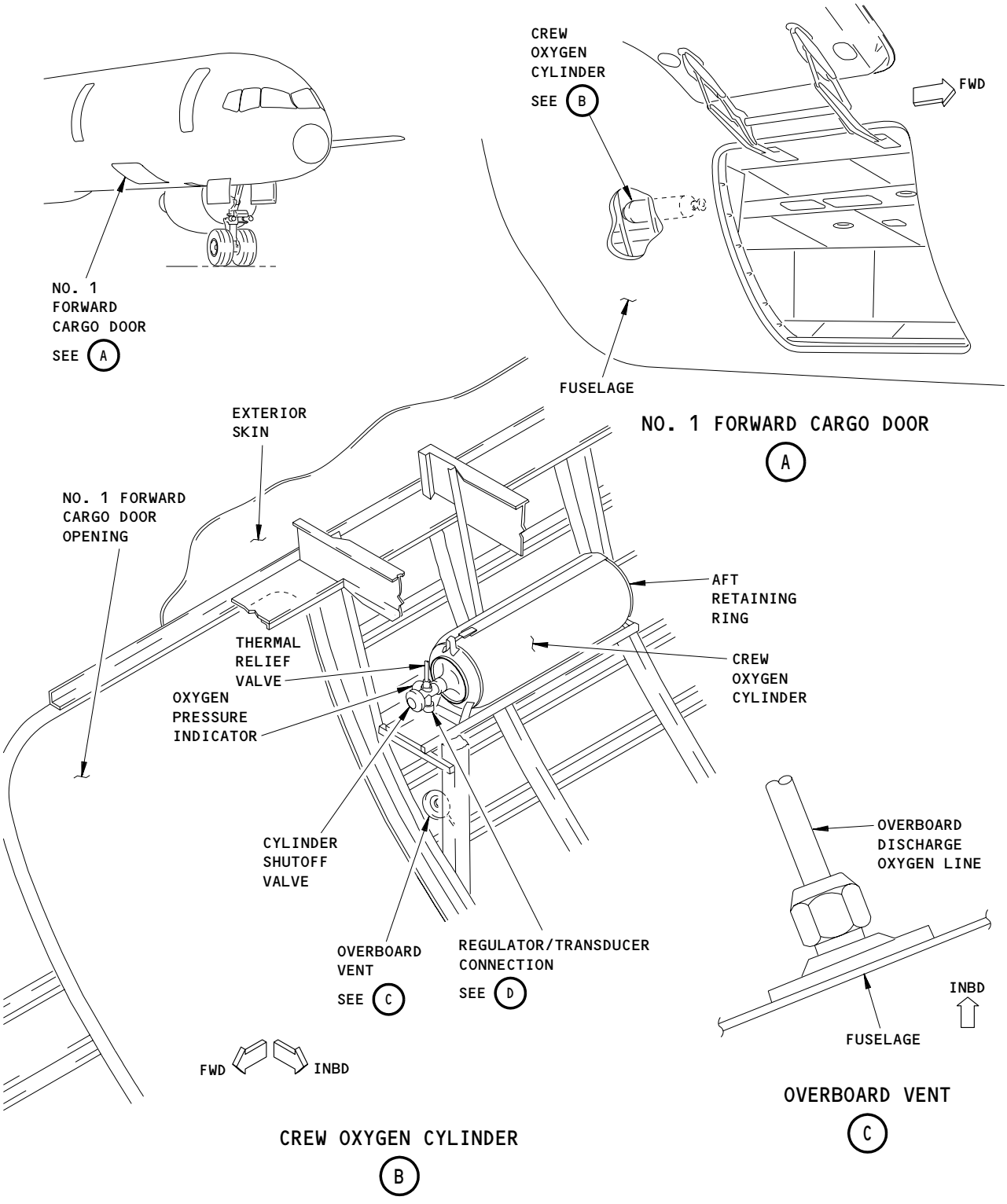
      S 916-018
      (1) Read and obey the safety precautions and general instructions for the oxygen system before you do the maintenance, (AMM 35-11-00/201).

      S 016-019
      (2) Open the access door to the crew oxygen cylinder.

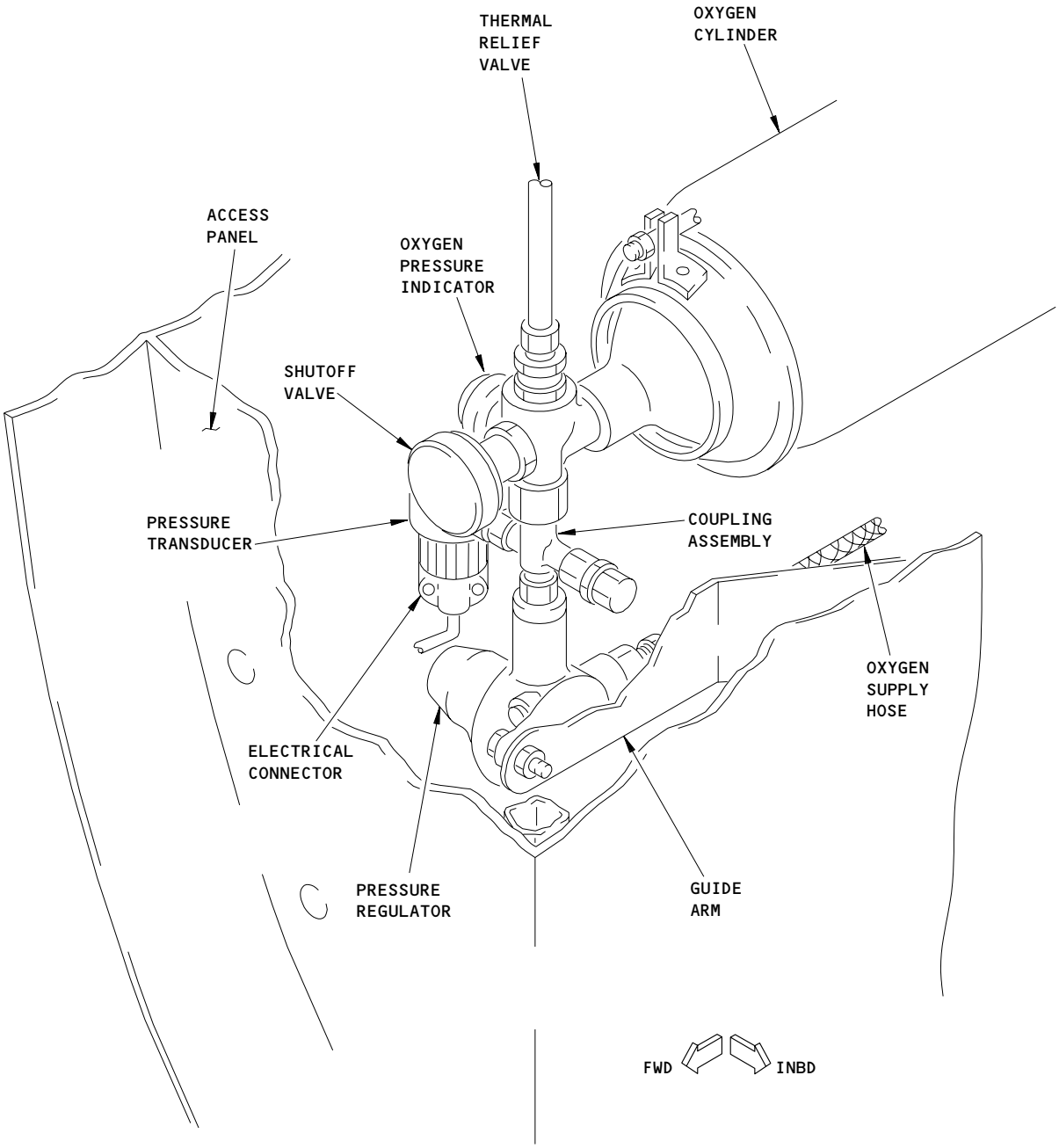
      S 216-020
      (3) Do a check of the pressure gage on the crew oxygen cylinder.

      NOTE: Make sure the pressure is above the minimum necessary for dispatch.

      S 796-021
      (4) Apply the leak detection compound, G50306 to all the fittings and connections.
          (a) Look for bubbles to find all the leaks.
          (b) Remove the leak detection compound, G50306 with a clean cotton cloth, G50316 immediately after the check.
          (c) Make sure the fittings and connections are dry.

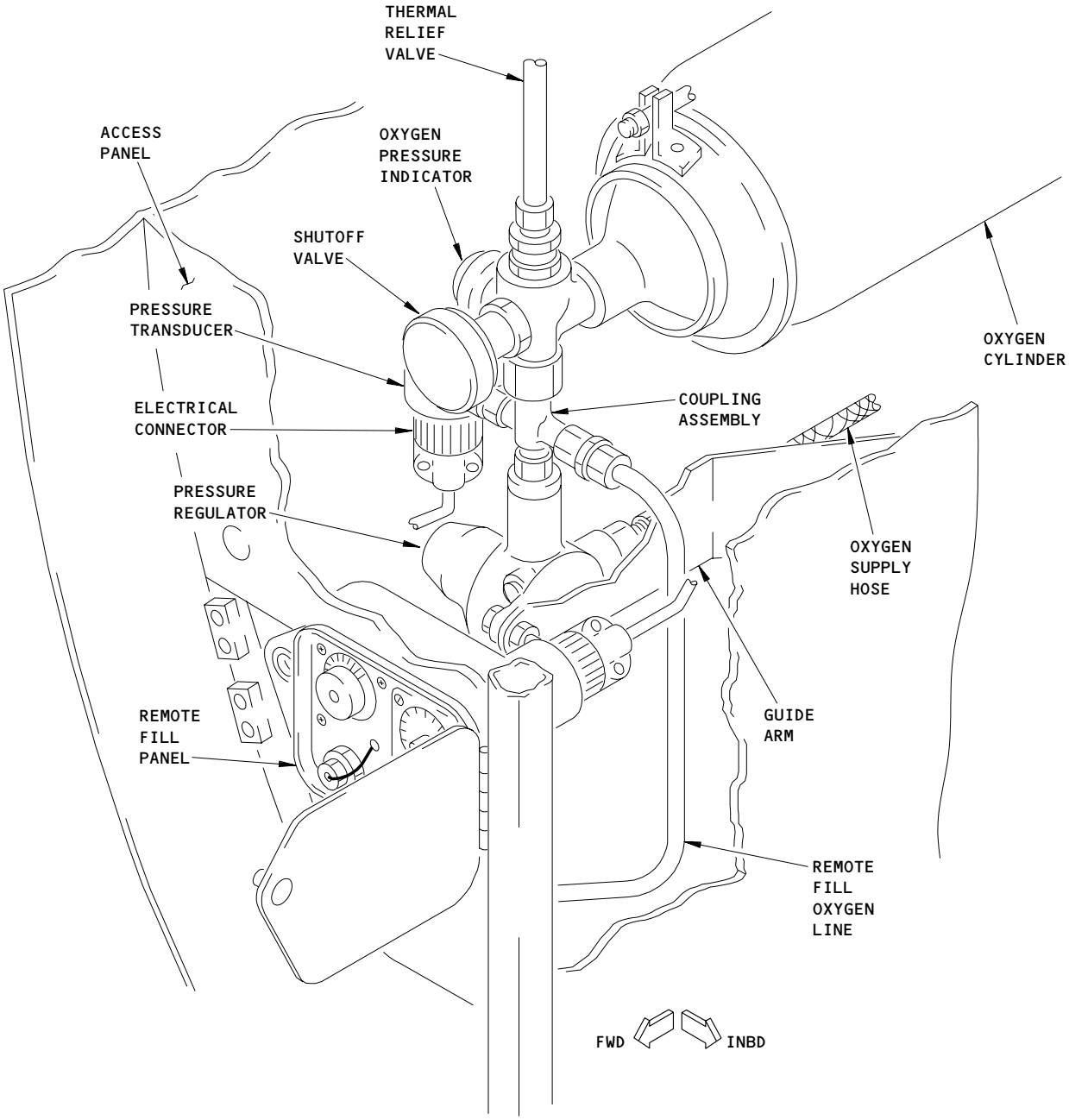


Crew Oxygen Cylinder Inspection
Figure 601 (Sheet 1)



REGULATOR/TRANSDUCER
CONNECTION
D

Crew Oxygen Cylinder Inspection
Figure 601 (Sheet 2)



REGULATOR/TRANSDUCER CONNECTION

(D)

Crew Oxygen Cylinder Inspection
Figure 601 (Sheet 3)

CAUTION: DO NOT TIGHTEN THE FITTINGS OR CONNECTIONS MORE THAN 25 IN-LBS (3 N-M). THIS CAN CAUSE DAMAGE TO THIS EQUIPMENT.

(d) If you find leaks, tighten the fittings and connections.
(e) If you can not stop the leaks, send the oxygen cylinder to an approved facility for an overhaul.

NOTE: The leaks must not be permitted to continue.

TASK 35-11-00-206-023

3. Oxygen Cylinder Correct Installation and Condition Check

A. References
(1) AMM 35-11-00/201, Crew Oxygen System

B. Access
(1) Location Zones
122 Forward Cargo Compartment (Right)

C. Procedure

S 916-024
(1) Read and obey the safety precautions and general instructions for the oxygen system before you do the maintenance, (AMM 35-11-00/201).

S 016-025
(2) Open the access door to the crew oxygen cylinder.

S 216-026
(3) Do a check of each of these components to make sure they are installed correctly.
(a) Make sure the pressure transducer and pressure regulator are installed correctly to the coupling assembly.
(b) Make sure the coupling assembly is installed correctly to the crew oxygen cylinder.
(c) Make sure the thermal relief valve and electrical connector are installed correctly.
(d) AIRPLANES WITH EXTERNAL FILL;
Make sure the oxygen supply hose and the remote-fill and overboard-discharge oxygen lines are installed correctly.
(e) AIRPLANES WITHOUT EXTERNAL FILL;
Make sure the oxygen supply hose and the overboard-discharge oxygen lines are installed correctly.

S 216-027

(4) Do a check of the crew oxygen cylinder to make sure it is installed correctly.

S 216-013

(5) Do a check of the crew oxygen cylinder to make sure it is in the satisfactory condition:
   (a) Do the task Crew Oxygen Cylinder Pressure and Leak Check.
   (b) Make sure that the oxygen cylinder hydrostatic test date complies with current regulations.

       NOTE: The hydrostatic test date must be within the prescribed service life limit. The service life limit is established by national regulatory authorities, the cylinder manufacturer, and/or the airlines.

       The last hydrostatic test date will be on a label near the top of the oxygen cylinder.

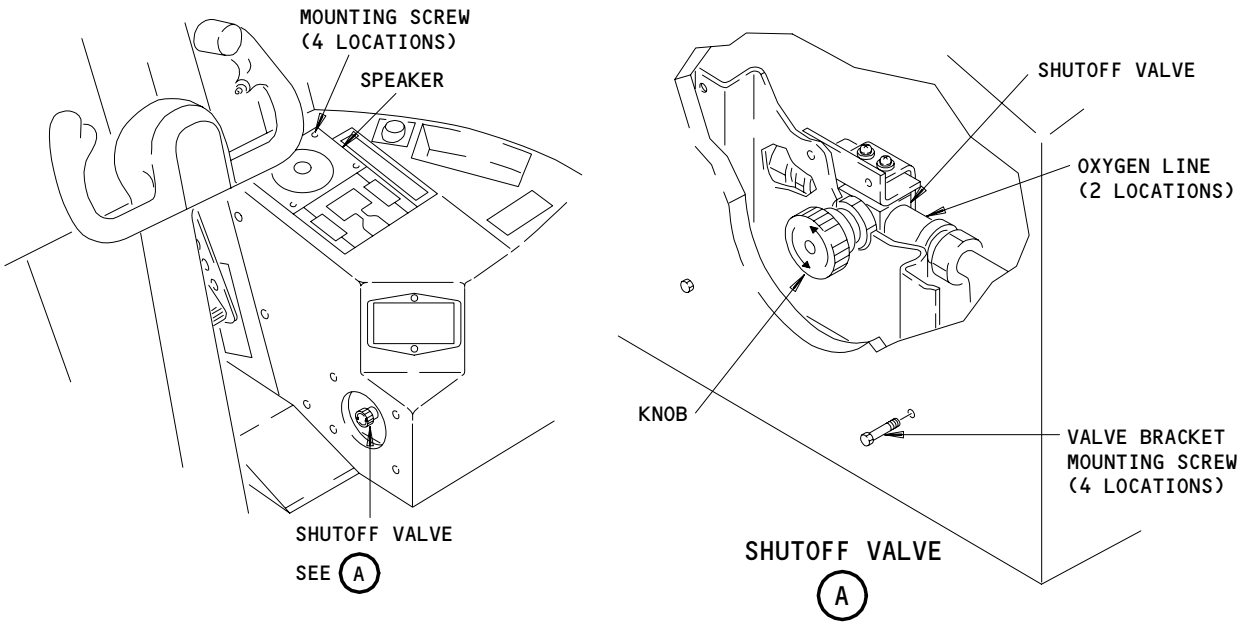
   (c) Do a check of the crew oxygen cylinder for these conditions:
       1) Make sure the pressure is above the minimum necessary for dispatch.
       2) Make sure the crew oxygen cylinder is clean.
       3) Make sure the crew oxygen cylinder does not have nicks, cracks, dents, cuts, or any other damage.

CREW SYSTEM SHUTOFF VALVE - REMOVAL/INSTALLATION

1. General
   A. This procedure contains two tasks. The first task is instructions to remove the crew system shutoff valve. The second task is instructions to install the crew system shutoff valve.

   TASK 35-11-02-004-002

2. Remove the Shutoff Valve (Fig. 401)
   A. General
      (1) Obey the safety precautions and the general maintenance instructions for the crew oxygen system (AMM 35-11-00/201).



Crew Oxygen Shutoff Valve
Figure 401

B. Equipment
(1) Cap - Protective, Aluminum, Flareless Tube, BACC14AG
(2) Plug - Protective, Aluminum, Flareless Tube, BACP20BG

C. References
(1) AMM 23-51-02/401, Interphone Speakers
(2) AMM 35-11-00/201, Crew Oxygen System

D. Access
(1) Location Zones
211/212 Control Cabin

E. Procedure

S 014-003
(1) Open the access panel to the crew oxygen cylinder.

S 844-004
(2) Close the shutoff valve at the oxygen cylinder.

S 844-005
(3) Open the shutoff valve for the crew oxygen system.

S 844-006
(4) Set a crew oxygen mask to 100 percent emergency oxygen.

S 874-007
(5) Move the test lever on a stowage box as many times as necessary to bleed the oxygen lines.

S 014-008
(6) Remove the speaker to get access to the shutoff valve (AMM 23-51-02/401).

S 034-009
(7) Slowly disconnect the shutoff valve from the oxygen lines.

S 024-010
(8) Remove the shutoff valve.

S 424-030

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(9) Add tube cap or tube plug to the open oxygen lines within 5 minutes.

NOTE: Oxygen clean fittings come from a sealed package and a label for oxygen system installation. Make sure that you use only oxygen clean fittings. Some fittings used in the oxygen system are the same as fittings in other systems and are not oxygen clean. If it is necessary to clean parts, use the applicable oxygen procedures to clean the parts. This also applies to tube caps or plugs which must be as clean as the installation connections.

TASK 35-11-02-404-012

3. Install the Shutoff Valve (Fig. 401)

A. Consumable Materials

(1) G00092 Oxygen System Leak Detection Compound - MIL-L-25567

(2) G02479 Lockwire - Copper (0.020 inch Diameter) (NASM20995CY20)

B. References

(1) AMM 23-51-02/401, Interphone Speaker

(2) AMM 35-11-00/201, Crew Oxygen System

(3) AMM 20-10-23/401, Lockwires

C. Access

(1) Location Zones

211/212 Control Cabin

D. Procedure

S 034-013

(1) Remove the tube cap and the tube plug from the oxygen line or ports.

S 424-031

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(2) Install the shutoff valve.

S 434-015
(3) Connect the oxygen lines.

E. Return the Airplane Back to Its Usual Condition

S 864-032

WARNING: OPEN THE OXYGEN SYSTEM VALVE SLOWLY. IF YOU OPEN OR CLOSE THE VALVES QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR AN EXPLOSION.

(1) AIRPLANES WITH FLIGHT COMPARTMENT CREW OXYGEN SYSTEM SHUTOFF VALVE; Make sure the crew oxygen system shutoff valve is opened to full open. Then close the valve one-fourth turn. Install an inspection wire on the valve. (AMM 20-10-23/401). Use lockwire, G02479.

S 864-037
(2) Open the oxygen cylinder shutoff valve slowly with your hand.

NOTE: The maximum torque is 25 pound-inches (2.8 newton meters).

S 864-033
(3) Close the valve one quarter of a turn.

S 424-034
(4) Install an inspection wire on the oxygen cylinder valve.

NOTE: Use the G02479 Lockwire - Copper (0.020 inch Diameter) (NASM20995CY20). (AMM 20-10-23/401).

S 214-018
(5) Examine the shutoff valve connections for leaks. Use the leak detection compound on the oxygen system.

NOTE: An air bubble is an indication that there is a leak.

S 164-001
(6) Remove the leak detection compound with a clean cloth immediately after you examine the oxygen system.

S 434-019
(7) Install the speaker (AMM 23-51-02/401).

S 844-020
(8) Close the access panel to the crew oxygen cylinder.

PRESSURE REGULATOR - REMOVAL/INSTALLATION

1. General
   A. This procedure contains two tasks. The first task is instructions to remove the pressure regulator from the crew oxygen cylinder. The second task is instructions to install the pressure regulator on the crew oxygen cylinder.

   TASK 35-11-03-004-001

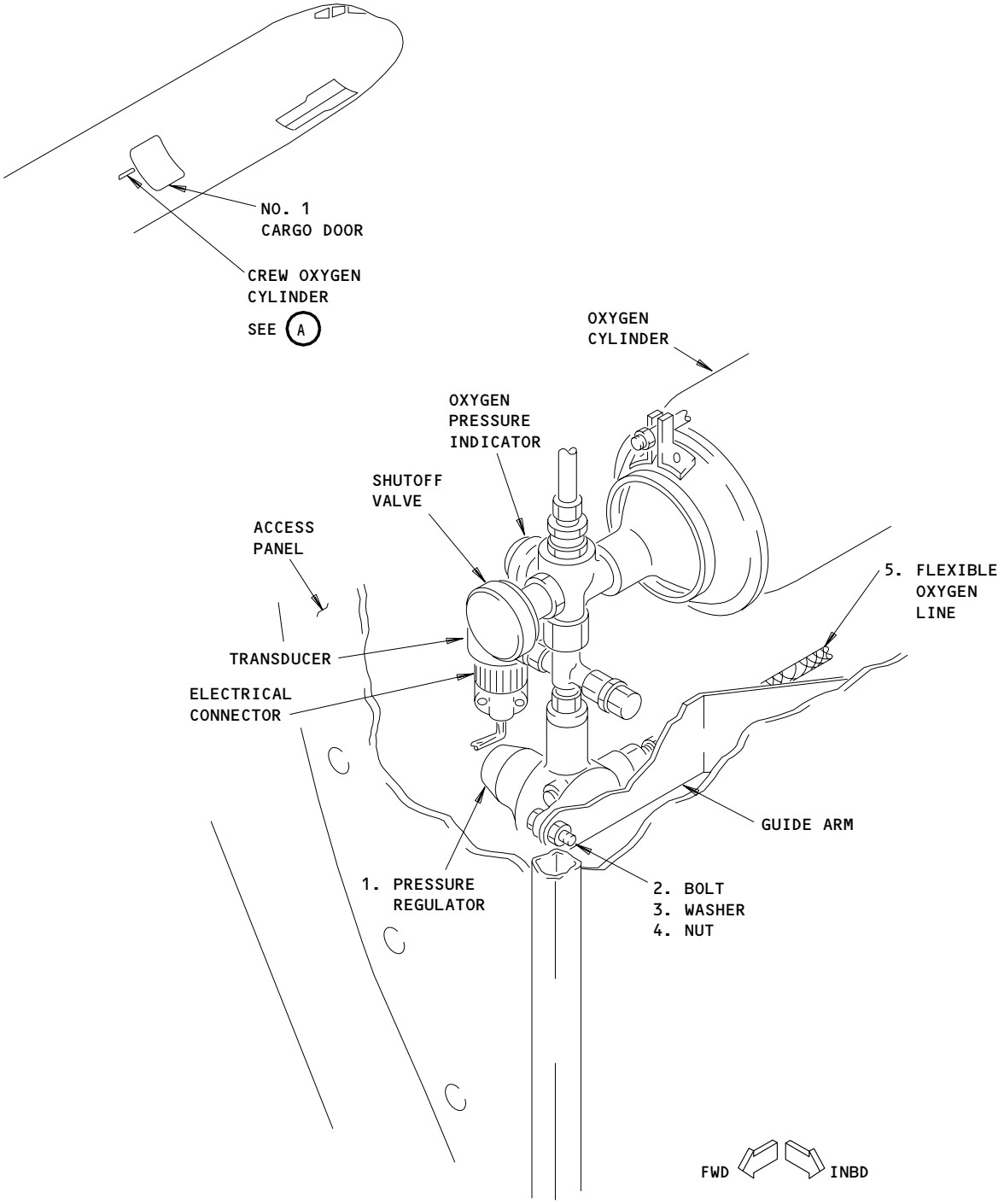
2. Remove the Regulator (Fig. 401)
   A. General
      (1) Obey the safety precautions and the general maintenance instructions for the crew oxygen system (AMM 35-11-00/201).
   B. Equipment
      (1) Cap - Protective, Aluminum, Flareless Tube, BACC14AG
      (2) Plug - Protective, Aluminum, Flareless Tube, BACP20BG
   C. References
      (1) AMM 35-11-00/201, Crew Oxygen System
   D. Access
      (1) Location Zones
          122 Forward Cargo Compartment (Right)

   E. Prepare for Removal

      S 864-002
      (1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
      (a) 11R29, 11S31, 11S32, or 11S33, OXYGEN PRESS

      S 864-059
      (2) AIRPLANES WITH EXTERNAL FILL;
      open this circuit breaker and attach a DO-NOT-CLOSE tag:
      (a) P34 APU/EXT Power Panel
          1) 34A3 or 34B2, OXY PRESS IND

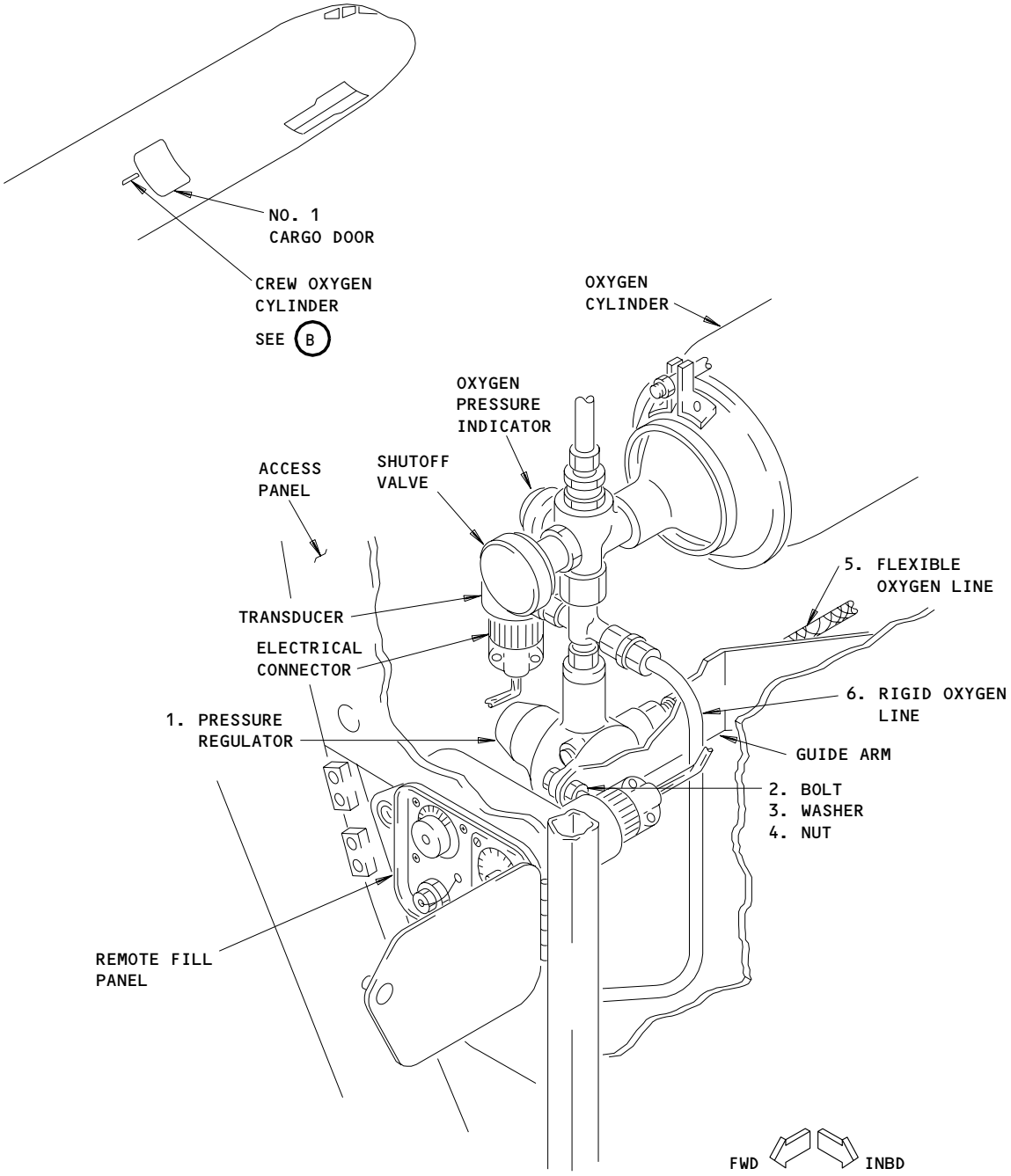
      S 014-061
      (3) Open the access panel for the crew oxygen cylinder.



CREW OXYGEN CYLINDER

A

Pressure Regulator
Figure 401 (Sheet 1)



CREW OXYGEN CYLINDER

B

Pressure Regulator
Figure 401 (Sheet 2)

S 864-004
(4) Close the shutoff valve on the oxygen cylinder.

S 864-005
(5) Set the control knob on a crew oxygen mask to the 100% emergency oxygen position.

S 864-006
(6) Move the test lever on the crew oxygen mask stowage box until the oxygen lines are completely bled.

S 034-007
(7) Disconnect the electrical connector from the transducer.

F. Procedure

S 034-008
(1) Disconnect the flexible oxygen line (5) from the regulator (1).

S 024-057
(2) AIRPLANES WITH EXTERNAL FILL;
Disconnect the rigid oxygen line (6) from the regulator (1).

S 034-011
(3) Remove the bolt (2), the washer (3), and the nut (4) that connect the regulator (1) to the guide arm.

S 034-012
(4) Disconnect the regulator (1) from the oxygen cylinder.

S 424-067

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(5) Add tube cap or tube plug to the open oxygen lines within 5 minutes (35-11-00 201).

NOTE: Oxygen clean fittings come from a sealed package and a label for oxygen system installation. Make sure that you use only oxygen clean fittings. Some fittings used in the oxygen system are the same as fittings in other systems and are not oxygen clean. If it is necessary to clean parts, use the applicable oxygen procedures to clean the parts. This also applies to tube caps or plugs which must be as clean as the installation connections.

S 844-014
(6) Return the control lever on the crew oxygen mask to the NORMAL position.

TASK 35-11-03-404-015

3. Install the Regulator (Fig. 401)

A. General
(1) Obey the safety precautions and the general maintenance procedures for the crew oxygen system (AMM 35-11-00/201).

B. Consumable Materials
(1) G00092 Oxygen System Leak Detection Compound - MIL-L-25567
(2) G02479 Lockwire - Copper (0.020 inch Diameter) (NASM20995CY20)

C. References
(1) AMM 20-10-23/401, Lockwires
(2) AMM 24-22-00/201, Electrical Power - Control
(3) AMM 35-11-00/201, Crew Oxygen System

D. Access
(1) Location Zones
122 Forward Cargo Compartment (Right)

E. Procedure

S 024-068
(1) Remove the tube cap and the tube plug from the oxygen line or ports.

S 424-069

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(2) Install the regulator (1) on the oxygen cylinder.

S 434-018
(3) Install the bolt (2), washer (3), and nut (4) that connect the regulator (1) to the guide arm.

S 434-019
(4) Attach the flexible oxygen line (5) to the regulator (1).

S 424-058
(5) AIRPLANES WITH EXTERNAL FILL;
Attach the rigid oxygen line (6) to the regulator (1).

F. Put the Airplane Back to Its Usual Condition

S 434-022
(1) Connect the electrical connector to the transducer.

S 864-023
(2) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the overhead panel, P11:
(a) 11R29, 11S31, 11S32, or 11S33, OXYGEN PRESS

S 864-060
(3) AIRPLANES WITH EXTERNAL FILL;
remove the DO-NOT-CLOSE tag and close this circuit breaker:
(a) P34 APU/EXT Power Panel
1) 34A3 or 34B2, OXY PRESS IND

S 434-024
(4) Supply electrical power (AMM 24-22-00/201).

S 864-025

WARNING: OPEN THE SHUTOFF VALVE SLOWLY TO PREVENT HIGH TEMPERATURES. HIGH TEMPERATURES CAN CAUSE INJURY TO YOU OR DAMAGE TO EQUIPMENT.

(5) Slowly open the shutoff valve.
(a) Fully open the shutoff valve.
(b) Close the shutoff valve one forth of a turn.

S 434-054
(6) Install the inspection wire.

NOTE: Use 0.020 inch diameter copper lockwire (AMM 20-10-23/401).

S 214-026
(7) Make sure the oxygen pressure shown on the status page of EICAS is within 100 psi of the pressure indicator on the oxygen cylinder.

S 214-027
(8) Examine the regulator (1) connections for leaks with the leak detection compound for the oxygen system.

S 164-028
(9) Remove the leak detection compound with a clean cloth immediately after you examine the oxygen system.

S 414-029
(10) Close the access panel to the crew oxygen cylinder.

S 864-030
(11) Remove the electrical power if it is no longer necessary (AMM 24-22-00/201).

PRESSURE REGULATOR - ADJUSTMENT/TEST

1. General
   A. This procedure gives the instructions to examine the pressure regulator for the crew oxygen system with the regulator installed. You must remove a crew oxygen mask and install a pressure gage to do this check.

   TASK 35-11-03-715-001

2. Operational Test - Crew Oxygen Pressure Regulator (Fig. 501-502)
   A. Equipment
      (1) Pressure Gage - 0 to 100 psig (689 Kpa), oil-free, to use in oxygen systems connected to bayonet fitting.
   B. References
      (1) AMM 24-22-00/201, Electrical Power - Control
      (2) AMM 35-11-00/201, Crew Oxygen System
      (3) AMM 35-11-51/401, Crew Oxygen Mask/Stowage Box
      (4) AMM 20-10-23/401, Lockwire
   C. Consumable Materials
      (1) G00092 Oxygen System Leak Detector
      (2) G02479 Lockwire - Copper (0.020 inch Diameter) (NASM20995CY20)
   D. Access
      (1) Location Zones
          122 Forward Cargo Compartment (Right)
          211/212 Control Cabin

   E. Procedure

      S 865-022

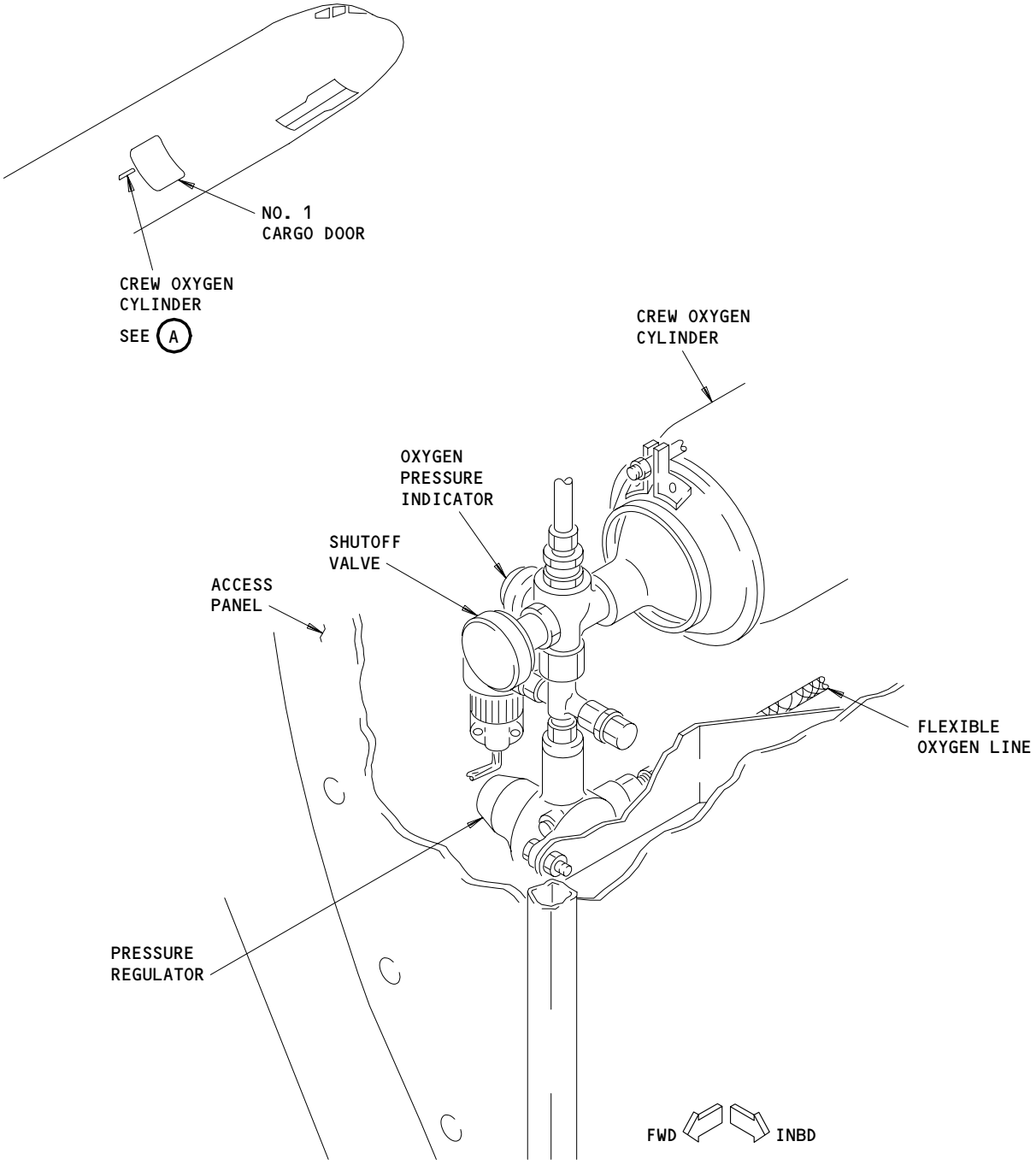
      WARNING: MAKE SURE YOU KNOW THE SAFETY PRECAUTIONS AND THE GENERAL MAINTENANCE INSTRUCTIONS FOR THE CREW OXYGEN SYSTEM (AMM 35-11-00/201). PRESSURIZED OXYGEN CAN CAUSE INJURY OR DAMAGE IF THE SAFETY PRECAUTIONS ARE NOT USED.

      (1) Read the safety precautions and the general maintenance instructions for the crew oxygen system (AMM 35-11-00/201).

      S 015-035
      (2) Open the access panel for the crew oxygen cylinder.

      S 215-032
      (3) Make sure the oxygen cylinder valve is open. Make sure the inspection wire (G02479, 0.20 cad/copper)is installed on the valve.

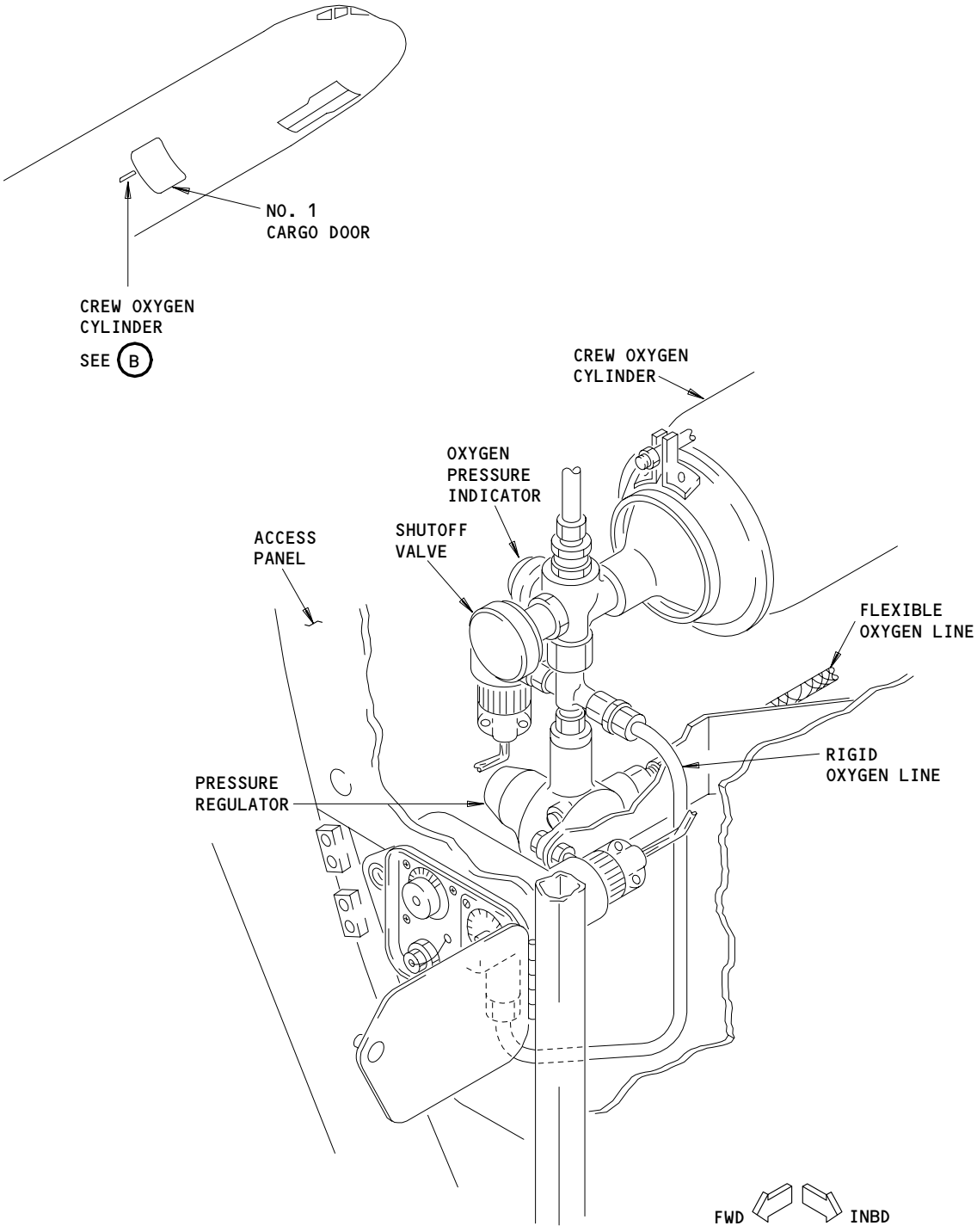
      S 215-033
      (4) AIRPLANES WITH FLIGHT COMPARTMENT CREW OXYGEN SYSTEM SHUTOFF VALVE; Make sure the crew oxygen valve system shutoff valve is fully open. Make sure the inspection wire (G02479, 0.20 cad/copper) is installed on the valve.



CREW OXYGEN CYLINDER

A

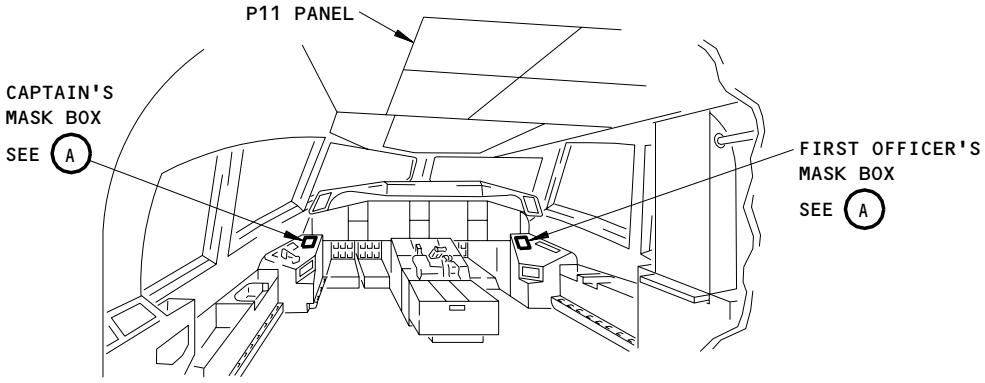
Pressure Regulator
Figure 501 (Sheet 1)



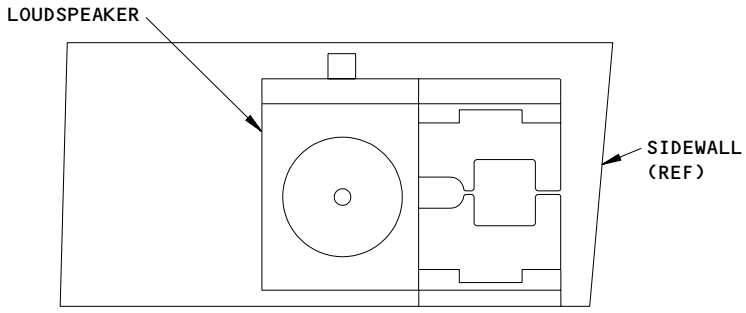
CREW OXYGEN CYLINDER

B

Pressure Regulator
Figure 501 (Sheet 2)

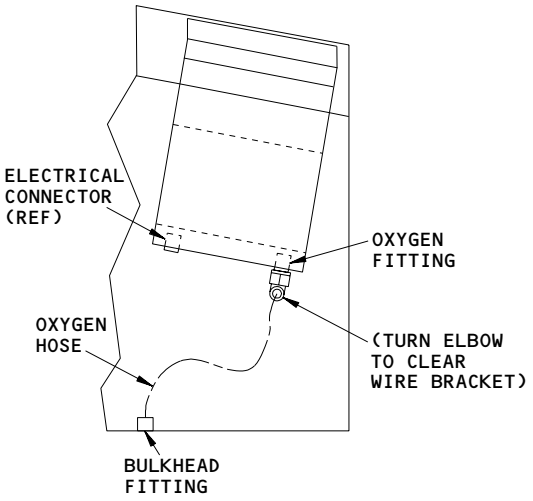


FLIGHT COMPARTMENT



CAPTAIN'S MASK BOX
(FIRST OFFICER'S MASK BOX IS ALMOST THE SAME)

A



Crew Oxygen Shutoff Valve
Figure 502

S 035-034
(5) Remove a crew oxygen mask from a stowage box (AMM 35-11-51/401).

S 485-010

CAUTION: USE A PRESSURE GAGE THAT IS CORRECT FOR OXYGEN SYSTEMS AND FREE FROM OIL, GREASE, AND OTHER HYDROCARBONS. THESE MATERIALS CAN BURN OR EXPLODE WHEN THEY ARE WITH OXYGEN.

(6) Connect the pressure gage to the quick disconnect fitting, in the crew oxygen mask stowage box.

S 785-012
(7) Make sure the pressure gage connected to the pressure regulator shows between 50 and 95 psi (345 and 655 kPa).

S 085-014
(8) Remove the pressure gage from the quick disconnect fitting, crew oxygen stowage box.

S 865-016
(9) Supply electrical power (AMM 24-22-00/201).

S 785-018
(10) Make sure the oxygen pressure shown on the EICAS display is within 100 psi (689 kPa) of the pressure shown on the oxygen cylinder indicator.

S 795-019
(11) Use the leak detection compound to look for leaks around the pressure regulator connections.

S 165-023
(12) Immediately remove the unwanted leak detection compound with a clean cloth.

S 415-020
(13) Close the access panel to the crew oxygen cylinder.

S 865-021
(14) Remove electrical power if it is not necessary (AMM 24-22-00/201).

PRESSURE TRANSDUCER - REMOVAL/INSTALLATION

1. General
   A. This procedure contains two tasks. The first task is instructions to remove the pressure transducer from the pressure regulator assembly at the crew oxygen cylinder. The second task is instructions to install the pressure transducer to the pressure regulator assembly at the crew oxygen cylinder.

TASK 35-11-04-004-001

2. Remove the Pressure Transducer (Fig. 401)
   A. General
      (1) Obey the safety precautions and the general maintenance instructions for the crew oxygen system (AMM 35-11-00/201).
   B. Equipment
      (1) Cap - Protective, Aluminum, Flareless Tube, BACC14AG
      (2) Plug - Protective, Aluminum, Flareless Tube, BACP20BG
   C. References
      (1) AMM 35-11-00/201, Crew Oxygen System
   D. Access
      (1) Location Zones
          122 Forward Cargo Compartment (Right)

   E. Prepare for Removal

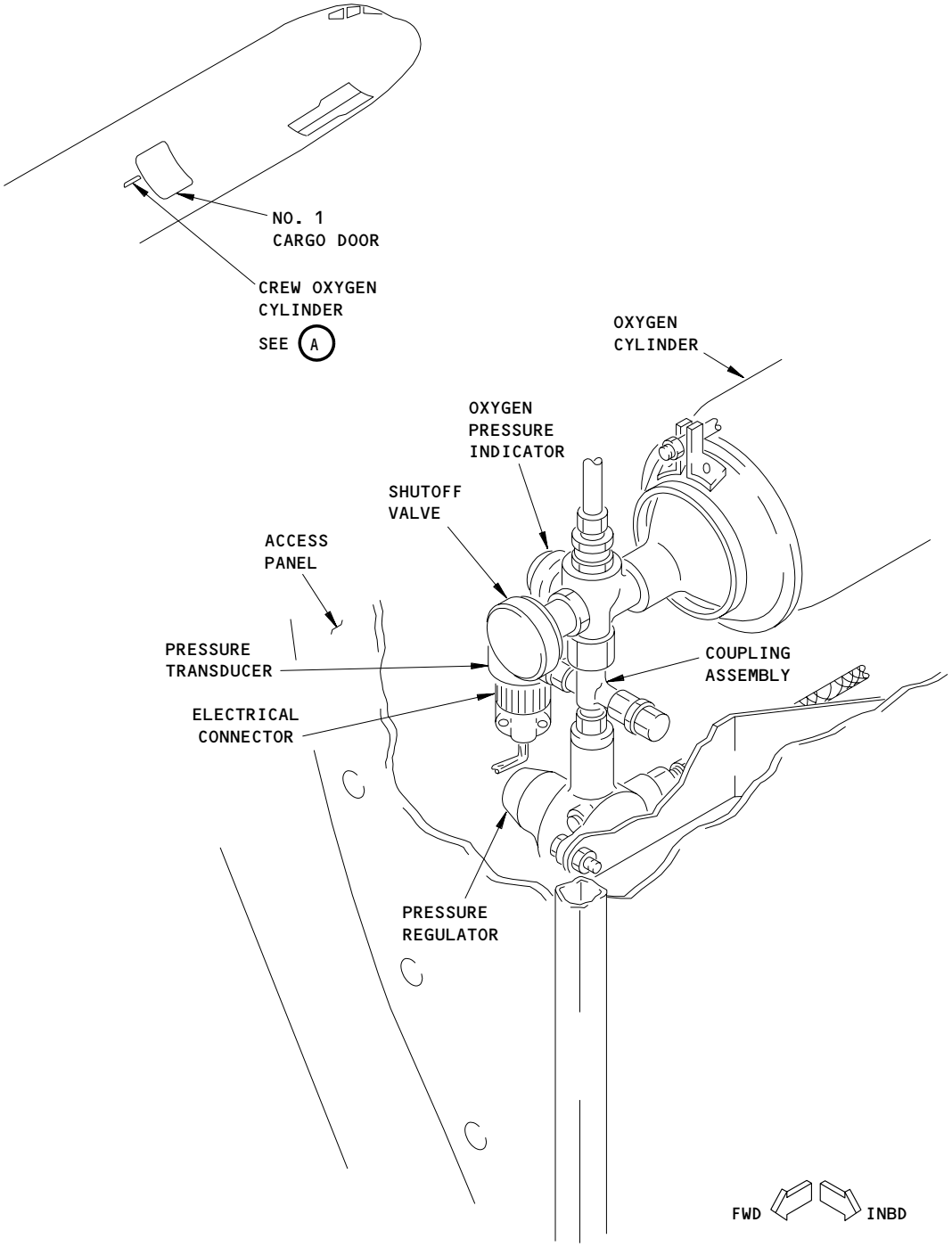
      S 864-002
      (1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
          (a) 11R29, 11S31, 11S32, or 11S33, OXYGEN PRESS

      S 864-003
      (2) Open this circuit breaker and attach a DO-NOT-CLOSE tag:
          (a) P34 APU/EXT Power Panel
              1) 34A3 or 34B2, OXY PRESS IND

      S 014-045
      (3) Open the access panel for the crew oxygen cylinder.

      S 864-005
      (4) Close the shutoff valve on the crew oxygen cylinder.

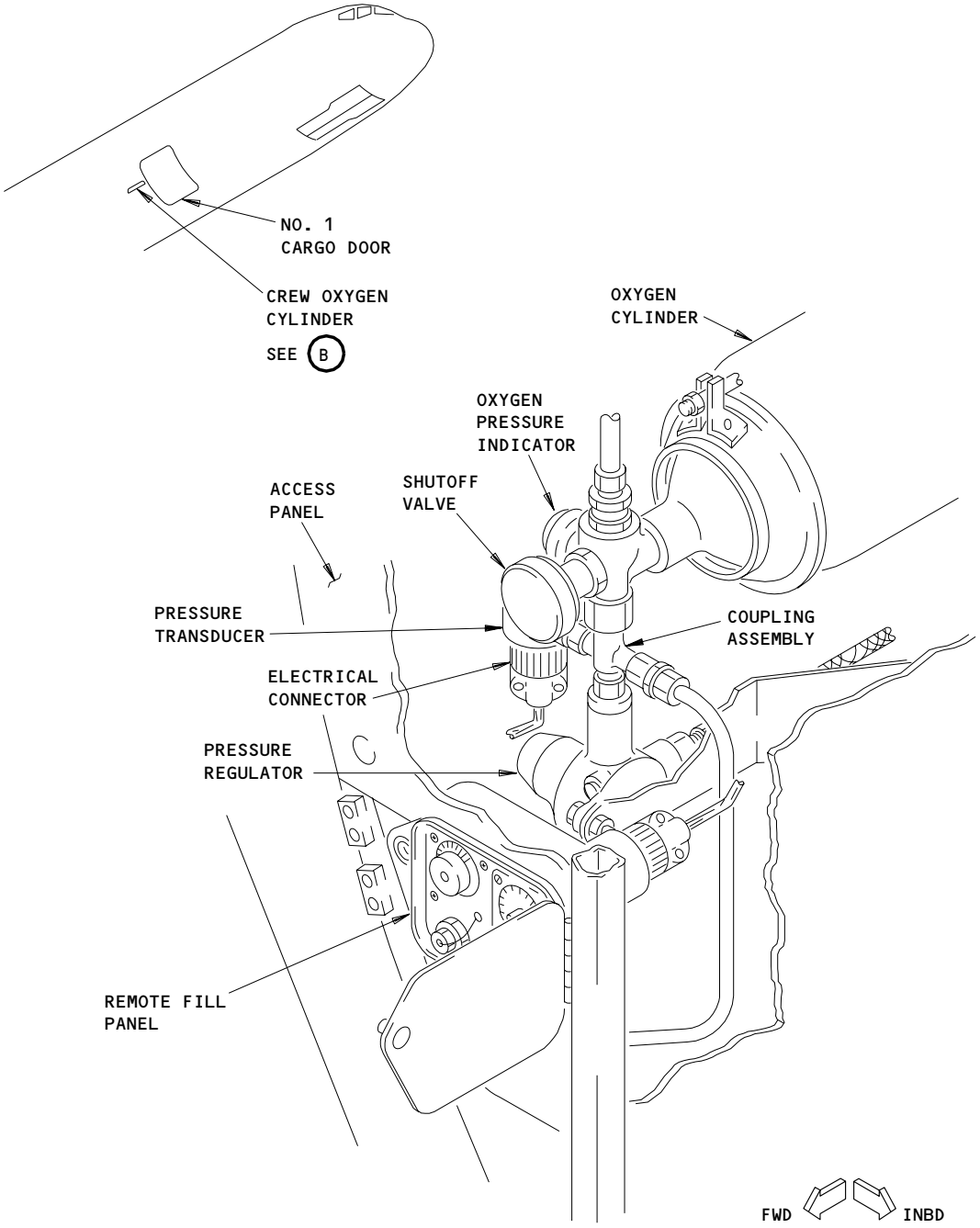
      S 864-006
      (5) Set the control knob on a crew oxygen mask to the 100% emergency oxygen position.



CREW OXYGEN CYLINDER

A

Pressure Transducer Installation
Figure 401 (Sheet 1)



CREW OXYGEN CYLINDER

B

Pressure Transducer Installation
Figure 401 (Sheet 2)

K25070

S 034-009

WARNING: YOU MUST BLEED OUT THE PRESSURE IN THE OXYGEN LINE BEFORE YOU DISCONNECT THE PRESSURE TRANSDUCER. THE PRESSURE CAN BE AS MUCH AS 1850 PSI (12755 kPa). INJURY CAN OCCUR IF YOU DO NOT BLEED THE PRESSURE OUT.

(6) Move the test lever on the crew oxygen mask stowage box until the oxygen lines are completely bled.

F. Procedure

S 034-008

(1) Disconnect the electrical connector from the pressure transducer.

S 034-038

(2) Hold the pressure transducer in place, and loosen the port fitting on the coupling assembly.

S 034-039

(3) Remove the pressure transducer.

S 424-051

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(4) Add tube cap or tube plug to the open oxygen lines within 5 minutes (35-11-00 201).

NOTE: Oxygen clean fittings come from a sealed package and a label for oxygen system installation. Make sure that you use only oxygen clean fittings. Some fittings used in the oxygen system are the same as fittings in other systems and are not oxygen clean. If it is necessary to clean parts, use the applicable oxygen procedures to clean the parts. This also applies to tube caps or plugs which must be as clean as the installation connections.

S 844-016

(5) Return the control knob on the crew oxygen mask to the NORMAL position.

TASK 35-11-04-404-017

3. Install the Pressure Transducer (Fig. 401)

A. General

(1) Obey the safety precautions and the general maintenance procedures for the crew oxygen system (AMM 35-11-00/201).

B. Consumable Materials

(1) G00092 Oxygen System Leak Detection Compound - MIL-L-25567

(2) G02479 Lockwire - Copper (0.020 inch Diameter) (NASM20995CY20)

C. References

(1) AMM 24-22-00/201, Electrical Power - Control

(2) AMM 35-11-00/201, Crew Oxygen System

(3) AMM 20-10-23/401, Lockwire

D. Access

(1) Location Zones

122 Forward Cargo Compartment (Right)

E. Procedure

S 034-018

(1) Remove the tube cap and the tube plug from the oxygen line or ports.

S 424-052

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(2) Connect the pressure transducer to the port fitting on the coupling assembly.

S 424-019

(3) Tighten the port fitting on the coupling assembly.

S 434-024

(4) Connect the electrical connector to the pressure transducer.

S 864-025

(5) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the overhead panel, P11:

(a) 11R29, 11S31, 11S32, or 11S33, OXYGEN PRESS

S 864-026

(6) Remove the DO-NOT-CLOSE tag and close this circuit breaker:

(a) P34 APU/EXT Power Panel

1) 34A3 or 34B2, OXY PRESS IND

S 434-027
(7) Supply electrical power (AMM 24-22-00/201).

S 864-028

WARNING: OPEN THE SHUTOFF VALVE SLOWLY TO PREVENT HIGH TEMPERATURES. HIGH TEMPERATURES CAN CAUSE INJURY TO YOU OR DAMAGE TO EQUIPMENT.

(8) Slowly open the crew oxygen cylinder shutoff valve to full open.
(a) Close the shutoff valve one forth of a turn.

S 434-044
(9) Install the inspection wire.

NOTE: Use 0.020 inch diameter copper lockwire (AMM 20-10-23/401).

S 214-042
(10) Make sure the oxygen pressure shown on the EICAS status page and on the crew oxygen cylinder agree to within 100 psi.

S 214-043
(11) Make sure the oxygen pressure shown on the fill panel and on the crew oxygen cylinder agree to within 100 psi.

S 214-034
(12) Examine the pressure transducer connection for leaks with the leak detection compound for the oxygen system.

S 164-035
(13) Remove the leak detection compound with a clean cloth immediately after you examine the oxygen system.

F. Put the Airplane Back to Its Usual Condition

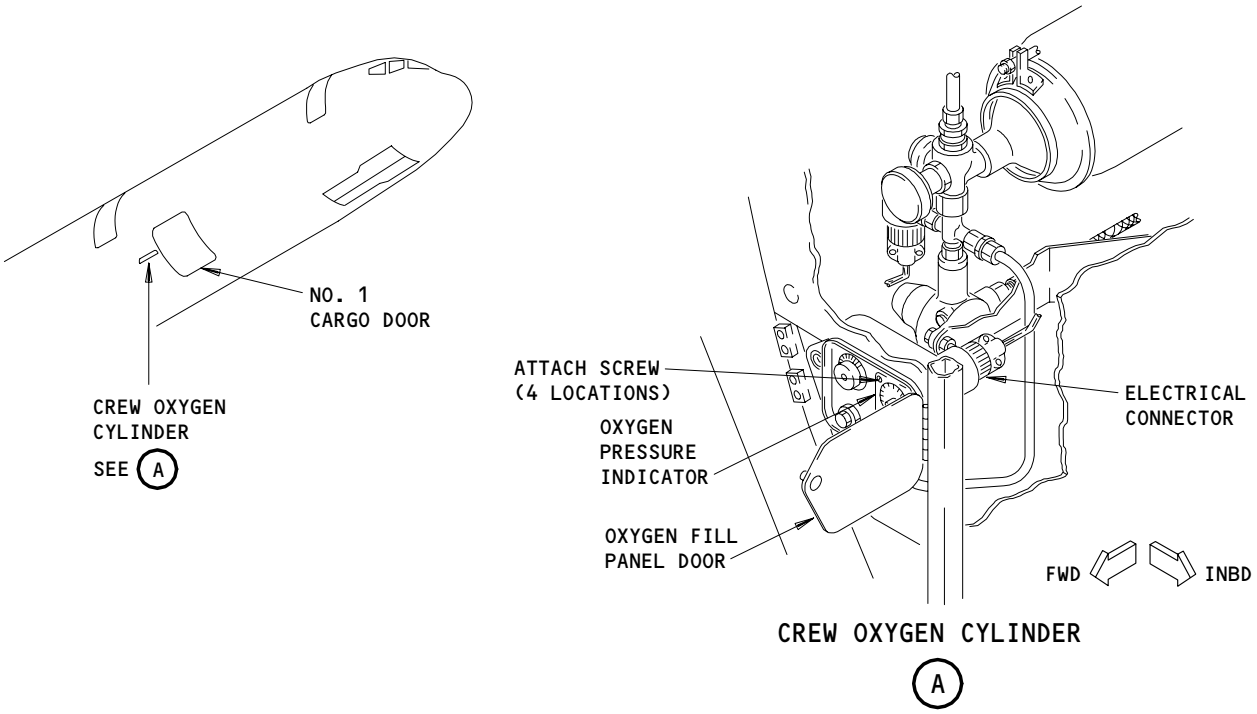
S 414-036
(1) Close the access panel to the crew oxygen cylinder.

S 864-037
(2) Remove the electrical power if it is no longer necessary (AMM 24-22-00/201).

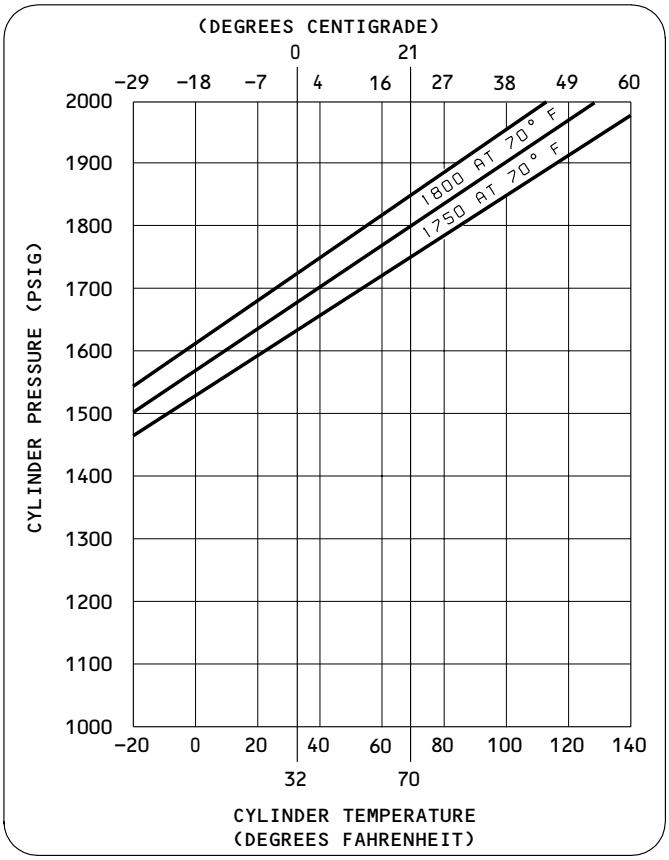
OXYGEN PRESSURE INDICATOR - REMOVAL/INSTALLATION

1. General
   A. This procedure contains two tasks. The first task is the removal of the oxygen pressure indicator from the remote-fill panel for the crew oxygen system. The second task is the installation of the oxgyen pressure indicator on the remote-fill panel for the crew oxygen system.

   TASK 35-11-05-004-001
2. Remove the Pressure Indicator (Fig. 401)
   A. General
      (1) Obey the safety precautions and the general maintenance instructions for the crew oxygen system (AMM 35-11-00/201).



Oxygen Pressure Indicator
Figure 401



Oxygen Cylinder Temperature-Pressure Ratio Chart
Figure 402

B. References
(1) AMM 35-11-00/201, Crew Oxygen System
C. Access
(1) Location Zones
122 Forward Cargo Compartment (Right)

D. Prepare for Removal

S 864-002
(1) Open this circuit breaker and attach a DO-NOT-CLOSE tag:
(a) Overhead circuit breaker panel, P11:
1) 11S31 or 11S33, OXYGEN PRESS
(b) P34 APU/EXT power panel:
1) 34A3 or 34B2, OXY PRESS IND

S 014-003
(2) Open the oxygen fill panel door.

S 034-004
(3) Remove the screws.

S 034-005
(4) Pull the indicator away from the panel.

S 034-006
(5) Disconnect the electrical connector.

S 024-007
(6) Remove the indicator.

TASK 35-11-05-404-008
3. Install the Pressure Indicator (Fig. 401)
A. References
(1) AMM 24-22-00/201, Electrical Power - Control
B. Access
(1) Location Zones
122 Forward Cargo Compartment (Right)

C. Procedure

S 434-009
(1) Connect the electrical connector.

S 424-010
(2) Install the indicator in the fill panel.

S 864-011
(3) Remove the DO-NOT-CLOSE tag and close this circuit breaker:
(a) Overhead circuit breaker panel, P11:
1) 11S31 or 11S33, OXYGEN PRESS
(b) P34, APU/EXT power panel:
1) 34A3 or 34B2 OXY PRESS IND

S 434-012
(4) Supply the electrical power (AMM 24-22-00/201).

S 214-013
(5) Make sure the indicator shows the oxygen cylinder pressure.

S 214-018
(6) You can use the temperature-pressure chart to do a check of the oxygen pressure cylinder (Fig. 402).

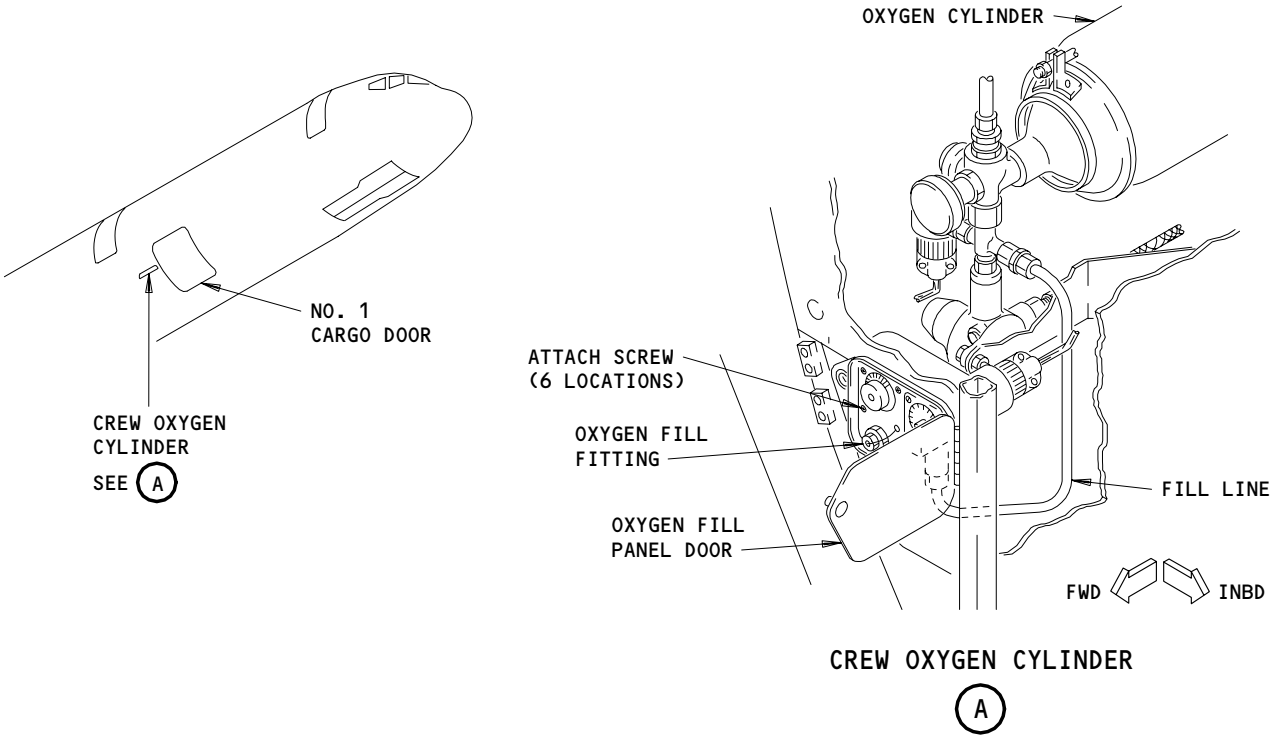
S 414-014
(7) Close the oxygen fill panel.

S 034-015
(8) Remove the electrical power if it is not necessary (AMM 24-22-00/201).

OXYGEN FILL FITTING - REMOVAL/INSTALLATION

TASK 35-11-12-004-001

1. Remove the Fill Fitting (Fig. 401)
   A. General
      (1) Obey the safety precautions and the general maintenance instructions for the crew oxygen system (AMM 35-11-00/201).
   B. Equipment
      (1) Cap - Protective, Aluminum, Flareless Tube, BACC14AG



Oxygen Fill Fitting
Figure 401

54987

(2) Plug - Protective, Aluminum, Flareless Tube, BACP20BG
(3) Clean caps and plugs

C. References
(1) AMM 35-11-00/201, Crew Oxygen System

D. Access
(1) Location Zones
122 Forward Cargo Compartment (Right)

E. Procedure

S 014-002
(1) Open the oxygen fill panel door.

S 034-003
(2) Slowly loosen the fill line connector to permit any pressure to bleed.

S 034-004
(3) Disconnect the fill line.

S 424-017

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(4) Add tube cap or tube plug to the open oxygen lines within 5 minutes (35-10-00 201).

NOTE: Oxygen clean fittings come from a sealed package and a label for oxygen system installation. Make sure that you use only oxygen clean fittings. Some fittings used in the oxygen system are the same as fittings in other systems and are not oxygen clean. If it is necessary to clean parts, use the applicable oxygen procedures to clean the parts. This also applies to tube caps or plugs which must be as clean as the installation connections.

S 024-006
(5) Remove the bolts, the nuts, and the washers.

S 024-007
(6) Remove the fill fitting.

TASK 35-11-12-404-008

2. Install the Fill Fitting (Fig. 401)
A. Consumable Materials
(1) Cap - Protective, Aluminum, Flareless Tube, BACC14AG

(2) Plug - Protective, Aluminum, Flareless Tube, BACP20BG
(3) G02479 Lockwire - Copper (0.020 inch Diameter) (NASM20995CY20)

B. References
(1) AMM 35-11-00/201, Crew Oxygen System
(2) AMM 20-10-23/401, Lockwires

C. Access
(1) Location Zones
122 Forward Cargo Compartment (Right)

D. Procedure

S 434-009
(1) Put the fill fitting in position.

S 424-010
(2) Install the bolts, the washers, the nuts, and the inspection wire.
NOTE: Use 0.020 inch diameter copper lockwire (AMM 20-10-23/401).

S 024-018

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(3) Remove the tube cap and the tube plug from the oxygen line or ports.

S 434-012
(4) Install the fill line connector.

S 844-013
(5) Close the oxygen fill panel door.

CREW OXYGEN MASK/STOWAGE BOX - REMOVAL/INSTALLATION

1. General
   A. This procedure has six tasks:
      (1) The first task is instructions to remove the stowage box for the oxygen mask and the regulator.
      (2) The second task is instructions to install the stowage box for the oxygen mask and the regulator.
      (3) The third task is instructions to remove the oxygen mask and the regulator.
      (4) The fourth task is instructions to install the oxygen mask and the regulator.
      (5) The fifth task is instructions to remove the face cone on the oxygen masks.
      (6) The sixth task is instructions to install the face cone on the oxygen masks.
   B. Obey the oxygen system safety precautions for the oxygen system and the general maintenance instructions in AMM 35-11-00/201, General Maintenance Practices.

TASK 35-11-51-004-010

2. Stowage Box Removal (Fig. 401)
   A. Equipment
      (1) Cap - Protective, Aluminum, Flareless Tube, BACC14AG
      (2) Plug - Protective, Aluminum, Flareless Tube, BACP20BG
   B. Access
      (1) Location Zones
          211/212 Control Cabin

   C. Procedure - Remove the stowage box

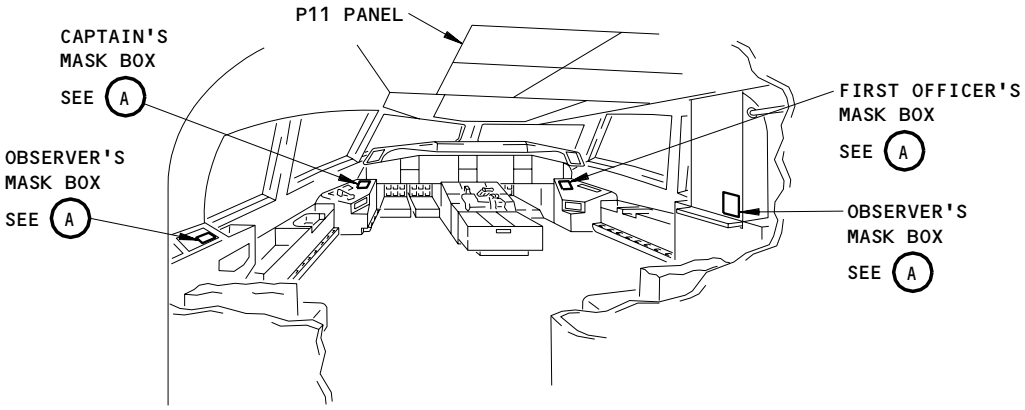
      S 034-011
      (1) Close the shutoff valve at the oxygen cylinder.

      S 864-012
      (2) AIRPLANES WITH FLIGHT COMPARTMENT CREW OXYGEN SYSTEM SHUTOFF VALVE; Close the shutoff valve for the crew oxygen system.

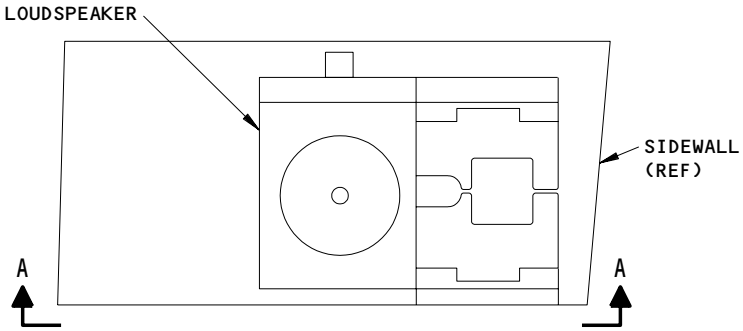
      S 034-014
      (3) Loosen the four fasteners that attach the stowage box to the structure.

      S 024-015
      (4) Remove the stowage box.

      S 864-016
      (5) Remove the pressure from the oxygen system through a flight compartment mask.

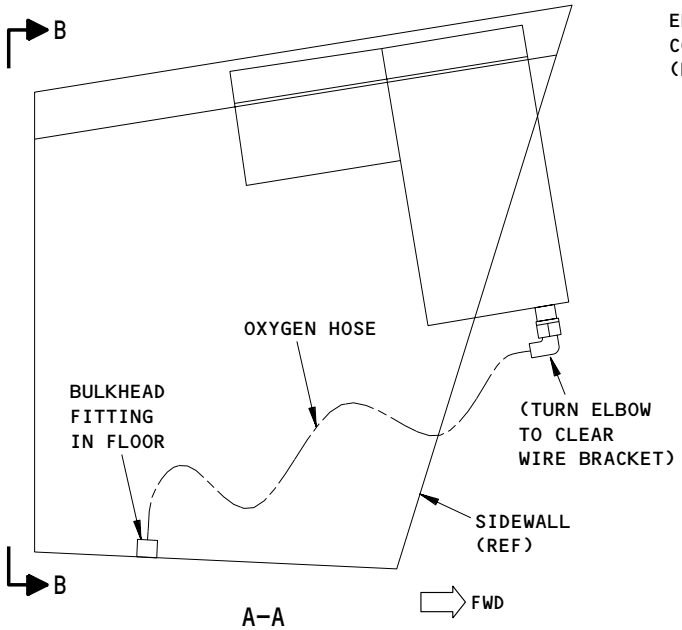


FLIGHT COMPARTMENT

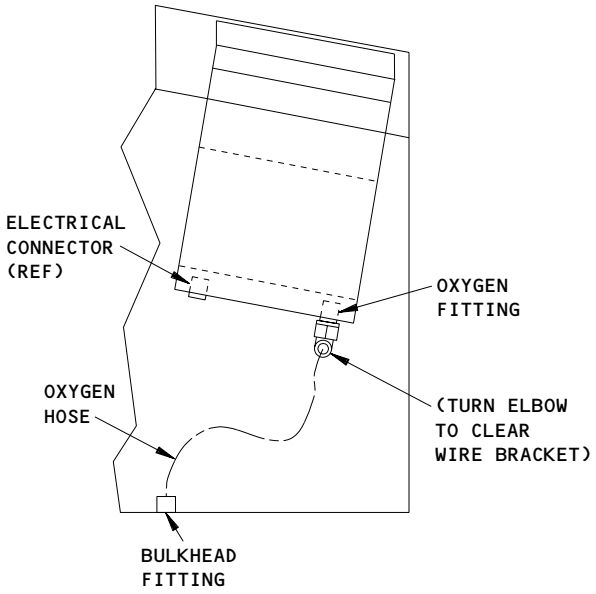


CAPTAIN'S MASK BOX
(OTHER MASK BOXES ARE EQUIVALENT)

A



A–A



B–B

Crew Oxygen Mask/Stowage Box Installation
Figure 401

S 034-001

WARNING: BE CAREFUL WHEN YOU LOOSEN THE CONNECTIONS ON THE OXYGEN SYSTEM. A SUDDEN RELEASE OF THE REMAINING PRESSURE CAN INCREASE THE TEMPERATURE OF THE OXYGEN. THIS CAN CAUSE A FIRE OR AN EXPLOSION.

(6) Disconnect the oxygen supply line from the stowage box.

NOTE: Use two wrenches to disconnect the oxygen connections. One wrench is necessary for the male connection and one wrench is necessary for the female connection.

S 034-002

(7) Disconnect the microphone connectors.

S 424-065

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(8) Install clean caps or plugs as soon as possible to the open fittings and the ports (AMM 35-11-00 201).

NOTE: Use clean metal caps where the cap engages the connector threads. Use new plastic caps if the cap does not engage the connector threads.

Oxygen clean fittings come from a sealed package labeled for oxygen system installation. Make sure that you use only oxygen clean fittings. Some fittings used in the oxygen system are the same as fittings used in other systems that are not oxygen clean. If it is necessary to clean parts, use the applicable oxygen procedures to clean the parts. This also applies to tube caps or plugs which must be as clean as the installation components.

TASK 35-11-51-404-018

3. Stowage Box Installation (Fig. 401)
   A. Consumable Materials
      (1) G02479 Lockwire - Copper (0.020 inch Diameter) (NASM20995CY20)
   B. References
      (1) AMM 23-51-00/501, Flight Interphone System
      (2) AMM 35-11-00/501, Crew Oxygen System
      (3) AMM 20-10-23/401, Lockwires

C. Access
(1) Location Zones
211/212 Control Cabin

D. Procedure - Install the stowage box

S 024-067
(1) Remove the tube cap and the tube plug from the oxygen line or ports.

S 434-066

WARNING: USE ONLY CLEAN COMPONENTS THAT COME FROM A SEALED BAG. MAKE SURE THAT THE LABEL ON THE BAG IDENTIFIES THE COMPONENTS AS SUFFICIENTLY CLEAN FOR THE OXYGEN SYSTEM. CONTAMINATION ON COMPONENTS CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(2) Connect the oxygen supply and the microphone connectors to stowage box as follows:
(a) Tighten the connectors with your hand such that at least two full fitting threads are engaged.

CAUTION: DO NOT TWIST THE SUPPLY. USE TWO WRENCHES TO TIGHTEN THE SUPPLY LINES. AN ACCIDENTAL TWIST OF THE SUPPLY LINE CAN CAUSE DAMAGE TO THE EQUIPMENT.

(b) Tighten the fittings fully with two wrenches.

S 434-060

CAUTION: TURN THE ELBOW CONNECTION AT THE BOTTOM OF THE MASK BOX SO THE OXYGEN HOSE WILL CLEAR THE WIRE BRACKET. IF YOU DO NOT, DAMAGE TO THE OXYGEN HOSE COULD OCCUR.

(3) Put the stowage box in the recess in the structure.

S 424-021
(4) Install the stowage box to the structure with four fasteners.

S 414-022
(5) If not installed before, install the mask and the regulator in the stowage box.

S 864-068

WARNING: OPEN THE OXYGEN CYLINDER VALVE SLOWLY. IF YOU OPEN OR CLOSE THE VALVES QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR AN EXPLOSION.

(6) Open the oxygen cylinder shutoff valve to full open.
(a) Close the oxygen cylinder shutoff valve one fourth turn.
(b) Install an inspection wire on the oxygen cylinder shutoff valve.

NOTE: Use the 0.020 inch cad/copper Inspection Wire (AMM 20-10-23/401).

S 864-069

WARNING: OPEN THE CREW OXYGEN SYSTEM VALVE SLOWLY. IF YOU OPEN OR CLOSE THE VALVES QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR AN EXPLOSION.

(7) AIRPLANES WITH FLIGHT COMPARTMENT CREW OXYGEN SYSTEM SHUTOFF VALVE; Slowly open the crew oxygen system valve to full open.
(a) Close the crew oxygen system valve one-fourth turn.
(b) Install an inspection wire on the valve.

NOTE: Use the 0.020 inch cad/copper Inspection Wire (AMM 20-10-23/401).

S 714-026
(8) Do the operational test for the crew oxygen system (AMM 35-11-00/501).

S 714-052
(9) Use the boom microphone to make a voice transmission between two flight crew stations (AMM 23-51-00/501).

TASK 35-11-51-004-027

4. Mask and the Regulator Removal

A. Access
(1) Location Zones
211/212 Control Cabin

B. Procedure- Remove the mask and the regulator.

S 864-028
(1) Close the crew shutoff valve for the oxygen system.

S 024-030
(2) Remove the oxygen mask from the stowage box.

S 414-031
(3) Close the left lid of the stowage box.

S 714-032
(4) Push the "Reset/Test" control lever.

S 214-004
(5) Make sure the "OXY-ON" flag goes out of view.

S 034-005
(6) Disconnect the oxygen supply on the stowage box from the regulator.

NOTE: These are quick disconnect fittings.

S 034-006
(7) Disconnect the microphone from the oxygen mask.

NOTE: These are quick disconnect fittings.

S 434-071

WARNING: USE ONLY OXYGEN-CLEAN COMPONENTS IN THE OXYGEN SYSTEM. IF YOU DO NOT USE OXYGEN-CLEAN COMPONENTS, A FIRE OR AN EXPLOSION CAN OCCUR. THIS CAN CAUSE DAMAGE TO EQUIPMENT OR INJURIES TO PERSONS.

(8) Install clean caps or plugs as soon as possible to the open fittings and the ports (35-11-00 201).

NOTE: Use clean metal caps where the cap engages the connector threads. Use new plastic caps if the cap does not engage the connector threads.

Oxygen clean fittings come from a sealed package labeled for oxygen system installation. Make sure that you use only oxygen clean fittings. Some fittings used in the oxygen system are the same as fittings used in other systems that are not oxygen clean. If it is necessary to clean parts, use the applicable oxygen procedures to clean the parts. This also applies to tube caps or plugs which must be as clean as the installation components.

TASK 35-11-51-404-034

5. Mask and the Regulator Installation

A. Consumable Materials

(1) G02479 Lockwire - Copper (0.020 inch Diameter) (NASM20995CY20)

B. References

(1) AMM 23-51-00/501, Flight Interphone System
(2) AMM 35-11-00/501, Crew Oxygen System
(3) AMM 20-10-23/401, Lockwires

C. Access

(1) Location Zones
211/212 Control Cabin

D. Procedure - Install the mask and the regulator

S 434-007

(1) Connect the microphone to the oxygen mask at the quick disconnect fittings.

S 044-072

(2) If installed, remove protective sheet from lens.

NOTE: An opaque protective sheet may be installed on the goggle by the manufacture, which may obstruct vision when you use the mask. Make sure you peel off the protective sheet before you stow the mask, if the sheet is on the mask.

NOTE: A clear protective strip may be installed on some goggles. Do not remove the protective strip if installed. It is intended to remove ice or condensation from the goggle lense during rapid decompression.

S 434-008

(3) Connect the oxygen supply to the regulator at the quick disconnect fittings.

S 864-070

WARNING: OPEN THE CREW OXYGEN SYSTEM VALVE SLOWLY. IF YOU OPEN OR CLOSE THE VALVES QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR AN EXPLOSION.

(4) Slowly open the crew oxygen system valve to full open.
(a) Close the crew oxygen system valve one-fourth turn.
(b) Install an inspection wire on the valve.

NOTE: Use the 0.020 inch cad/copper Inspection Wire (AMM 20-10-23/401).

S 014-037
(5) Open the left lid of the stowage box.

S 714-039
(6) Do the operational test of the Crew Oxygen System (AMM 35-11-00/501).

S 714-053
(7) Use the boom microphone to make a voice transmission between two flight crew stations (AMM 23-51-00/501).

S 024-038
(8) Install the oxygen mask in the stowage box.

TASK 35-11-51-004-040

6. Mask Face Cone Removal

A. Access

(1) Location Zones
211/212 Control Cabin

B. Procedure

S 024-041
(1) Remove the mask from the stowage box.

S 414-042
(2) Close the left lid of the stowage box.

S 714-043
(3) Push the "Reset" control lever.

S 214-003
(4) Make sure the "OXY-ON" flag goes out of view.

S 034-044
(5) Loosen the lockscrew on the mask where the mask attaches to the regulator.

S 034-045
(6) Push the mask lock in the aft direction.

S 024-009
(7) Remove the mask face cone from the regulator.

TASK 35-11-51-404-046

7. Mask Face Cone Installation

A. Access

(1) Location Zones
211/212 Control Cabin

B. Procedure

S 434-047
(1) Put the mask face cone in position on the regulator.

S 434-048
(2) Push the mask lock in the forward direction.

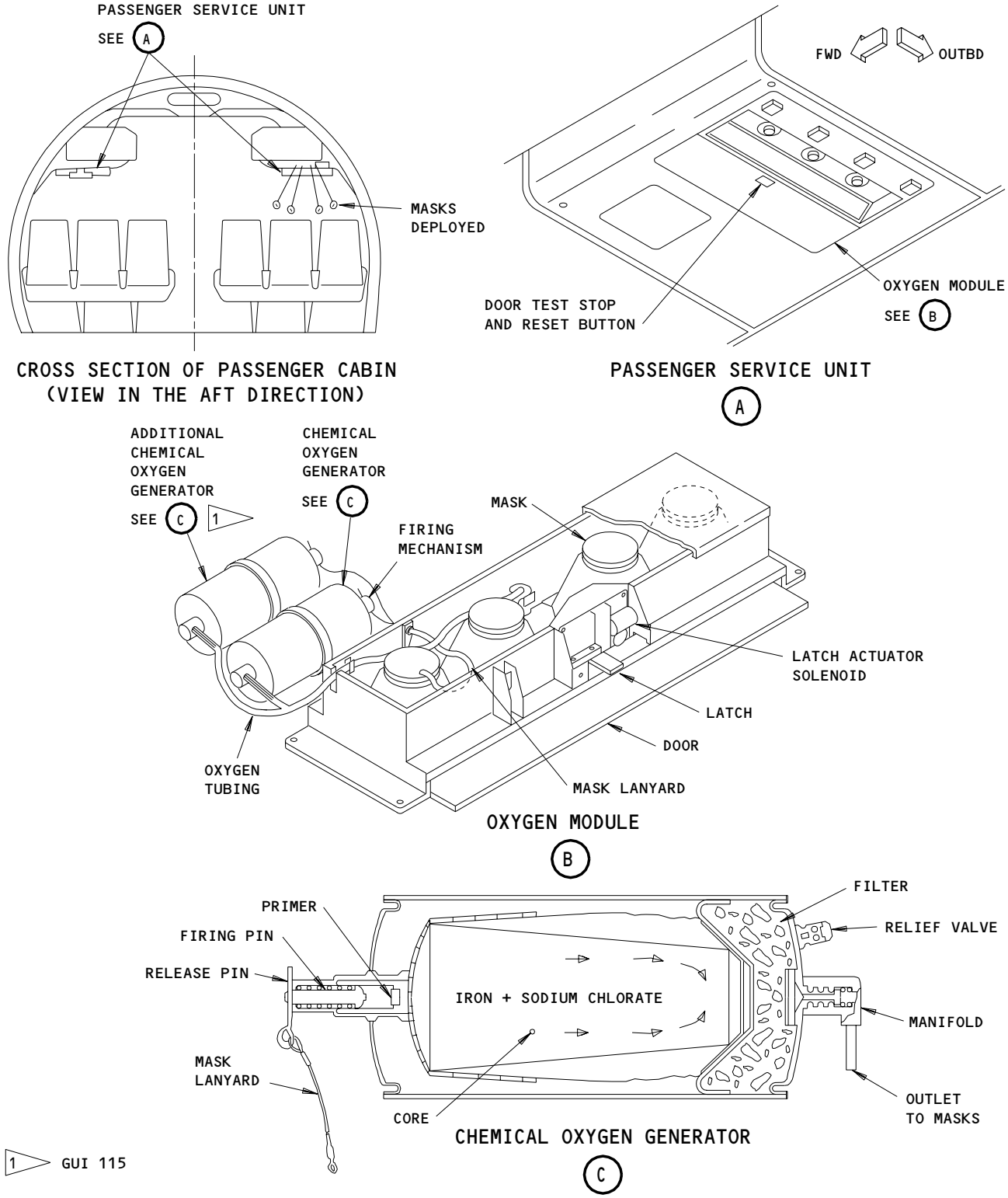
S 434-049
(3) Tighten the lockscrew.

S 014-050
(4) Open the left lid of the stowage box.

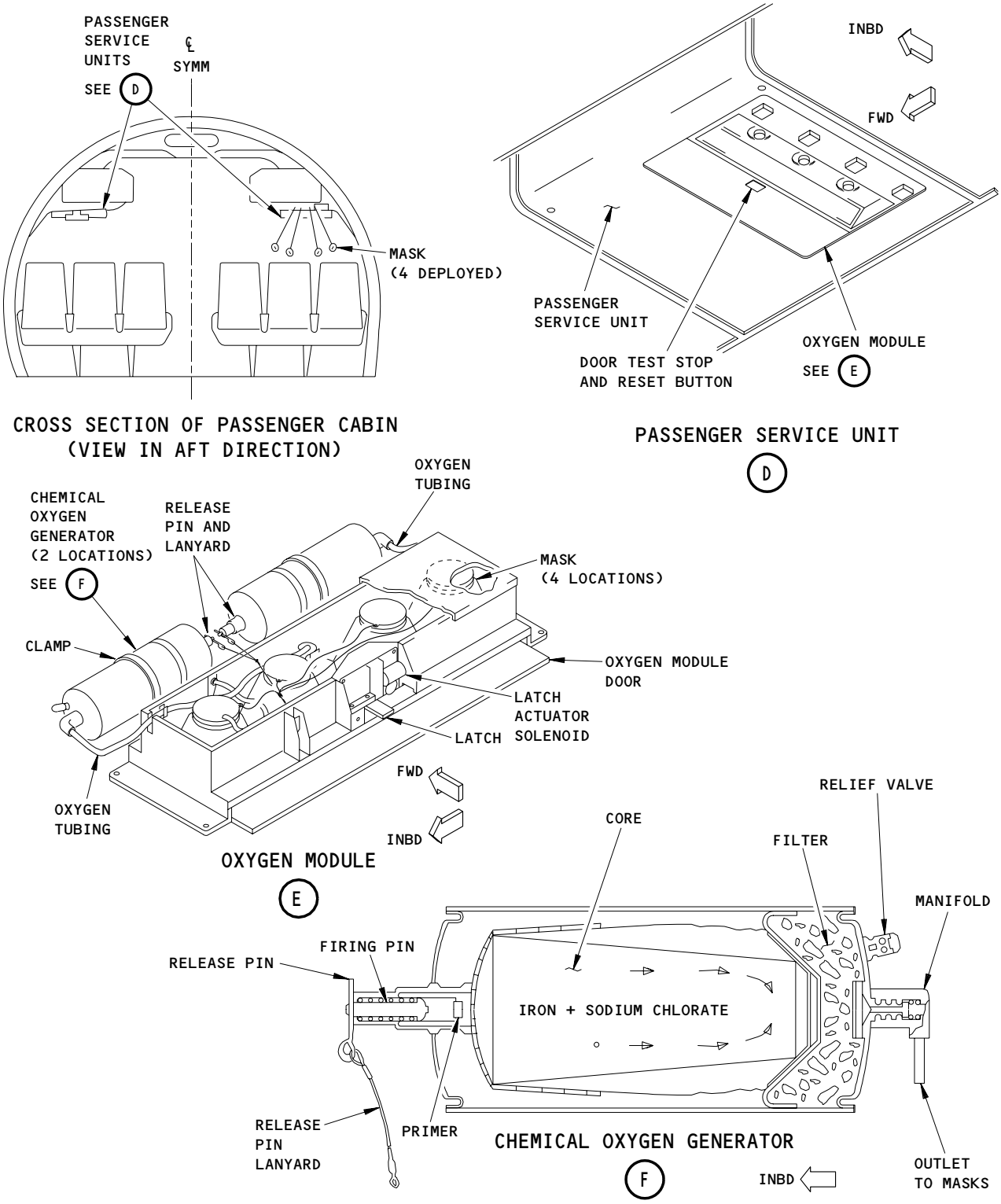
S 424-051
(5) Install the mask in the stowage box.

PASSENGER OXYGEN SYSTEM - DESCRIPTION AND OPERATION

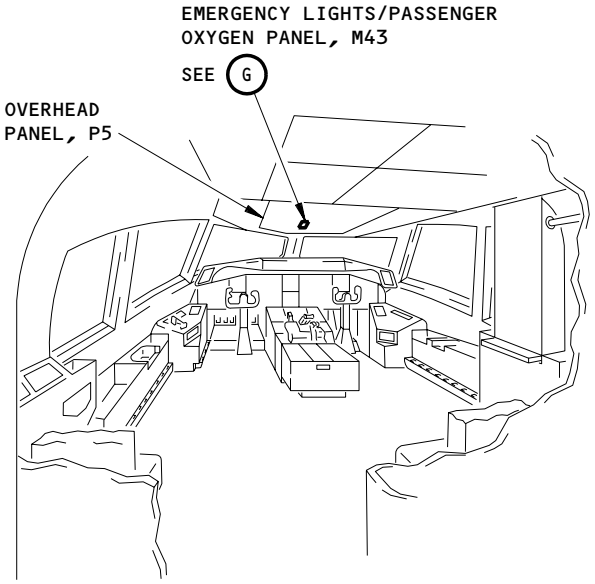
1. General
   A. The passenger oxygen system supplies oxygen to the passengers if needed. The system has chemical oxygen generators, two switches with electrical latch actuation, and oxygen masks. The generators and masks are kept in modules in the passenger service units (PSUs). A manual switch and/or aneroid switch control the latches on the module doors. When either switch is closed the latch mechanism releases. This permits the module doors to open. When the doors open, the masks fall into the reach of the passengers.
   B. GUI 115;
   Each passenger service unit (PSU) on the right side of the airplane contains an oxygen module which has a chemical oxygen generator and three oxygen masks.
   C. GUI 115;
   One more oxygen module (therapeutic) is installed in each PSU on the left side of the airplane. These added modules are known as sustaining or therapeutic oxygen modules and are opened manually. They contain an oxygen mask and two small chemical oxygen generators. The sustaining or therapeutic oxygen module is a low volume supply of oxygen. It supplies 15% of the passengers with oxygen for 30 minutes. This therapeutic oxygen is also a reserve supply of oxygen.
2. Oxygen Modules (Fig. 1)
   A. Oxygen modules are installed above all the passenger seats and attendant stations. Each lavatory also has an oxygen module in the ceiling. Each module has an oxygen generator and several mask assemblies. The module doors open to let the masks fall into the reach of the passengers. The doors open electrically by an aneroid switch or a hand operated switch. The module doors also open manually.
   B. GUI 115;
   A therapeutic oxygen module is also installed above each row of passenger seats on the left side of the airplane. The module is operated manually and has one oxygen mask. Each module contains two chemical oxygen generators. Each generator contains a 15 minute supply of oxygen. When they are fired separately they supply a total of 30 minutes of therapeutic oxygen.
3. Oxygen Generator (Fig. 1)
   A. Chemical oxygen generators chemically change sodium chlorate and iron into salt, iron oxide, and gaseous oxygen.



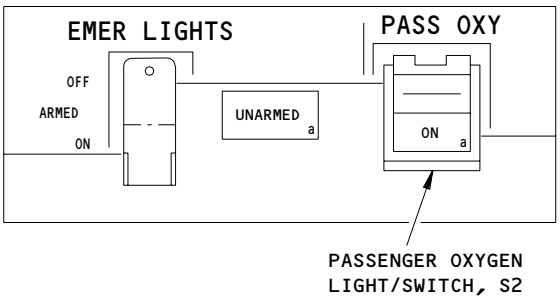
Passenger Oxygen Components
Figure 1 (Sheet 1)



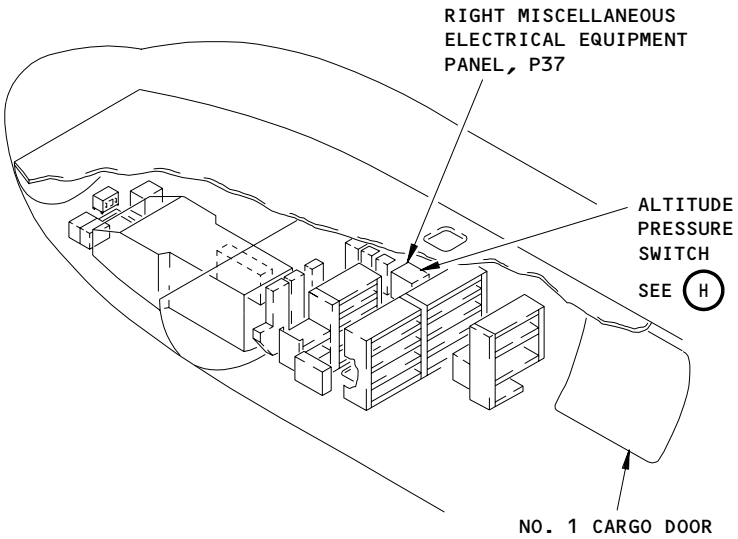
Passenger Oxygen Components
Figure 1 (Sheet 2)

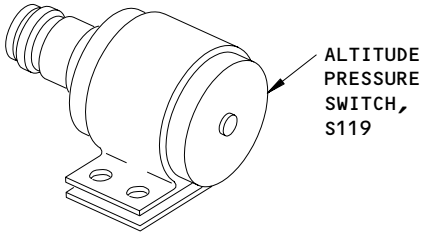


FLIGHT COMPARTMENT



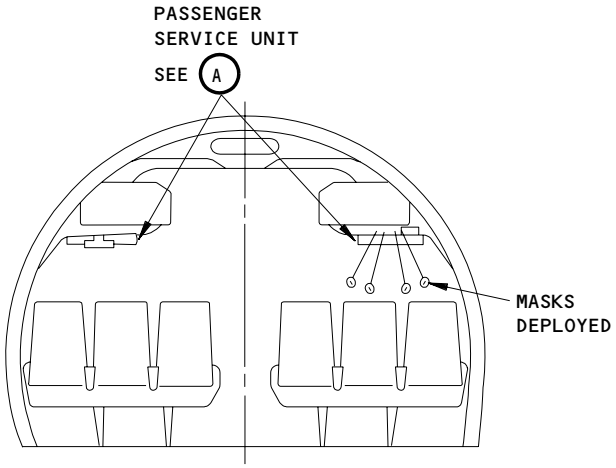
EMERGENCY LIGHTS/PASSENGER
OXYGEN PANEL, M43
G



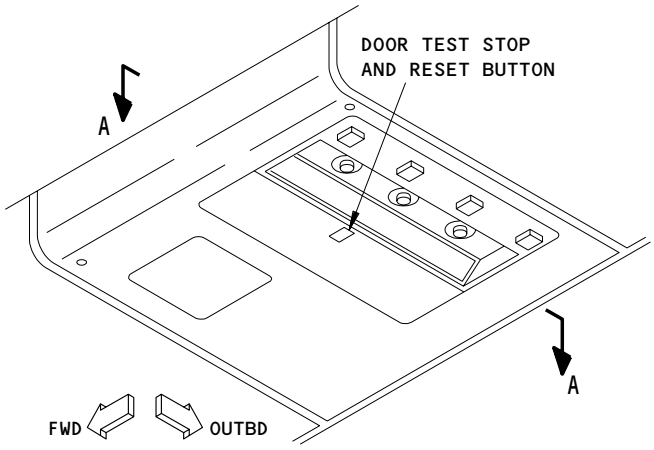


ALTITUDE PRESSURE SWITCH
H

Passenger Oxygen Components
Figure 1 (Sheet 3)

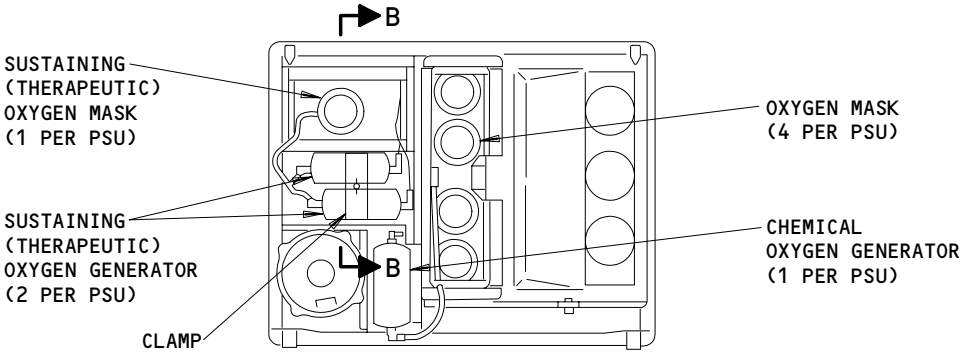


CROSS SECTION OF PASSENGER CABIN
(VIEW IN THE AFT DIRECTION)

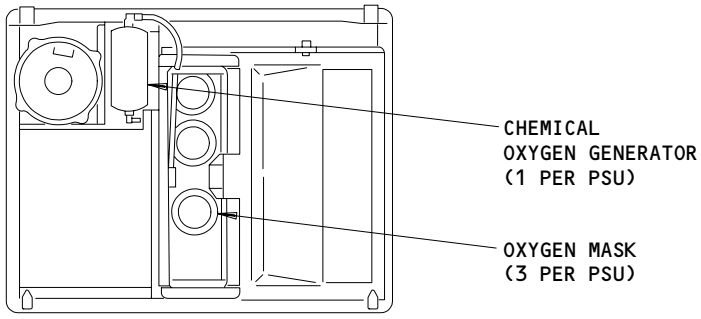


PASSENGER SERVICE UNIT (PSU)
A

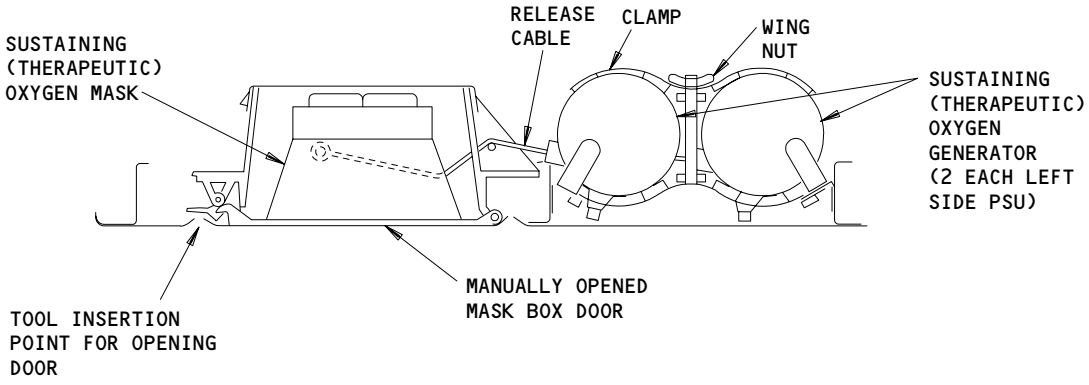
Passenger Oxygen Components
Figure 1A (Sheet 1)



LEFT PSU (EXAMPLE 31 LOCATIONS)
A-A



RIGHT PSU (EXAMPLE 31 LOCATIONS)
A-A



SUSTAINING OXYGEN MODULE
B-B

Passenger Oxygen Components
Figure 1A (Sheet 2)

99246

B. Each generator has a release pin which holds the firing pin in position. A lanyard connects the masks to the release pin. Behind the firing pin is a primer to start the chemical reaction in the generator. Each generator has a filter through which the oxygen flows to get to the manifold. The manifold has one outlet to each oxygen mask. A relief valve on the generator opens if the pressure in the generator is 90 psi (620 kPa) or above. There is a color band on the generator that is temperature sensitive. When the generator is fired this color band turns black and this is an indication that the generator is used and must be replaced.

C. GUI 115;
The generators in the sustaining (therapeutic) oxygen module both connect to the single mask in the module (Fig. 1A).

4. Passenger Oxygen Masks (Fig. 1)

A. Passenger oxygen masks are kept in each oxygen module above the passenger seats. A supply tube connects the oxygen generator manifold to each mask. Or the supply tube connects a supply line manifold, attached to the wall of the oxygen box, to each mask. Each mask has a harness which permits the passenger or flight attendant to quickly put the mask over the mouth and nose.

B. GUI 115;
A passenger oxygen mask is kept in each sustaining (therapeutic) oxygen module. These modules are installed above the left passenger seats (Fig. 1A). A supply tube connects the oxygen generator manifold to the mask. The mask has a harness which permits the passenger or flight attendant to quickly put the mask over the mouth and nose.

5. Door Latch Actuator (Fig. 1)

A. Each oxygen module has a door latch actuator. The actuator has a solenoid switch with a plunger. The plunger strikes the latch lever and releases the module door. The solenoid switch is powered by 28 volts d.c. from the overhead circuit breaker panel, P11.

B. GUI 115;
Door latch actuators are not installed on the sustaining (therapeutic) oxygen modules. The modules are manually operated.

6. Operation (Fig. 2)

A. Functional Description

(1) The oxygen system sends a 28 vdc power signal through relays to a solenoid actuator on the door latch of each oxygen module. When the solenoid actuator is energized, the latch releases, the door opens and the masks fall into reach.

(2) The system is operated automatically by the altitude pressure switch S119 or manually by the passenger oxygen switch on the pilot's overhead panel P5. When cabin pressure is equal to an altitude of 14,000 feet, the altitude pressure switch causes the passenger, lavatory and attendant oxygen masks to drop from the oxygen boxes. When the passenger oxygen switch on the P5 panel is pushed, the passenger, lavatory, and attendant oxygen masks drop from the oygen boxes.

(3) After a 5 ±1 second time delay, the energized control relay de-energizes removing power from the oxygen module door latch actuators.

(4) When the oxygen module doors open, the oxygen masks drop into the reach of the people. When the mask is pulled to the face, the firing pin is released and strikes the primer. This starts the ignition process inside the generator. Ten seconds later oxygen flows to each mask connected to that particular generator.

(5) GUI 115;
Sustaining (therapeutic) oxygen is available after the first 15 minutes of oxygen from the first generator is used. To start the second generator, pull the ring in the module.

B. Control

(1) The oxygen system is started automatically when cabin pressure is equal to an altitude of 14,000 feet. The system is also started when a manual switch on the overhead panel, P5, is pushed.

(2) The doors of the attendant and the lavatory oxygen boxes are manually opened as follows. Put a thin flat tool into the space between the oxygen box door and the ceiling panel. The latch actuation tab is hidden from view but is adjacent to the door test stop. Push the latch actuation tab with the thin flat tool to operate the door latch and release the door.

(3) The doors of the passenger oxygen boxes are manually opened as follows. Put a rod of 0.125 inch diameter into the hole adjacent to the door test stop. Push the rod to operate the door latch and release the door.

(4) GUI 115;
Sustaining (therapeutic) oxygen system operation (Fig. 1A).

(a) Put a thin flat tool (such as a table knife) into the space between the mask box door (sustaining oxygen) and the PSU faceplate (Section B-B). Push the tool up to operate the door latch and release the door.

NOTE: The latch actuation tab is hidden from view, but is in the center of the inboard edge of the mask box door.

(b) The mask box door swings open and releases the oxygen mask.

(c) Pull down on the mask to start the first oxygen generator. Put the mask on the passenger's face.

(d) When the oxygen from the first generator is used, pull the ring in the mask box for 15 more minutes of oxygen from the second generator.

C. For more details on the Passenge Oxygen System, refer to these wiring diagrams and functional schematics:
   WDM 35-21-11: Oxygen Mask Door Deployment
   WDM 35-21-12 thru 35-21-22: Oxygen Mask Deployment
   WDM 35-21-31: Oxygen Deployment Actuator
   SSM 35-21-01: Passenger Oxygen System.

PASSENGER OXYGEN

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ACTUATOR – OXYGEN MODULE DOOR LATCH	2,3	1	PSU, OXYGEN MODULE	35-21-06
CIRCUIT BREAKER –	1		FLT COMPT, P11	
PASSENGER OXYGEN CONT, C1323		1	11A24	*
PASSENGER OXYGEN LEFT, C1321		1	11A21	*
PASSENGER OXYGEN MANUAL DEPLOY, C1325		1	11A25	*
PASSENGER OXYGEN RIGHT, C1322		1	11A23	*
DOOR – OXYGEN MODULE	2,3	1	PSU, OXYGEN MODULE	35-21-00
DOOR – SUSTAINING OXYGEN MODULE 2	2	1	PSU, SUSTAINING OXYGEN MODULE	35-21-00
GENERATOR – OXYGEN	2,3	1	PSU, OXYGEN MODULE	35-21-04
GENERATOR – SUSTAINING OXYGEN 2	2	1	PSU, SUSTAINING OXYGEN MODULE	35-21-04
LIGHT/SWITCH – PASSENGER OXYGEN, S2	1	1	FLT COMPT, P5, EMER LTS/PASS. OXY PNL, M43	35-21-00
PANEL – (FIM 33-51-00/101)				
EMER LTS/OXY, M43				
RELAY – (FIM 31-01-37/101)				
MANUAL DEPLOY OXY CONTROL, K7				
OXY CONTROL, K4				
OXY CONTROL TIME DELAY, K8 2				
OXY DEPLOY INDICATOR, K10038				
OXY MANUAL DEPLOY TIME DELAY, K42 2				
SWITCH – ALTITUDE PRESSURE, S119	1	1	119AL, MAIN EQUIP CTR, P37	35-21-00

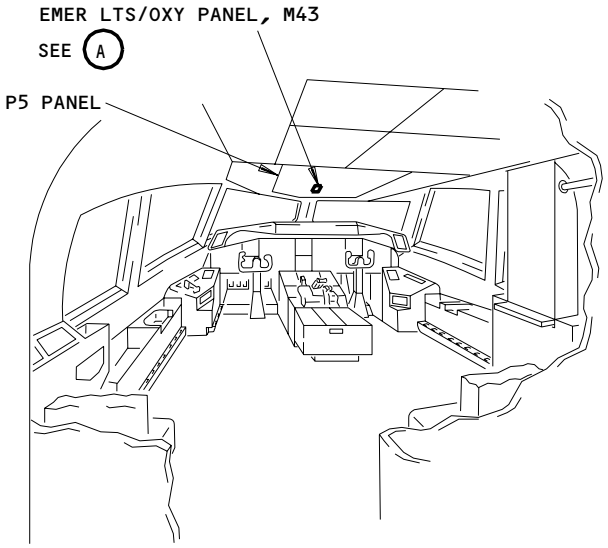
* SEE THE WDM EQUIPMENT LIST

1 VARIABLE WITH PASSENGER SEAT CONFIGURATION

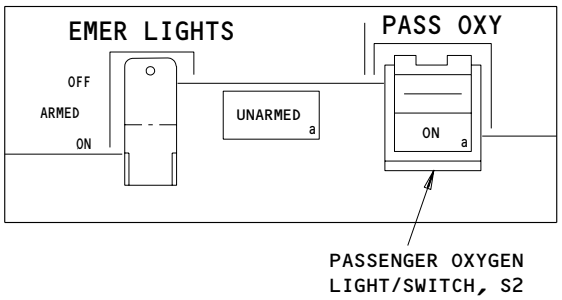
2 GUI 115

Passenger Oxygen – Component Index
Figure 101

A79649

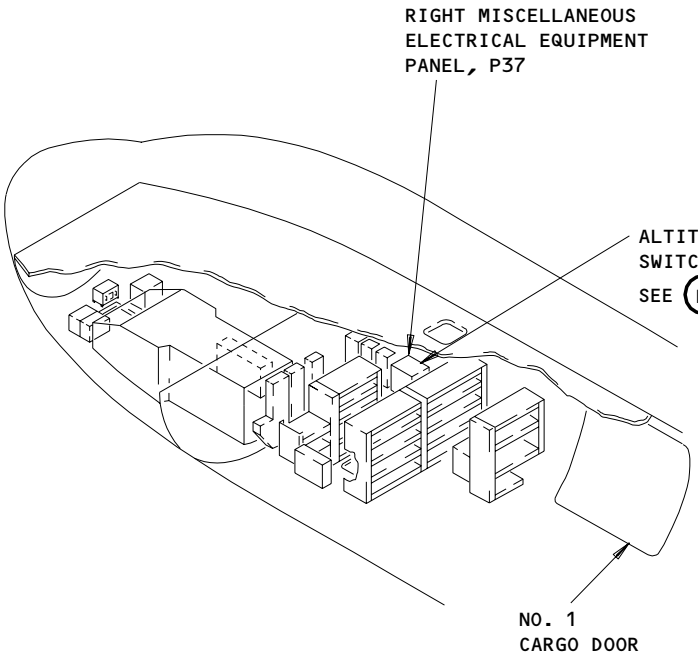


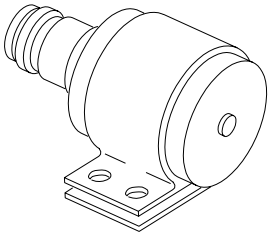
FLIGHT COMPARTMENT



EMER LTS/OXY PANEL, M43

A

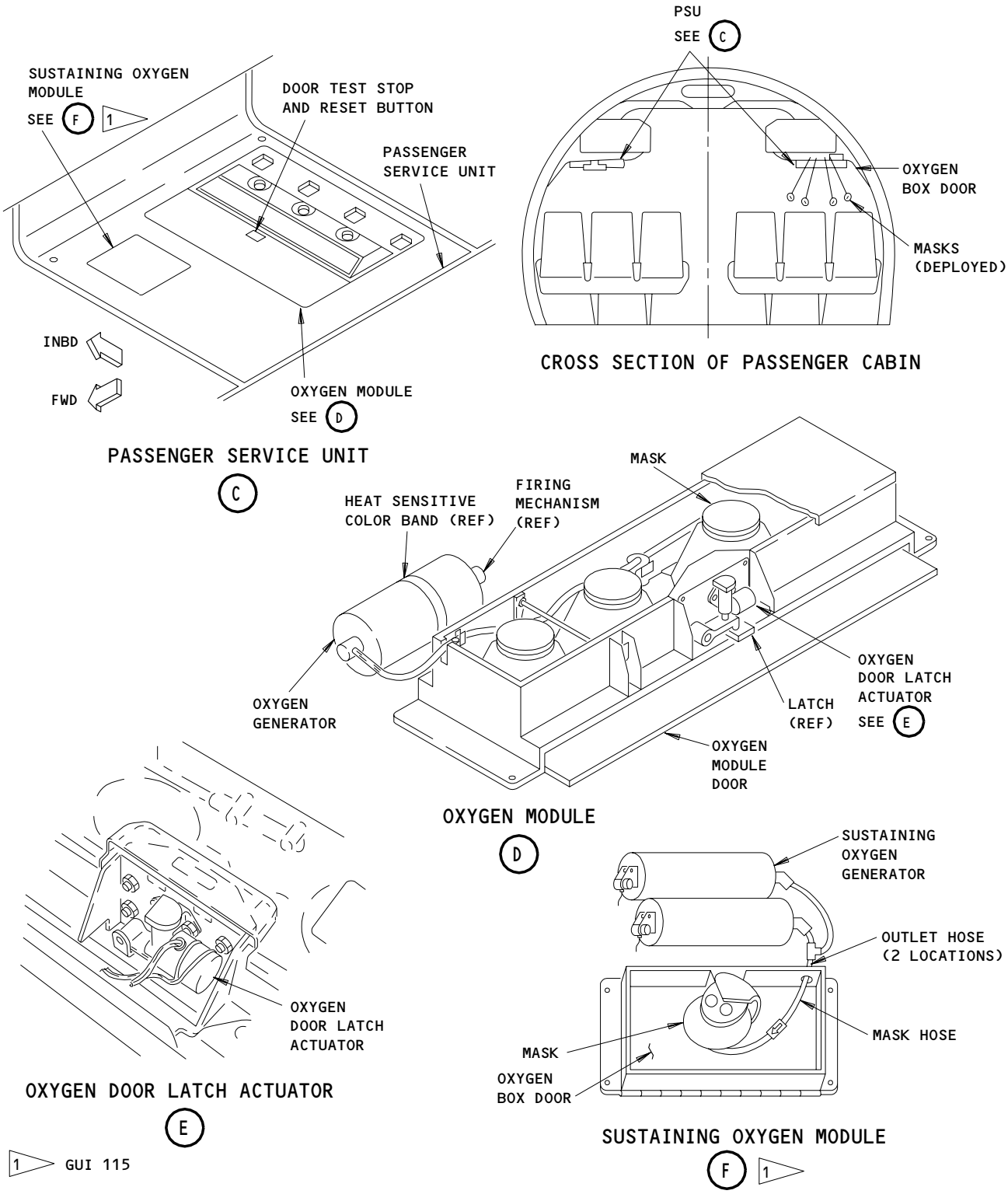




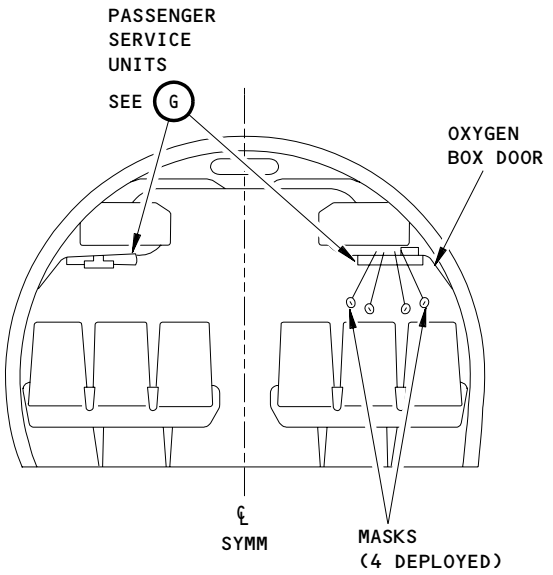
ALTITUDE PRESSURE SWITCH, S119

B

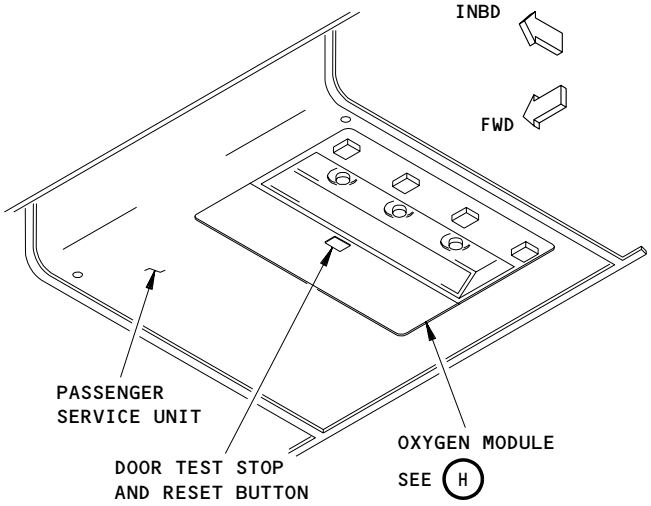
Passenger Oxygen – Component Location
Figure 102 (Sheet 1)



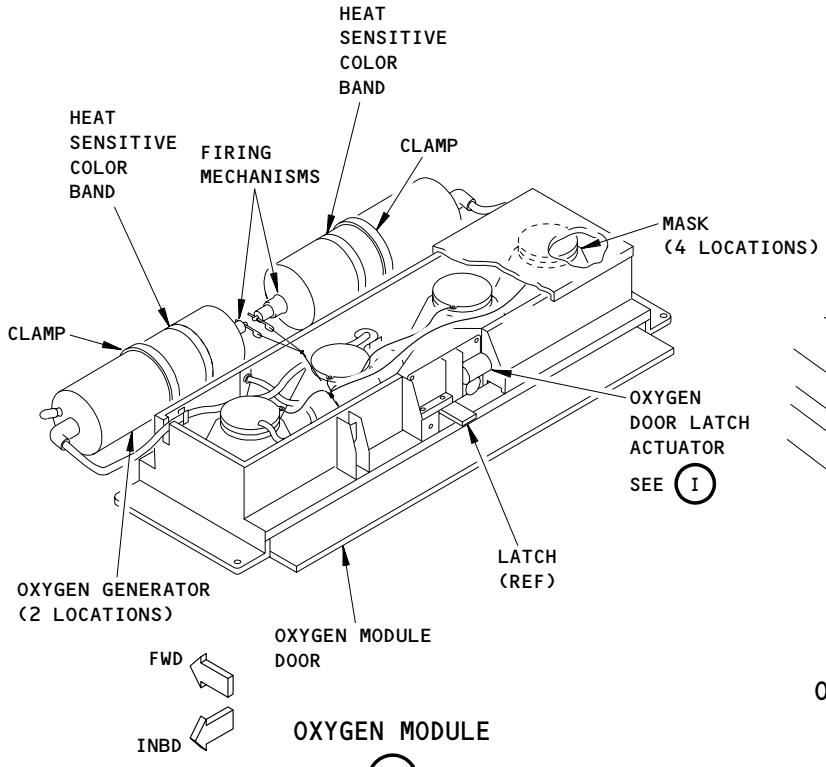
Passenger Oxygen – Component Location
Figure 102 (Sheet 2)



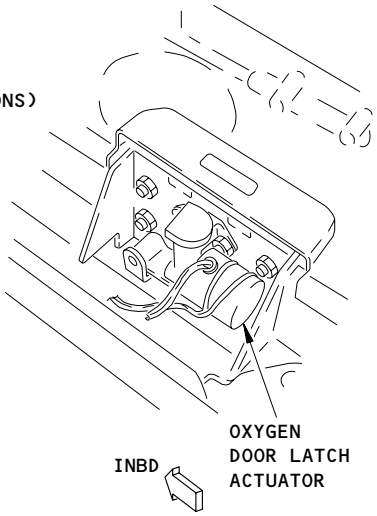
CROSS SECTION OF PASSENGER CABIN
(VIEW IN AFT DIRECTION)



PASSENGER SERVICE UNIT
G



OXYGEN MODULE
H

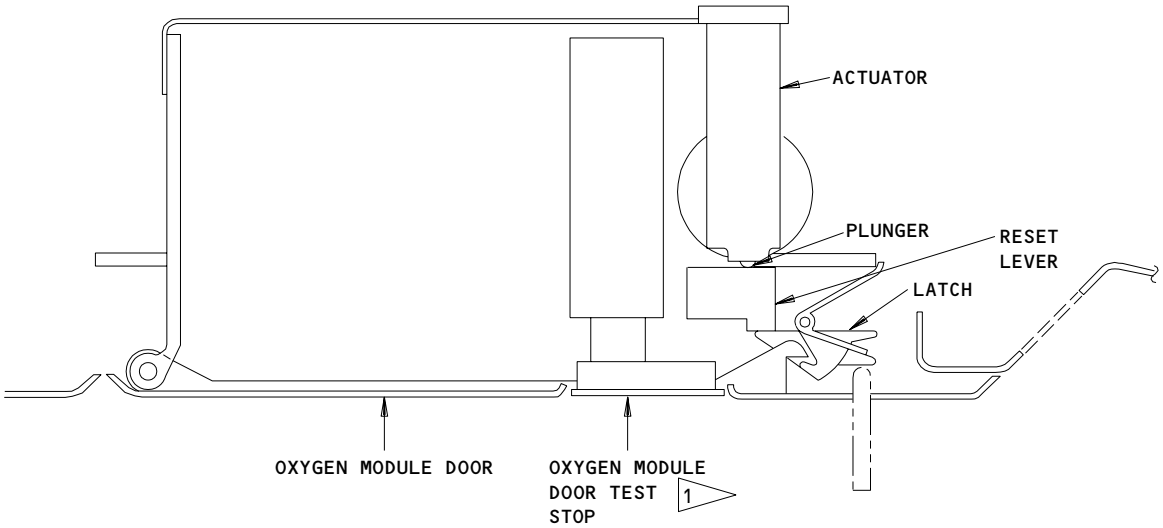


OXYGEN DOOR LATCH ACTUATOR
I

Passenger Oxygen – Component Location
Figure 102 (Sheet 3)

PASSENGER OXYGEN SYSTEM - ADJUSTMENT/TEST

1. General
   A. This procedure contains one task. The task is an operational test of the passenger oxygen system.
   B. The operational test of the passenger oxygen system has instructions for these procedures:
      (1) A test of the latch mechanism with the PASS OXY switch.
      (2) A calibration check of the altitude pressure switch.



Oxygen Module Door Restraint Device
Figure 501

(3) A check of the passenger oxygen system.

TASK 35-21-00-715-001

2. Operational Test (Fig. 501, Fig. 502)

A. Equipment

(1) Vacuum Source - 0-20 inches of Hg capacity (absolute)

(2) 2545B-01 Pump-Vacuum, Portable, 115Volts, 60 Hertz, Standard Duty
Welch Vacuum Technology Inc. (Vender Code 0NCC5)
7300 N. Linder Ave., Skokie Ill. 60076-0183 or

(3) 2545C-02 Pump-Vacuum, Portable, 240 Volts, 50 Hertz, Standard Duty
Welch Vacuum Technology Inc. (Vender Code 0NCC5)
7300 N. Linder Ave., Skokie Ill. 60076-0183

(4) Adapter - Consolidated Controls Corporation (15 Durant Avenue Bethel, CT 06801) P/N JAK136.

B. References

(1) AMM 24-22-00/201, Electrical Power - Control

C. Access

(1) Location Zones

119 Main Equipment Center
200 Upper Half of the Fuselage (Main Cabin)
211 Control Cabin, Left
212 Control Cabin, Right

D. Procedure - Prepare the Airplane for the Check of the PASS OXY Switch, Altitude Pressure Switch, and the Oxygen System Circuit

S 485-081

(1) Connect the vacuum source to the port on the altitude pressure switch, S119, in the P37 panel in the main equipment center (Fig. 502).

S 485-082

(2) Use Adapter, P/N JAK136, as necessary, to connect the vacuum source.

S 865-134

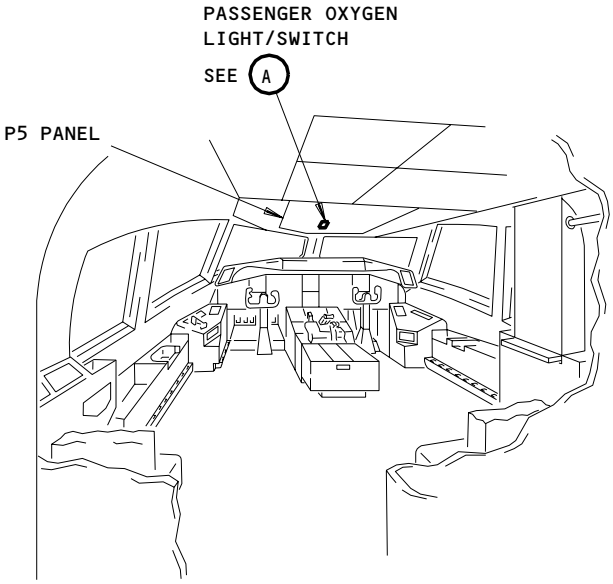
(3) Supply electrical power (AMM 24-22-00/201).

S 865-119

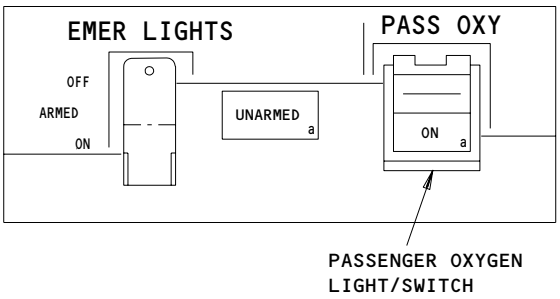
(4) Put the oxygen module door test stops at each oxygen module in the test position (Fig. 501).

S 865-120

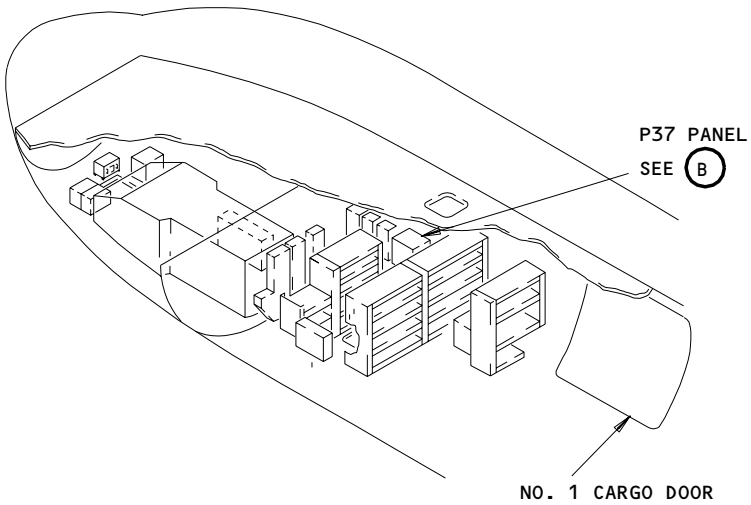
(5) Make sure the six EICAS circuit breakers on the overhead circuit breaker panel, P11, are closed.

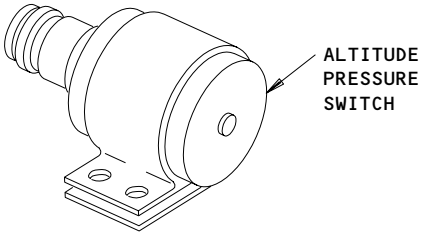


FLIGHT DECK



PASSENGER OXYGEN
LIGHT/SWITCH
A





P37 PANEL
B

Passenger Oxygen and Altitude Pressure Switches
Figure 502

S 865-121
(6) Push the STATUS button on the pilot's display select panel.

S 865-136
(7) Make sure these circuit breakers on the overhead circuit breaker panel, P11, are closed:
(a) 11A24 (or 11A25), PASSENGER OXYGEN CONT
(b) 11A25 (or 11A26), PASSENGER OXYGEN MANUAL DEPLOY

E. Procedure - Do the check of the latch mechanism on the passenger oxygen door with the PASS OXY switch.

S 865-122
(1) Push the PASS OXY switch on emergency lights module on the pilot's overhead panel, P5.

S 215-123
(2) Make sure all the oxygen module doors are released and touch the door test stops.

S 215-124
(3) Make sure the PASS OXY amber switch-light ON light comes on.

S 215-125
(4) Make sure the message PASS OXY is shown on the EICAS.

S 865-137
(5) Open this P11 panel circuit breaker:
(a) 11A24 (or 11A25), PASSENGER OXYGEN CONT

S 215-126
(6) Make sure the PASS OXY amber switch-light is not on.

S 215-171
(7) Make sure the EICAS message, PASS OXY, does not show on the top display.

S 865-139
(8) Close this P11 panel circuit breaker:
(a) 11A24 (or 11A25), PASSENGER OXYGEN CONT

S 845-131
(9) Do these steps:
(a) Close the oxygen module doors.
(b) Put the door test stops in the usual position (Fig. 501).
(c) If you will do no more checks, put the door test stops in the usual position (Fig. 501).

F. Procedure - Do the Calibration Check of the altitude pressure switch and Circuit Test for the Passenger Oxygen System.

S 865-017
(1) Put the oxygen module door test stop at each oxygen module in the test position (Fig. 501).

S 485-114
(2) Make sure that the vacuum source is connected to the altitude pressure switch, S119, in the P37 panel (Fig. 502).

NOTE: If you decrease the pressure on the altitude pressure switch to 17.3 - 17.8 inches Hg absolute (13,650 to 14,350 feet altitude) (4,161 to 4,374 meters altitude), all the oxygen module doors must release and touch the door test stops.

S 865-133
(3) Slowly decrease the pressure on the altitude pressure switch until the oxygen module doors release and touch the door test stops.

S 225-170
(4) Make sure all the passenger oxygen module doors open between 17.3 and 17.8 inches Hg absolute (13,650 to 14,350 feet altitude) (4,161 to 4,374 meters altitude).

S 215-127
(5) Make sure the PASS OXY amber switch-light ON light comes on.

S 215-128
(6) Make sure the message PASS OXY is shown on the EICAS.

S 865-138
(7) Open this P11 panel circuit breaker:
(a) 11A24 (or 11A25), PASSENGER OXYGEN CONT

S 215-129
(8) Make sure the PASS OXY amber switch-light is not on.

S 215-169
(9) Make sure the EICAS message, PASS OXY, does not show on the top display.

S 865-172
(10) Close this P11 panel circuit breaker:
(a) 11A24 (or 11A25), PASSENGER OXYGEN CONT

S 865-130
(11) Close all the oxygen module doors as follows:
(a) Put all the restraint devices for the oxygen module door in the usual position.
(b) Put all the test stops in the usual position (Fig. 501).

S 865-027
(12) Remove the electrical power (AMM 24-22-00/201).

S 085-025
(13) Remove the vacuum source, and the JAK136 Aadapter, if used, from the altitude pressure switch (Fig. 502).

TASK 35-21-00-705-076

3. Door Latch Mechanism Test (Fig. 501)

A. References
(1) AMM 24-22-00/201, Electrical Power - Control

B. Access
(1) Location Zones
200 Upper Half of the Fuselage

C. Prepare to do the Test

S 865-168
(1) Supply electrical power (AMM 24-22-00/201).

S 865-167
(2) Put the oxygen module door test stops at each oxygen module in the test position (Fig. 501).

S 865-166
(3) Make sure the six EICAS circuit breakers on the overhead circuit breaker panel, P11, are closed.

S 865-174
(4) Push the STATUS button on the pilot's display select panel.

D. Do the Door Latch Mechanism Test

S 865-164
(1) Push the PASS OXY switch on emergency lights module on the pilot's overhead panel, P5.

S 215-163
(2) Make sure all the oxygen module doors are released and touch the door test stops.

S 215-162
(3) Make sure the PASS OXY amber switch-light ON light comes on.

S 215-161
(4) Make sure the message PASS OXY is shown on the EICAS.

S 865-160
(5) Open this P11 panel circuit breaker:
(a) 11A24 (or 11A25), PASSENGER OXYGEN CONT

S 215-159
(6) Make sure the PASS OXY amber switch-light is not on.

S 215-158
(7) Make sure the EICAS message, PASS OXY, does not show on the top display.

S 865-157
(8) Close this P11 panel circuit breaker:
(a) 11A24 (or 11A25), PASSENGER OXYGEN CONT

S 845-156
(9) Do these steps:
(a) Close the oxygen module doors.
(b) Put the door test stops in the usual position (Fig. 501).

TASK 35-21-00-705-074

4. Altitude Pressure Switch Test (Fig. 502)
A. Equipment
(1) Vacuum Source - 0-20 inches of Hg capacity (absolute)

(2) Adapter - Consolidated Controls Corporation (15 Durant Avenue Bethel, CT 06801) P/N JAK136.

B. References

(1) AMM 24-22-00/201, Electrical Power - Control

C. Access

(1) Location Zones

119 Main Equipment Center
200 Upper Half of the Fuselage (Main Cabin)
211 Control Cabin, Left
212 Control Cabin, Right

D. Procedure - Prepare the Airplane for the Check of the Altitude Pressure Switch

S 485-083

(1) Connect the vacuum source to the port on the altitude pressure switch, S119, in the P37 panel in the main equipment center (Fig. 502).

S 485-084

(2) Use Adapter, P/N JAK136, as necessary, to connect the vacuum source.

S 865-155

(3) Supply electrical power (AMM 24-22-00/201).

S 865-154

(4) Put the oxygen module door test stops at each oxygen module in the test position (Fig. 501).

S 865-153

(5) Make sure the six EICAS circuit breakers on the overhead circuit breaker panel, P11, are closed.

S 865-151

(6) Push the STATUS button on the pilot's display select panel.

S 865-150

(7) Make sure these circuit breakers on the overhead circuit breaker panel, P11, are closed:

(a) 11A24 (or 11A25), PASSENGER OXYGEN CONT
(b) 11S25 (or 11A26), PASSENGER OXYGEN MANUAL DEPLOY

E. Procedure - Do the check of the altitude pressure switch.

S 485-149
(1) Make sure that the vacuum source is connected to the port on the altitude pressure switch, S119 (Fig. 502).

NOTE: If you decrease the pressure on the altitude pressure switch to 17.3 - 17.8 inches Hg absolute (13,650 to 14,350 feet altitude), all the oxygen module doors must release and touch the door test stops.

S 865-148
(2) Slowly decrease the pressure on the altitude pressure switch until the oxygen module doors release and touch the door test stops.

S 225-147
(3) Make sure all the passenger oxygen module doors open between 17.3 and 17.8 inches Hg absolute (13,650 to 14,350 feet altitude).

S 215-146
(4) Make sure the PASS OXY amber switch-light ON light comes on.

S 215-145
(5) Make sure the message PASS OXY is shown on the EICAS.

S 865-144
(6) Open this P11 panel circuit breaker:
(a) 11A24 (or 11A25), PASSENGER OXYGEN CONT

S 215-143
(7) Make sure the PASS OXY amber switch-light is not on.

S 215-142
(8) Make sure the EICAS message, PASS OXY, does not show on the top display.

S 865-141
(9) Close this P11 panel circuit breaker:
(a) 11A24 (or 11S25), PASSENGER OXYGEN CONT

S 865-140
(10) Close all the oxygen module doors as follows:
(a) Put all the restraint devices for the oxygen module door in the usual position.
(b) Put all the test stops in the usual position (Fig. 501).

F. Put the Airplane Back to its Usual Condition

S 865-085
(1) Remove the electrical power (AMM 24-22-00/201).

S 085-086
(2) Remove the vacuum source, and the JAK136 Adapter, if used, from the altitude pressure switch (Fig. 502).

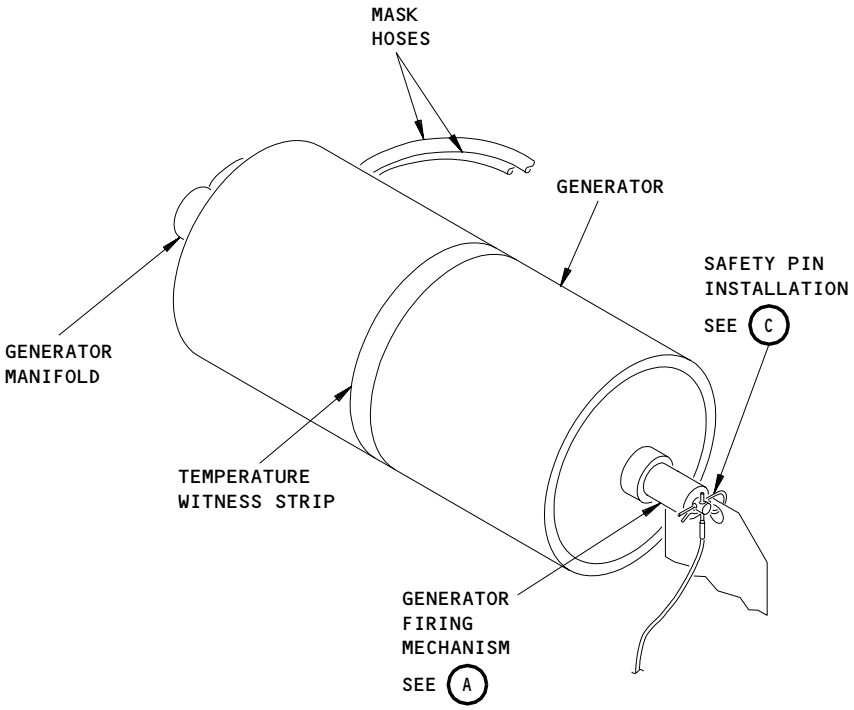
OXYGEN GENERATOR - MAINTENANCE PRACTICES

1. General
   A. This procedure contains the following tasks:
      (1) The deactivation of passenger oxygen system oxygen generators
      (2) The activation of passenger oxygen system oxygen generators
      (3) The deactivation of sustaining oxygen system oxygen generators
      (4) The activation of sustaining oxygen system oxygen generators
   B. This procedure contains instructions to deactivate and activate oxygen generators. All spare oxygen generators, oxygen modules, and service units (Passenger Service Units (PSUs), Attendant Service Units (ASUs), and Lavatory Service Units (LSUs)) are supplied with a safety pin. The safety pin is installed in the firing mechanism of the oxygen generator. The generator cannot fire when the safety pin is correctly installed. It is safe to handle oxygen generators when the safety pin is installed.
   C. In addition to the safety pin, a secondary safety device is used for the transport of the spare oxygen generator. This secondary safety device must be removed from the firing pin's release pin hole, before the release pin can be installed.
   D. You must install the safety pin before you remove a generator, service unit or oxygen module from the airplane.
   E. After you install a generator, service unit, or an oxygen module, you must remove the safety pin before flight.
   F. The retraction equipment shown in the Equipment paragraph contains a set of pliers and the safety pins for the oxygen generator deactivation. When you activate a generator, keep the safety pin with the retraction equipment for future use.

TASK 35-21-04-042-001

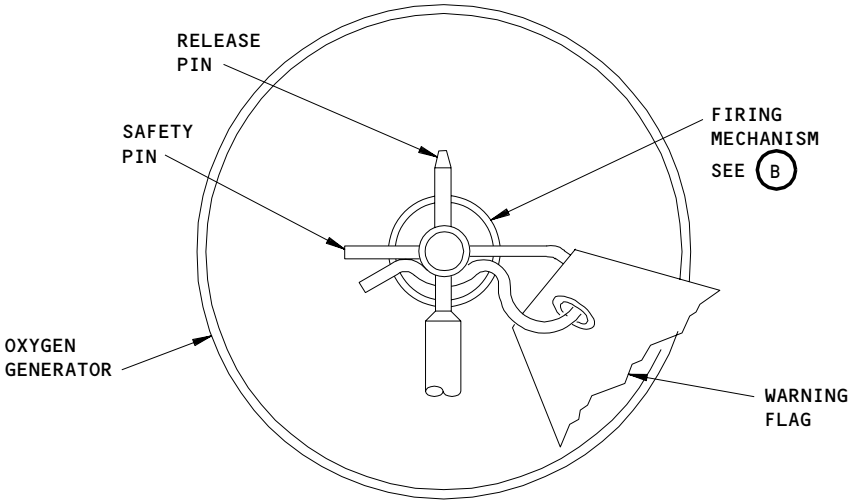
2. Oxygen Generator - Deactivation (Fig. 201)
   A. Equipment
      (1) Firing Pin Oxygen System Retraction Equipment, Oxygen system - A35001
      (2) Draeger Firing Pin Oxygen System Retraction Pliers, Oxygen system - E71516-00
   B. References
      (1) AMM 35-21-04/401, Oxygen Generator
   C. Access
      (1) Location Zone
          200 Upper Half of Fuselage
   D. Procedure - Deactivate the Oxygen Generator

      S 012-043
      (1) Get access to the oxygen generator, if necessary.



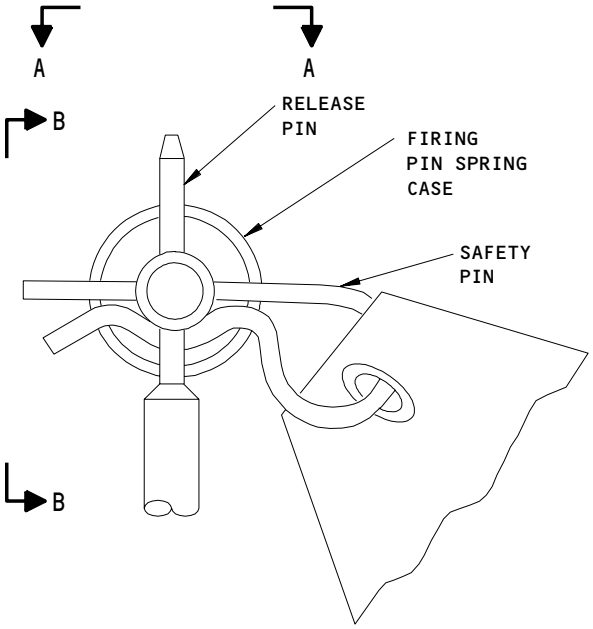
OXYGEN GENERATOR
(EXAMPLE)

Oxygen Generator Activation/Deactivation
Figure 201 (Sheet 1)



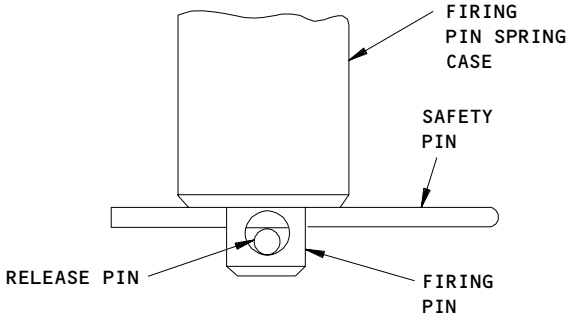
OXYGEN GENERATOR FIRING MECHANISM

A

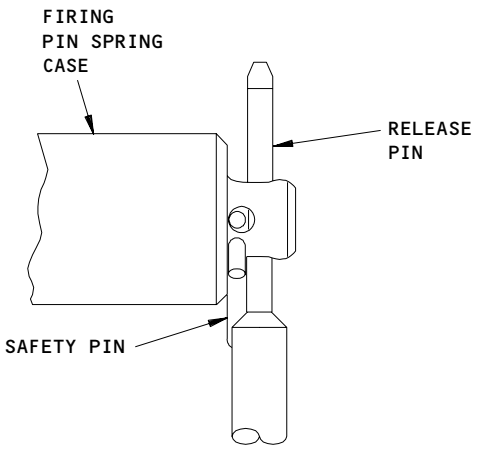


FIRING MECHANISM

B

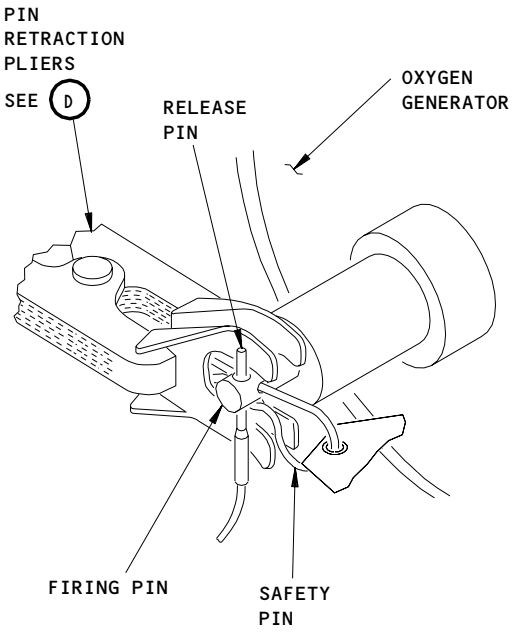


A–A



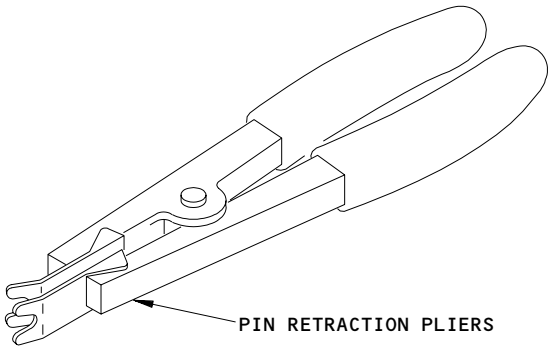
B–B

Oxygen Generator Activation/Deactivation
Figure 201 (Sheet 2)



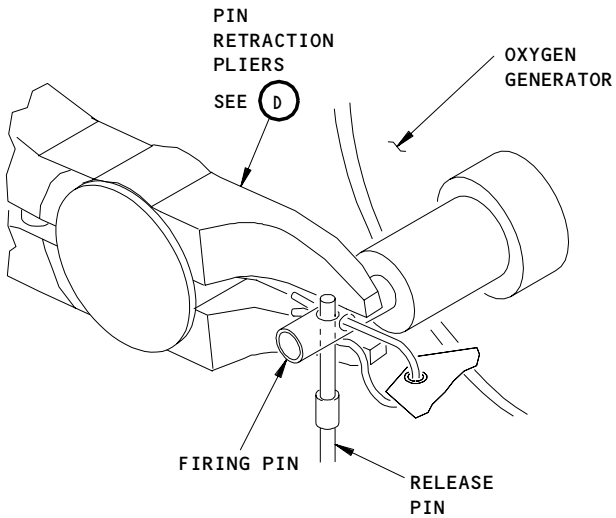
SAFETY PIN INSTALLATION

C 1



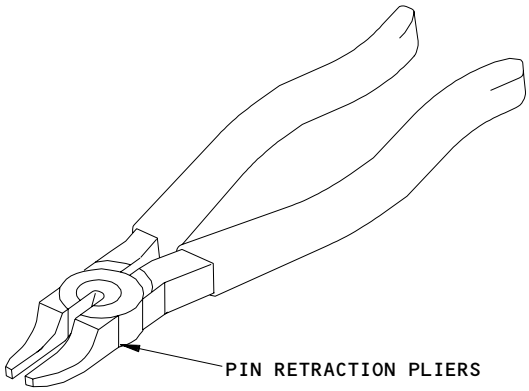
PIN RETRACTION PLIERS

D 1



SAFETY PIN INSTALLATION

C 2

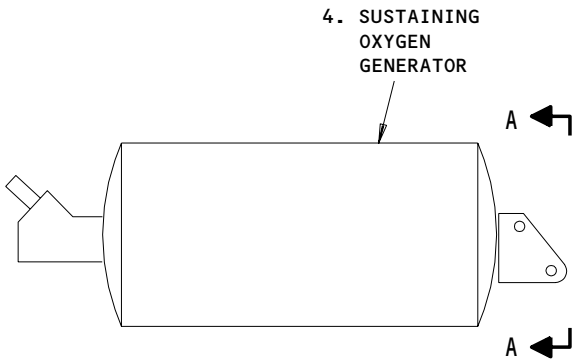


PIN RETRACTION PLIERS

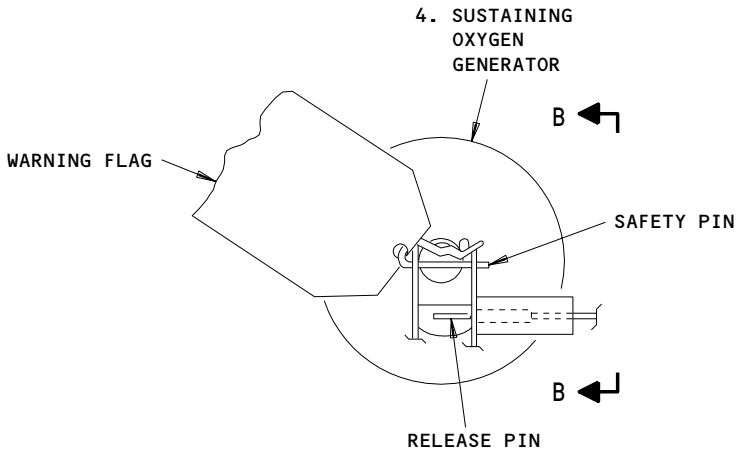
D 2

1 PURITAN BENNETT/B.E. AEROSPACE OXYGEN GENERATORS
2 DRAEGER OXYGEN GENERATORS

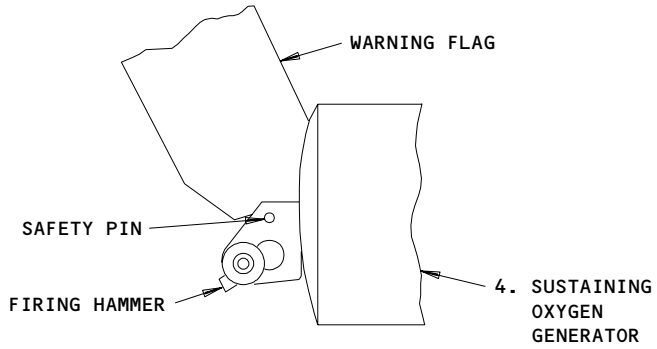
Oxygen Generator Activation/Deactivation
Figure 201 (Sheet 3)



SUSTAINING OXYGEN GENERATOR
(EXAMPLE)



A–A



B–B

Safety Pin Installation for Sustaining Oxygen Generator
Figure 202

M16393

S 212-016

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THE RELEASE PIN OR SAFETY PIN WITH THE WARNING FLAG IS INSTALLED ON THE GENERATOR. IF THE RELEASE PIN OR SAFETY PIN IS REMOVED AND THE GENERATOR FIRES, THE GENERATOR SURFACE TEMPERATURE WILL GET HOT (450 DEGREES F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

WARNING: MAKE SURE YOU OBEY ALL APPLICABLE REGULATORY REQUIREMENTS FOR THE TRANSPORT OF OXYGEN GENERATORS. IF THE SERVICE LIFE OF THE GENERATORS HAS EXPIRED, YOU MUST DISCHARGE THE GENERATORS TO MAKE SURE THE OXIDIZER CORE IS EMPTY. THIS MUST BE DONE BEFORE PREPARING THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT DISCHARGED AND EMPTY, THEY COULD ACCIDENTALLY DISCHARGE DURING TRANSPORT AND IGNITE A FIRE. THIS COULD CAUSE DEATH OR INJURY TO PERSONS.

CAUTION: YOU MUST BE VERY CAREFUL WHEN YOU HANDLE OXYGEN GENERATORS. DO NOT APPLY FORCE TO AN OXYGEN GENERATOR OR LET IT FALL. THESE ACTIONS CAN PREVENT THE OPERATION OF THE OXYGEN GENERATOR.

DO NOT TRY TO REMOVE THE FIRING MECHANISM FROM THE OXYGEN GENERATOR. IT CANNOT BE ASSEMBLED AGAIN.

CAUTION: MAKE SURE THAT THE RELEASE PIN IS INSTALLED IN THE LARGER OF THE TWO HOLES, AND THAT THE SAFETY PIN IS INSTALLED IN THE SMALLER OF THE TWO HOLES IN THE FIRING PIN.

FAILURE TO DO SO COULD PREVENT THE OXYGEN GENERATOR FROM PROPERLY ACTIVATING WHEN OXYGEN MASKS ARE DEPLOYED.

(2) Do these checks to find if the generator fired:
   (a) If the color band on the generator is black, the generator fired.
   (b) If the firing pin is in the fired position (you cannot install the safety pin), the generator has fired.

S 042-006

(3) If the generator did not fire, deactivate the generator as follows:
   (a) Put the retraction pliers between the release pin and the generator firing mechanism.
   (b) Carefully retract the firing pin and move the release pin away from the firing mechanism with the use of the retraction pliers, until the safety pin hole is visible; do not release the pliers.

(c) Put the safety pin into the firing pin's safety pin hole. The safety pin hole is the smaller of the two holes found in the firing pin.

NOTE: Make sure the safety pin is between the release pin and the firing pin spring case (Fig. 201).

(d) Carefully release and remove the pliers.

S 962-007

(4) If the generator fired, do these steps:
(a) Remove the generator (AMM 35-21-04/401).
(b) Install a new generator (AMM 35-21-04/401).

TASK 35-21-04-442-002

3. Oxygen Generator - Activation (Fig. 201)

A. Equipment
(1) Firing Pin Oxygen System Retraction Equipment, Oxygen System - A35001
(2) Draeger Firing Pin Oxygen System Retraction Pliers, Oxygen system - E71516-00

B. References
(1) AMM 35-21-04/401, Oxygen Generator

C. Access
(1) Location Zone
200 Upper Half of the Fuselage

D. Procedure - Activate the Oxygen Generator

S 012-008

(1) Get access to the oxygen generator, if necessary.

S 482-028

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THE RELEASE PIN OR SAFETY PIN WITH A WARNING FLAG IS INSTALLED ON THE GENERATOR. IF THE RELEASE PIN OR SAFETY PIN IS PULLED AND THE GENERATOR FIRES, THE GENERATOR SURFACE TEMPERATURE WILL GET HOT (450 DEGREES F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

CAUTION: YOU MUST BE CAREFUL WHEN YOU INSTALL AND REMOVE OXYGEN GENERATORS. DO NOT APPLY FORCE TO AN OXYGEN GENERATOR OR LET IT FALL. THESE ACTIONS CAN PREVENT THE OPERATION OF THE OXYGEN GENERATOR.

DO NOT TRY TO REMOVE THE FIRING MECHANISM FROM THE OXYGEN GENERATOR. IT CAN NOT BE ASSEMBLED AGAIN.

(2) Do these checks to find if the generator fired:
  (a) If the color band on the generator is black, the generator fired.
  (b) If the firing pin is in the fired position (you cannot install the safety pin), the generator has fired.

S 962-011

(3) If the generator fired, do these steps:
  (a) Remove the fired generator (AMM 35-21-04/401)
  (b) Install a charged generator (AMM 35-21-04/401).

S 212-044

WARNING: MAKE SURE THE RELEASE CABLE IS CAPABLE OF FREE TRAVEL. INCORRECT ROUTING OF THE RELEASE CABLE CAN CAUSE A FAILURE IN THE OXYGEN DISTRIBUTION SYSTEM. THIS CAN LEAD TO INJURY OF PASSENGER.

CAUTION: IN ADDITION TO THE SAFETY PIN, A SECONDARY SAFETY DEVICE IS USED FOR THE TRANSPORT OF THE SPARE OXYGEN GENERATOR. THIS SECONDARY SAFETY DEVICE MUST BE REMOVED FROM THE FIRING PIN'S RELEASE PIN HOLE, BEFORE THE RELEASE PIN CAN BE INSTALLED.

FAILURE TO DO SO COULD PREVENT THE OXYGEN GENERATOR FROM PROPERLY ACTIVATING WHEN OXYGEN MASKS ARE DEPLOYED.

(4) Remove the secondary safety device, if installed, from the release pin hole in the firing pin. The release pin hole is the larger of the two holes on the firing pin of the oxygen generator.

S 212-026

CAUTION: MAKE SURE THAT THE RELEASE PIN IS INSTALLED IN THE LARGER OF THE TWO HOLES, AND THAT THE SAFETY PIN IS INSTALLED IN THE SMALLER OF THE TWO HOLES IN THE FIRING PIN.

FAILURE TO DO SO COULD PREVENT THE OXYGEN GENERATOR FROM PROPERLY ACTIVATING WHEN OXYGEN MASKS ARE DEPLOYED.

(5) If the release pin is not installed, put the release pin in the larger of the two holes in the generator firing pin.

NOTE: Make sure the safety pin is between the release pin and the firing pin spring case (Fig. 201).

S 442-013

(6) Carefully pull the safety pin from the firing pin.

S 412-014

(7) If no other service unit maintenance is required, close the service unit as applicable.

TASK 35-21-04-042-041

4. Sustaining Oxygen Generator - Deactivation (Fig. 202)

A. Equipment

(1) Safety Pin,
Scott Aviation part number: 805683-01

B. References

(1) AMM 35-21-04/401, Oxygen Generator

C. Access

(1) Location Zone
200 Upper Half of Fuselage

D. Procedure

S 012-029

(1) Lower the passenger service unit (PSU) to get access to the sustaining oxygen generator:
(a) Put a rod into the latch access hole (2 locations).

(b) Push up on the rod to unlatch the cam latches.
(c) Lower the PSU.

S 212-030

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THE RELEASE PIN OR SAFETY PIN WITH A WARNING FLAG IS INSTALLED ON THE GENERATOR. IF THE RELEASE PIN OR SAFETY PIN IS PULLED AND THE GENERATOR FIRES, THE GENERATOR SURFACE TEMPERATURE WILL GET HOT (450 DEGREES F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

WARNING: MAKE SURE YOU OBEY ALL APPLICABLE REGULATORY REQUIREMENTS FOR THE TRANSPORT OF OXYGEN GENERATORS. IF THE SERVICE LIFE OF THE GENERATORS HAS EXPIRED, YOU MUST DISCHARGE THE GENERATORS TO MAKE SURE THE OXIDIZER CORE IS EMPTY. THIS MUST BE DONE BEFORE PREPARING THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT DISCHARGED AND EMPTY, THEY COULD ACCIDENTALLY DISCHARGE DURING TRANSPORT AND IGNITE A FIRE. THIS COULD CAUSE DEATH OR INJURY TO PERSONS.

CAUTION: IN ADDITION TO THE SAFETY PIN, A SECONDARY SAFETY DEVICE IS USED FOR THE TRANSPORT OF THE SPARE OXYGEN GENERATOR. THIS SECONDARY SAFETY DEVICE, IF INSTALLED, MUST BE REMOVED FROM THE FIRING MECHANISMS RELEASE PIN HOLE BEFORE THE RELEASE PIN CAN BE INSTALLED. FAILURE TO DO SO COULD PREVENT THE OXYGEN GENERATOR FROM CORRECTLY ACTIVATING WHEN OXYGEN MASKS DEPLOY.

CAUTION: MAKE SURE THAT THE RELEASE PIN IS INSTALLED IN THE RELEASE PIN HOLE, AND THAT THE SAFETY PIN IS INSTALLED IN THE SAFETY PIN HOLE IN THE FIRING MECHANISM. THE SAFETY PIN HOLE IS THE HOLE CLOSEST TO THE FIRING PIN. FAILURE TO DO SO COULD PREVENT THE OXYGEN GENERATOR FROM CORRECTLY ACTIVATING WHEN OXYGEN MASKS DEPLOY.

(2) Visually inspect the firing mechanism to make sure the release pin is correctly installed in the release pin hole and not installed in the safety pin hole of the firing mechanism.

NOTE: The release pin hole is the hole located farthest away from the firing pin.

(a) If the release pin is incorrectly installed in the safety pin hole, do the steps that follow:
1) Retract the actuation hammer away from the firing pin until it has travelled past the release pin hole.

2) Remove the release pin from the safety pin hole and put it in the release pin hole.

NOTE: The release pin hole is the hole located farthest away from the firing pin.

3) Carefully release the actuator hammer to rest upon the release pin.

S 212-031

(3) Do these checks to find if the generator fired:
(a) If the heat sensitive band on the generator is black, the generator fired.
(b) If the actuating hammer is resting against the firing pin, the generator has fired.

S 902-032

(4) If the generator has fired, do these tasks:
(a) Remove the generator (AMM 35-21-04/401).
(b) Install a new generator (AMM 35-21-04/401).

S 042-033

(5) If the generator has not been fired, deactivate the generator as follows:
(a) Put the safety pin into the firing mechanism safety pin hole.

NOTE: The safety pin hole is the hole closest to the firing pin.

NOTE: Make sure the safety pin is between the actuating hammer and the firing pin (Fig. 202).

S 022-034

(6) If it is necessary to remove the release pin from the firing mechanism, do these steps:
(a) Carefully retract and hold the actuating hammer away from the release pin, to allow the release pin to be removed freely.
(b) Remove the release pin from the firing mechanism.
(c) Carefully release the actuation hammer to rest against the safety pin.

TASK 35-21-04-402-035

5. Sustaining Oxygen Generator - Activation (Fig. 202)
A. Equipment
(1) Safety Pin,
Scott Aviation part number: 805683-01
B. References
(1) AMM 35-21-04/401, Oxygen Generator

C. Access
(1) Location Zone
200 Upper Half of Fuselage

D. Procedure

S 412-036

(1) Lower the passenger service unit (PSU) to get access to the sustaining oxygen generator:
(a) Put a rod into the latch access hole (2 locations).
(b) Push up on the rod to unlatch the cam latches.
(c) Lower the PSU.

S 212-037

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THE RELEASE PIN OR SAFETY PIN WITH A WARNING FLAG IS INSTALLED ON THE GENERATOR. IF THE RELEASE PIN OR SAFETY PIN IS PULLED AND THE GENERATOR FIRES, THE GENERATOR SURFACE TEMPERATURE WILL GET HOT (450 DEGREES F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

WARNING: MAKE SURE YOU OBEY ALL APPLICABLE REGULATORY REQUIREMENTS FOR THE TRANSPORT OF OXYGEN GENERATORS. IF THE SERVICE LIFE OF THE GENERATORS HAS EXPIRED, YOU MUST DISCHARGE THE GENERATORS TO MAKE SURE THE OXIDIZER CORE IS EMPTY. THIS MUST BE DONE BEFORE PREPARING THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT DISCHARGED AND EMPTY, THEY COULD ACCIDENTALLY DISCHARGE DURING TRANSPORT AND IGNITE A FIRE. THIS COULD CAUSE DEATH OR INJURY TO PERSONS.

CAUTION: IN ADDITION TO THE SAFETY PIN, A SECONDARY SAFETY DEVICE IS USED FOR THE TRANSPORT OF THE SPARE OXYGEN GENERATOR. THIS SECONDARY SAFETY DEVICE, IF INSTALLED, MUST BE REMOVED FROM THE FIRING MECHANISMS RELEASE PIN HOLE BEFORE THE RELEASE PIN CAN BE INSTALLED. FAILURE TO DO SO COULD PREVENT THE OXYGEN GENERATOR FROM CORRECTLY ACTIVATING WHEN OXYGEN MASKS DEPLOY.

CAUTION: MAKE SURE THAT THE RELEASE PIN IS INSTALLED IN THE RELEASE PIN HOLE, AND THAT THE SAFETY PIN IS INSTALLED IN THE SAFETY PIN HOLE IN THE FIRING MECHANISM. THE SAFETY PIN HOLE IS THE HOLE CLOSEST TO THE FIRING PIN. FAILURE TO DO SO COULD PREVENT THE OXYGEN GENERATOR FROM CORRECTLY ACTIVATING WHEN OXYGEN MASKS DEPLOY.

(2) Visually inspect the firing mechanism to make sure the safety pin is correctly installed in the safety pin hole, and not the release pin hole of the firing mechanism.

NOTE: The safety pin hole is the hole located closest to the firing pin.

(a) If the safety pin is incorrectly installed in the release pin hole, do the steps that follow:
1) Retract and hold the actuation hammer away from the safety pin to allow the safety pin to be removed freely.
2) Remove the safety pin from the release pin hole and put it in the safety pin hole.

NOTE: The safety pin hole is the hole located closest to the firing pin.

3) Carefully release the actuator hammer to rest upon the safety pin.

S 212-038
(3) Do these checks to find if the generator fired:
(a) If the heat sensitive band on the generator is black, the generator fired.
(b) If the actuating hammer is resting against the firing pin, the generator has fired.

S 902-039
(4) If the generator has fired, do these tasks:
(a) Remove the generator (AMM 35-21-04/401).
(b) Install a new generator (AMM 35-21-04/401).

S 442-040

(5) If the generator has not been fired, activate the generator as follows:

(a) If it is necessary to install the release pin into the firing mechanism, do the steps that follow:

1) Retract and hold the actuation hammer away from the safety pin beyond the release pin hole, to allow the release pin to be installed freely.

WARNING: MAKE SURE THE RELEASE CABLE IS CAPABLE OF FREE TRAVEL. INCORRECT ROUTING OF THE RELEASE CABLE CAN CAUSE A FAILURE IN THE OXYGEN DISTRIBUTION SYSTEM. THIS CAN LEAD TO INJURY OF PASSENGERS.

2) Install the release pin into the release pin hole of the firing mechanism.

NOTE: Make sure the release pin is between the actuating hammer and the firing pin (Fig. 202).

3) Carefully release the actuating hammer to rest upon the release pin.

(b) Remove the safety pin from the firing mechanism safety pin hole.

OXYGEN GENERATOR - REMOVAL/INSTALLATION

1. General
   A. This procedure gives instructions to remove and install the chemical oxygen generators.
   B. Each Passenger Service Unit (PSU), each Attendant Service Units (ASU), and each Lavatory Service Unit (LSU) have one or more oxygen generators. The PSUs and the ASUs are below the stowage bins and in the ceilings of their respective locations.
   C. There are oxygen generators made for one, two, three, or four persons. Make sure you install the correct type of oxygen generator.
   D. Each oxygen generator has a heat-sensitive band that becomes black when the oxygen generator is fired.

      NOTE: Do not install an oxygen generator that has fired.

   E. GUI 005, 008, POST SB 35-0030;
      There are 22 minute oxygen generators installed on the airplanes. Some of the installations will have two oxygen generators (Fig. 401A).

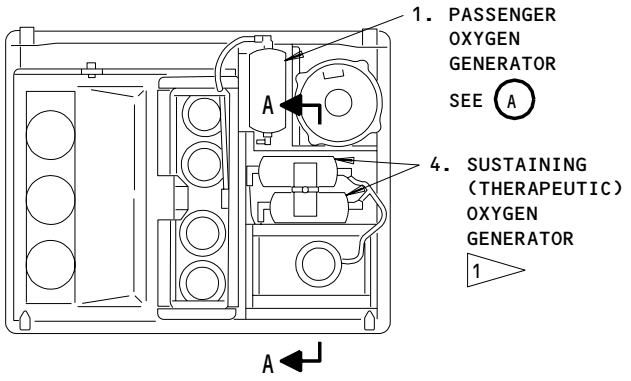
TASK 35-21-04-004-001

2. Remove the Oxygen Generator (Fig. 401)
   A. Access
      (1) Location Zones
          200 Upper Half of the fuselage

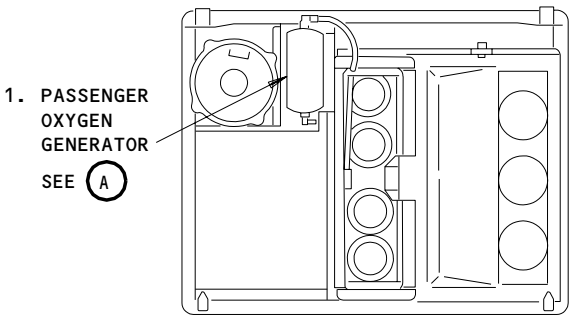
   B. Procedure - Prepare to Remove the Oxygen Generator

      S 864-002
      (1) Open these circuit breakers on the overhead circuit breaker panel, P11, and attach DO-NOT-CLOSE tags:
          (a) 11A24 (or 11A25), PASSENGER OXYGEN CONT
          (b) 11A25 (or 11A26), PASSENGER OXYGEN MANUAL DEPLOY

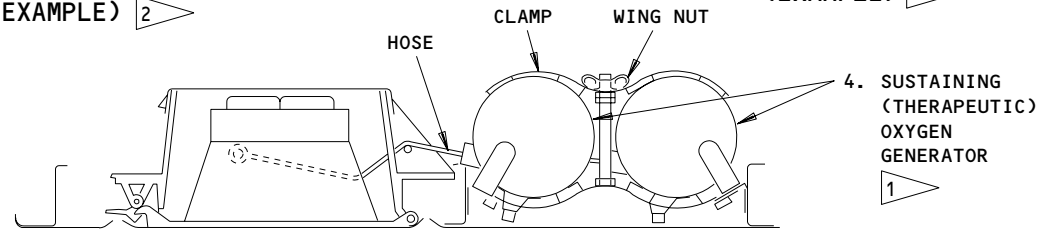
      S 014-003
      (2) Open a PSU or an ASU that is below a stowage bin as follows:
          (a) Put an 1/8-inch rod into one of the two latch access holes in the PSU or ASU faceplate.
          (b) Push the 1/8-inch rod to release the door latch.



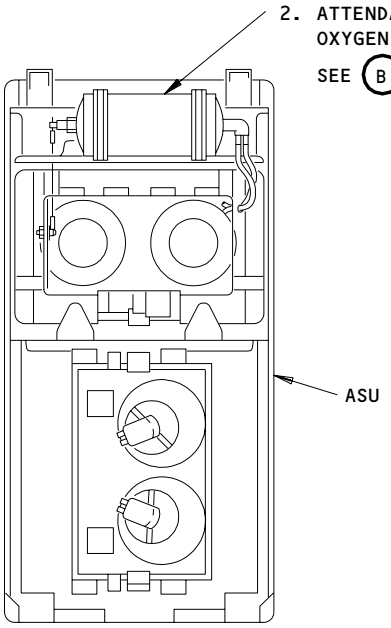
LEFT PASSENGER SERVICE UNIT (PSU) (EXAMPLE) 2



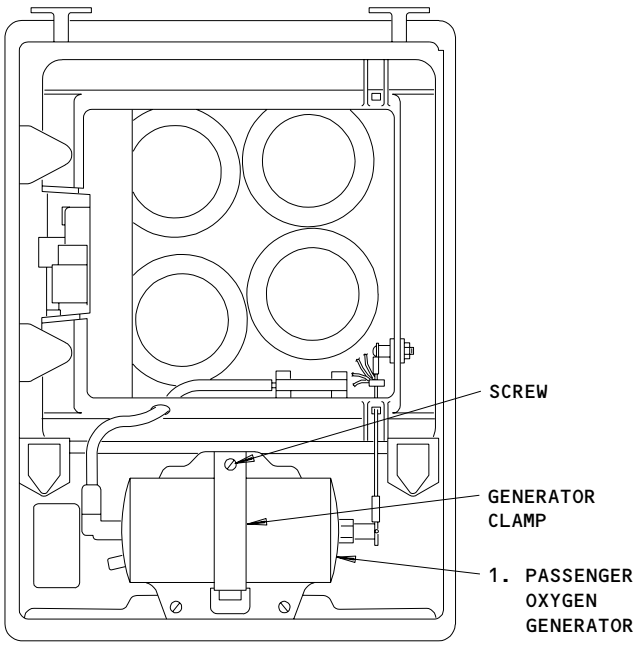
RIGHT PASSENGER SERVICE UNIT (PSU) (EXAMPLE) 2



A–A



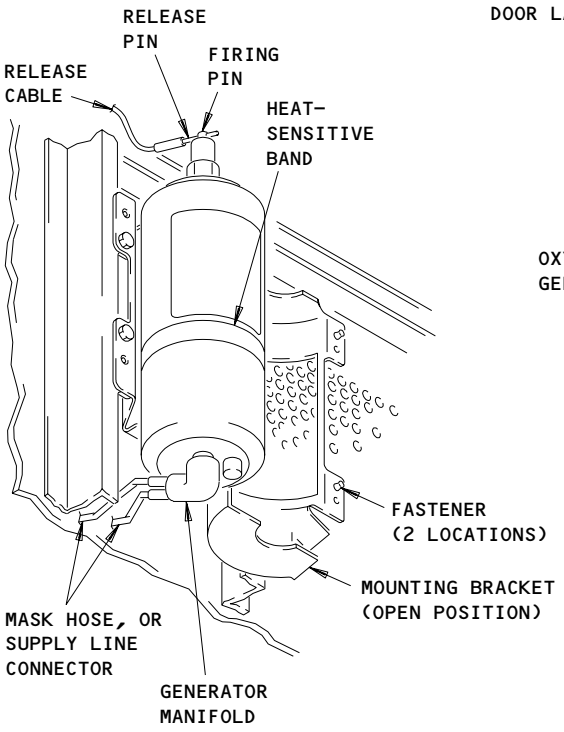
ATTENDANT SERVICE UNIT (ASU) (EXAMPLE)



OVER-DOOR PASSENGER SERVICE UNIT (PSU) (EXAMPLE)

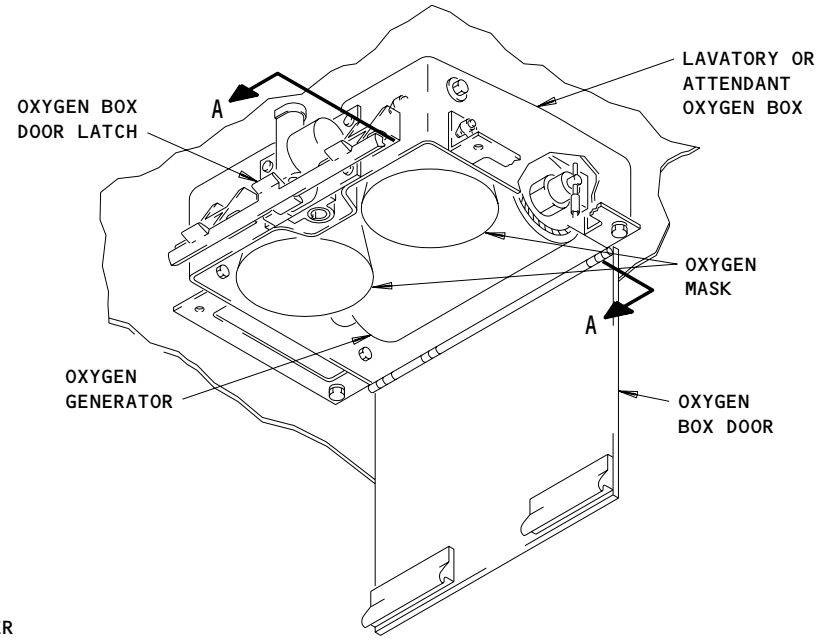
1 GUI 115
2 GUI 001–011, 115

Oxygen Generator
Figure 401 (Sheet 1)

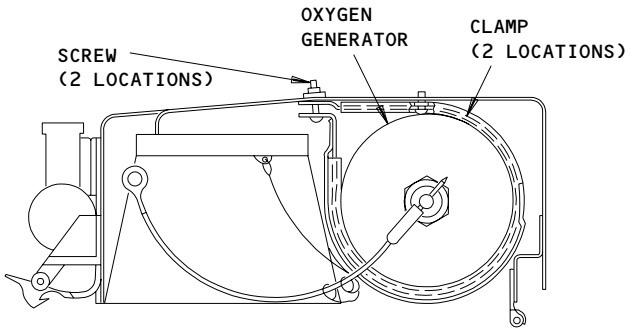


PASSENGER OXYGEN GENERATOR

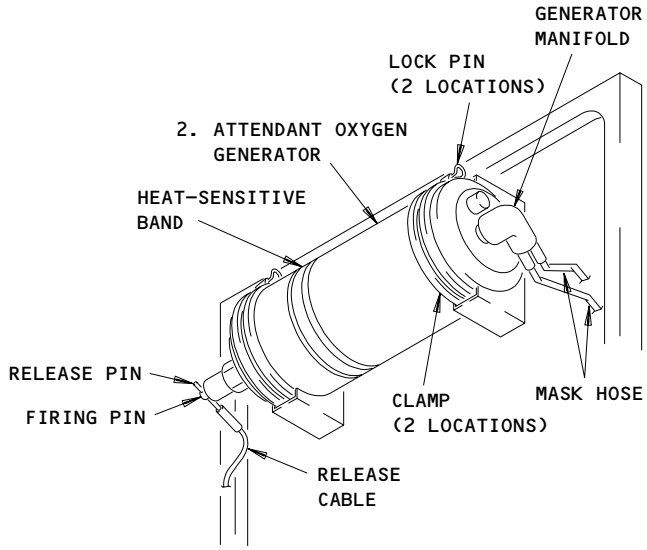
(A)



LOWERED CEILING ASU OR LSU (EXAMPLE)



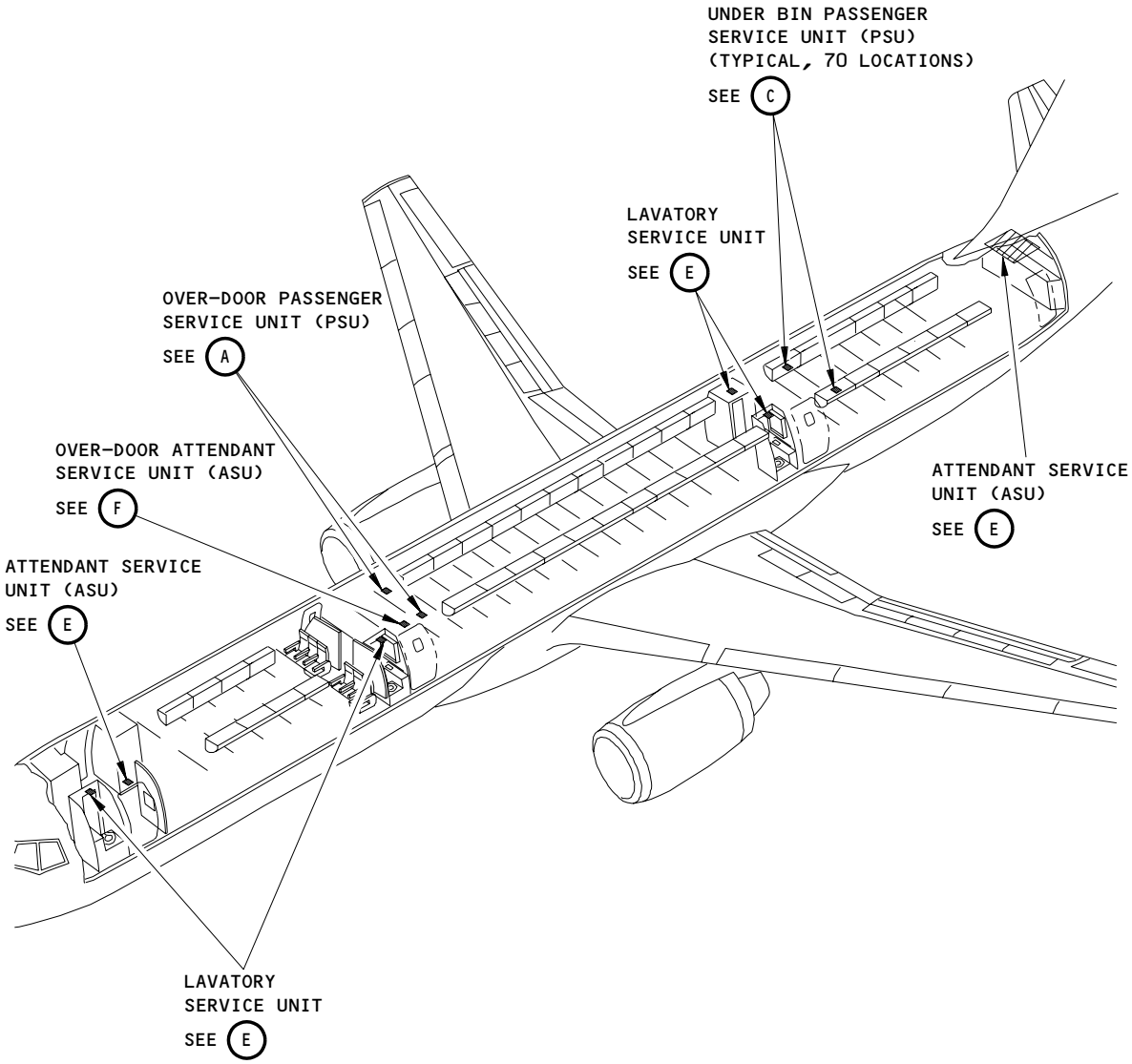
A-A



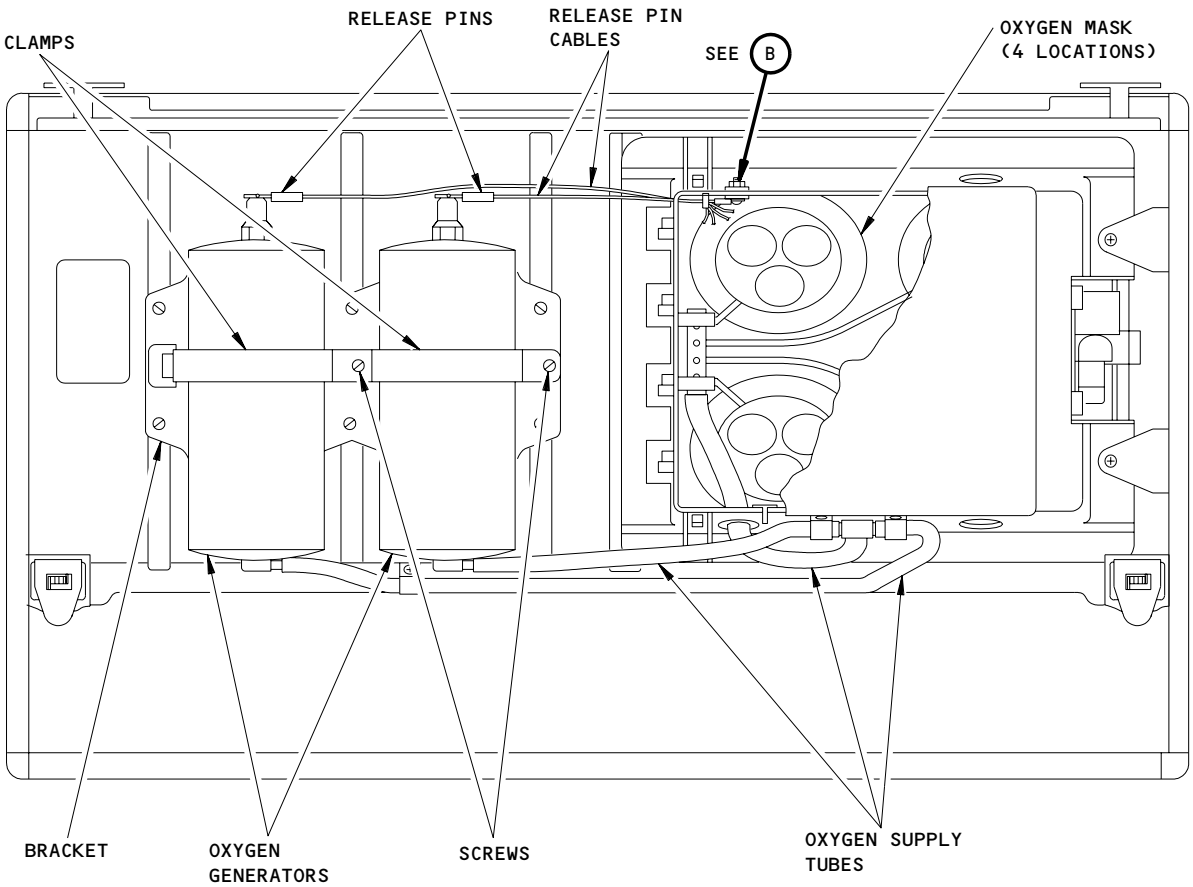
ATTENDANT OXYGEN GENERATOR

(B)

Oxygen Generator
Figure 401 (Sheet 2)

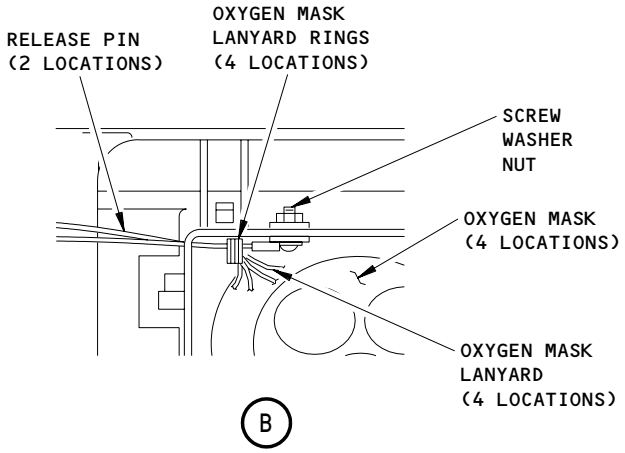


Oxygen Generator - Removal/Installation
Figure 401A (Sheet 1)



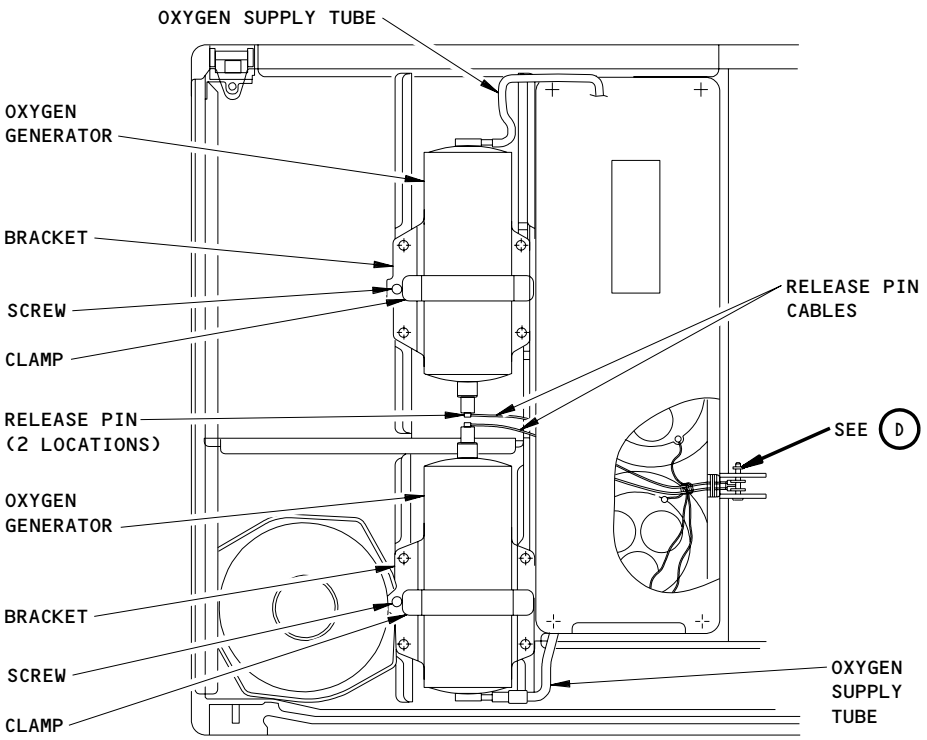
OVER-DOOR PASSENGER SERVICE UNIT (PSU)
(EXAMPLE)

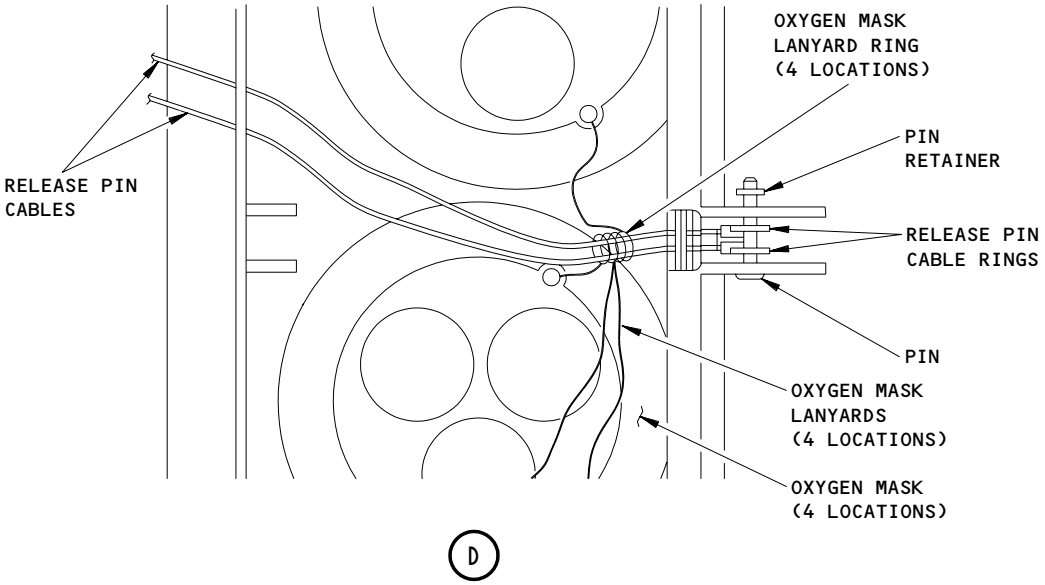
A



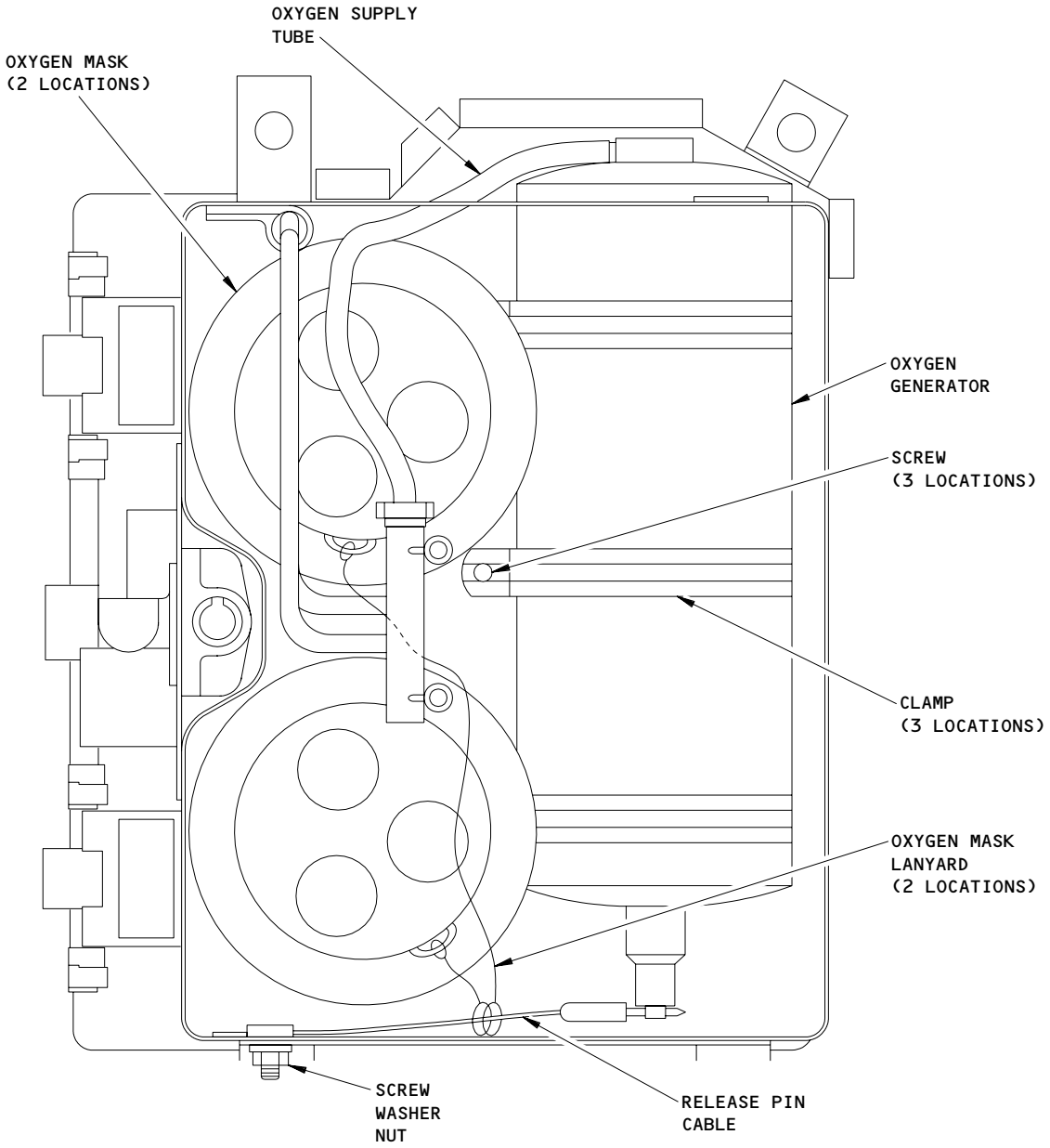
B

Oxygen Generator - Removal/Installation
Figure 401A (Sheet 2)





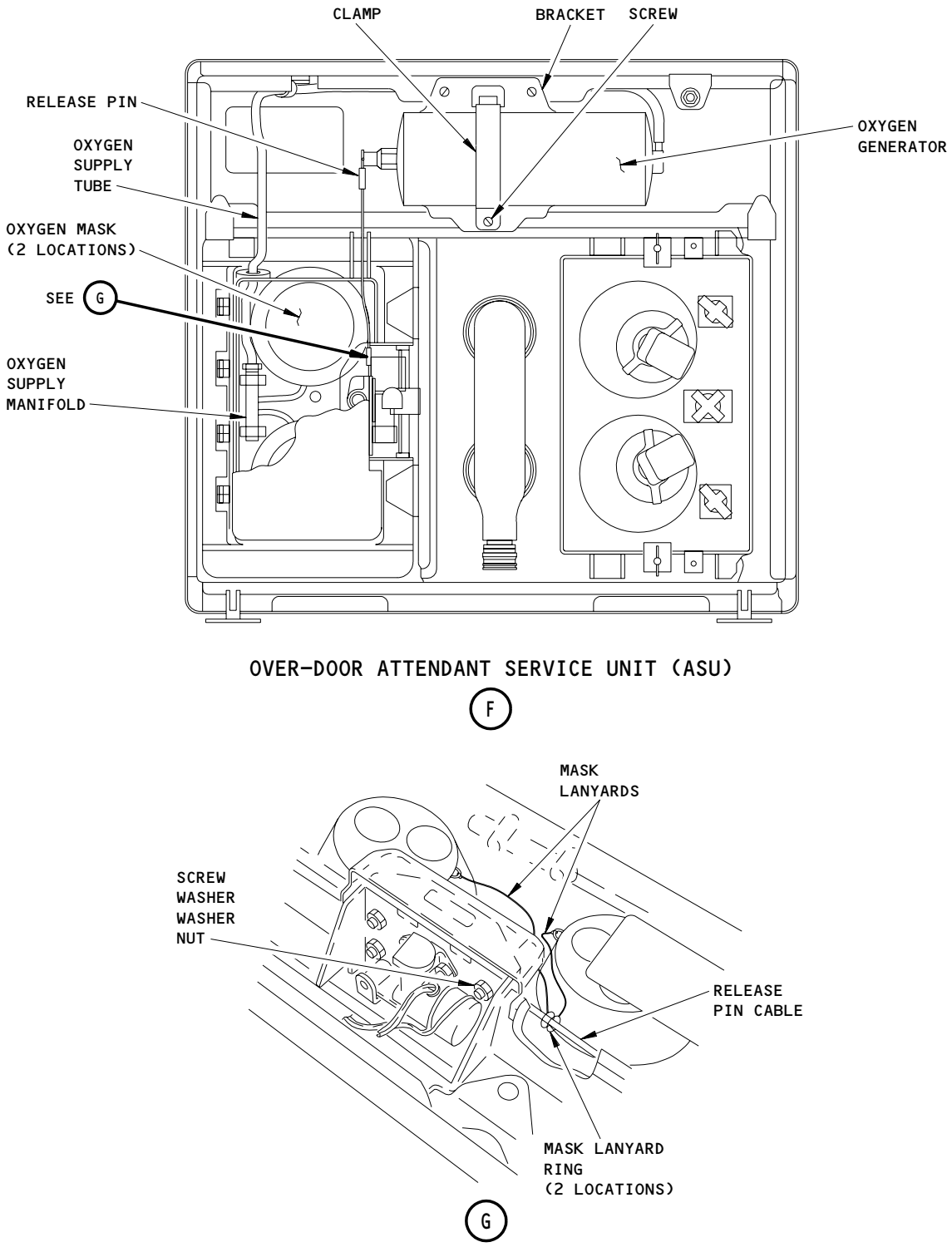
Oxygen Generator - Removal/Installation
Figure 401A (Sheet 3)



ATTENDANT SERVICE UNIT (ASU)
(ATTENDANT SERVICE UNIT SHOWN, LAVATORY SERVICE UNIT IS EQUIVALENT)

E

Oxygen Generator - Removal/Installation
Figure 401A (Sheet 4)



Oxygen Generator - Removal/Installation
Figure 401A (Sheet 5)

(c) Put the 1/8-inch rod into the other latch access hole.
(d) Push the 1/8-inch rod to release the door latch.

S 014-004
(3) Open the oxygen box door of an ASU or an LSU that is in the ceiling as follows:
(a) Put a flat tool between the door and the ceiling.
(b) Push the flat tool to release the door latch.

S 214-005
(4) Examine the heat-sensitive band on the oxygen generator to find if it is black.

NOTE: If it is black, the oxygen generator has fired.

S 914-072

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THE RELEASE PIN OR SAFETY PIN WITH THE WARNING FLAG IS INSTALLED ON THE GENERATOR. IF THE RELEASE PIN OR SAFETY PIN IS REMOVED AND THE GENERATOR FIRES, THE GENERATOR SURFACE TEMPERATURE WILL GET HOT (450 DEGREES F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

WARNING: MAKE SURE YOU OBEY ALL APPLICABLE REGULATORY REQUIREMENTS FOR THE TRANSPORT OF OXYGEN GENERATORS. IF THE SERVICE LIFE OF THE GENERATORS HAS EXPIRED, YOU MUST DISCHARGE THE GENERATORS TO MAKE SURE THE OXIDIZER CORE IS EMPTY. THIS MUST BE DONE BEFORE PREPARING THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT DISCHARGED AND EMPTY, THEY COULD ACCIDENTALLY DISCHARGE DURING TRANSPORT AND IGNITE A FIRE. THIS COULD CAUSE DEATH OR INJURY TO PERSONS.

CAUTION: YOU MUST BE VERY CAREFUL WHEN YOU HANDLE OXYGEN GENERATORS. DO NOT APPLY FORCE TO AN OXYGEN GENERATOR OR LET IT FALL. THESE ACTIONS CAN PREVENT THE OPERATION OF THE OXYGEN GENERATOR.

DO NOT TRY TO REMOVE THE FIRING MECHANISM FROM THE OXYGEN GENERATOR. IT CANNOT BE ASSEMBLED AGAIN.

(5) Deactivate the oxygen generator that has not been fired (AMM 35-21-04/201).

S 914-073
(6) After the oxygen generator has been deactivated, carefully remove the release pin.

S 034-007
(7) Disconnect the mask hoses from the manifold on the oxygen generator.

C. Procedure - Remove the Oxygen Generator

S 844-029
(1) Do the Prepare to Remove the Oxygen Generator procedure.

S 024-080
(2) GUI 001-004, 006, 007, 009-011;
GUI 005, 008, PRE SB 35-0030;
Remove a passenger oxygen generator (1) from a PSU that is below a stowage bin as follows:
(a) Remove the mounting bracket fasteners.
(b) Remove the mounting bracket.
(c) Remove the passenger oxygen generator (1).

S 024-084
(3) GUI 001-004, 006, 007, 009-011;
GUI 005, 008, PRE SB 35-0030;
Remove an attendant oxygen generator (2) from an ASU that is below a stowage bin as follows:
(a) Remove the lock pins from the clamps.
(b) Pull the generator clamps away from the attendant oxygen generator (2).
(c) Remove the attendant oxygen generator (2).

S 024-085
(4) GUI 001-004, 006, 007, 009-011;
GUI 005, 008, PRE SB 35-0030;
Remove an attendant oxygen generator (2) from an ASU that is in the ceiling as follows:
(a) Remove the generator shield screws.
(b) Remove the generator shield.
(c) Remove the attendant oxygen generator (2).

S 024-086

(5) GUI 001-004, 006, 007, 009-011;
GUI 005, 008, PRE SB 35-0030;
Remove a lavatory oxygen generator (3) from an LSU as follows:
(a) Remove the generator shield screws.
(b) Remove the generator shield.
(c) Remove the lavatory oxygen generator (3).

S 024-083

(6) GUI 005, 008, POST SB 35-0030;
Remove the passenger oxygen generator(s) from a LSU, ASU, or a PSU as follows (Fig. 401A):
(a) Disconnect the screw(s) that attach the generator clamp(s) to the bracket(s) or to the oxygen box, as applicable.
1) For the passenger service unit and the attendant overdoor service unit, pull the hinged clamp away from the generator(s).
(b) Remove the oxygen generator(s).
1) Remove the clamps from the lavatory or attendant service unit oxygen generator, and keep the clamps. You will use the clamps to install the oxygen generator.

S 024-039

(7) GUI 115;
Remove the sustaining oxygen generators (4) from a PSU as follows:
(a) Remove the wing nut from the clamp.
(b) Remove the clamp.
(c) Remove the sustaining oxygen generators (4).

TASK 35-21-04-404-013

3. Install the Oxygen Generator (Fig. 401)

A. Access
(1) Location Zones
200 Upper Half of the fuselage

B. Procedure - Install the Oxygen Generator

S 214-067

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THE RELEASE PIN OR SAFETY PIN WITH THE WARNING FLAG IS INSTALLED ON THE GENERATOR. IF THE RELEASE PIN OR SAFETY PIN IS REMOVED AND THE GENERATOR FIRES, THE GENERATOR SURFACE TEMPERATURE WILL GET HOT (450 DEGREES F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

CAUTION: YOU MUST BE VERY CAREFUL WHEN YOU HANDLE OXYGEN GENERATORS. DO NOT APPLY FORCE TO AN OXYGEN GENERATOR OR LET IT FALL. THESE ACTIONS CAN PREVENT THE OPERATION OF THE OXYGEN GENERATOR.

DO NOT TRY TO REMOVE THE FIRING MECHANISM FROM THE OXYGEN GENERATOR. IT CANNOT BE ASSEMBLED AGAIN.

(1) Do these checks to find if the replacement generator has fired:
   (a) If the color band on the generator is black, the generator has fired.
   (b) If the firing pin is in the fired position (you cannot install the safety pin), the generator has fired.

S 044-062

(2) Deactivate the oxygen generator, if it has not been fired (AMM 35-21-04/201).

S 424-087

(3) GUI 001-004, 006, 007, 009-011;
GUI 005, 008, PRE SB 35-0030;
Install a passenger oxygen generator (1) in a PSU that is below a stowage bin as follows:
   (a) Put the passenger oxygen generator (1) in position.

NOTE: Some PSU's contain a placard, which specifies the location to align the release pin. If the placard is installed, alight the release pin between the arrows on the placard. If the placard is not installed, center the release pin above the top of the No Smoking/ Fasten Seat Belt Lamp Housing Assembly.

(b) Put the mounting bracket in position.
(c) Install the mounting bracket fasteners.

S 424-092
(4) GUI 001-004, 006, 007, 009-011;
GUI 005, 008, PRE SB 35-0030;
Install an attendant oxygen generator (2) in an ASU that is below a stowage bin as follows:
(a) Put the attendant oxygen generator (2) in position.

NOTE: Some PSU's contain a placard, which specifies the location to align the release pin. If the placard is installed, align the release pin between the arrows on the placard. If the placard is not installed, center the release pin above the top of the No Smoking/ Fasten Seat Belt Lamp Housing Assembly.

(b) Put the clamps in position.
(c) Install the lock pins that hold the clamps to the ASU.

S 424-088
(5) GUI 001-004, 006, 007, 009-011;
GUI 005, 008, PRE SB 35-0030;
Install an attendant oxygen generator (2) in an ASU that is in the ceiling as follows:
(a) Put the attendant oxygen generator (2) in position.

NOTE: Some PSU's contain a placard, which specifies the location to align the release pin. If the placard is installed, align the release pin between the arrows on the placard. If the placard is not installed, center the release pin above the top of the No Smoking/Fasten Seat Belt Lamp housing assembly.

(b) Put the generator shield in position.
(c) Install the generator shield screws.

S 424-089
(6) GUI 001-004, 006, 007, 009-011;
GUI 005, 008, PRE SB 35-0030;
Install a lavatory oxygen generator (3) in an LSU that is in the ceiling as follows:
(a) Put the lavatory oxygen generator (3) in position.

NOTE: Some PSU's contain a placard, which specifies the location to align the release pin. If the placard is installed, align the release pin between the arrows on the placard. If the placard is not installed, center the release pin above the top of the No Smoking/Fasten Seat Belt Lamp Housing Assembly.

(b) Put the generator shield in position.
(c) Install the generator shield screws.

S 424-091
(7) GUI 005, 008, POST SB 35-0030;
Do these steps to install the 22 minute oxygen generator(s) in the passenger service units, lavatory service units, or the attendant service units (Fig. 401A):

NOTE: Make sure you install the oxygen generator part number specified by the airplane AIPC for the specific passenger, lavatory, or attendant service unit. The 757 airplanes use either a 12 or 22 minute oxygen generator. Additionally, different generators are specified for the two, three, and four mask service units.

(a) For the ASU and LSU oxygen generator only, put the clamps in their position on the oxygen generator.
(b) Put the oxygen generator(s) in its position in the applicable service unit
NOTE: Some PSU's contain a placard, which specifies the location to align the release pin. If the placard is installed, align the release pin between the arrows on the placard. If the placard is not installed, center the release pin above the top of the No Smoking/Fasten Seat Belt Lamp housing assembly.

1) For the Passenger Service unit and overdoor attendant service unit, put the hinged clamps in their closed positions on the oxygen generator(s) and bracket(s).
(c) Install the screw(s) that attach the clamp(s) to the bracket, or the oxygen box, as applicable.

S 424-040
(8) GUI 115;
Install the sustaining oxygen generators (4) in a PSU as follows:
(a) Put the sustaining oxygen generators (4) in position.

NOTE: Some PSU's contain a placard, which specifies the location to align the release pin. If the placard is installed, align the release pin between the arrows on the placard. If the placard is not installed, center the release pin above the top of the No Smoking/Fasten Seat Belt Lamp Housing Assembly.

(b) Put the clamp in position.
(c) Install the wing nut.

C. Procedure - Put the Airplane Back to Its Initial Condition

S 434-076

(1) Connect the mask hoses to the generator manifold.

NOTE: If the mask hose attaches directly to the generator, and the the generator has fired, cut one-inch off the free end of the mask hose. Do this before you attach the hose to the generator.

S 214-023

WARNING: MAKE SURE THE RING ON THE END OF EACH MASK LANYARD HAS TWO FULL COILS. IF A RING HAS LESS THAN TWO COILS, THE RING CAN COME APART FROM THE RELEASE PIN CABLE. THE OXYGEN GENERATOR WILL NOT OPERATE IN AN EMERGENCY IF THE RELEASE PIN IS NOT PULLED OUT BY THE RELEASE PIN CABLE.

(2) Make sure the ring on the end of each mask lanyard has two full coils.

NOTE: Discard the rings with less than two coils.

S 434-026

(3) Put the release cable through the ring that is on the end of each mask lanyard.

NOTE: Make sure you include all of the mask lanyard rings on the release cable.

S 014-074

CAUTION: IN ADDITION TO THE SAFETY PIN, A SECONDARY SAFETY DEVICE IS USED FOR THE TRANSPORT OF THE SPARE OXYGEN GENERATOR. THIS SECONDARY SAFETY DEVICE MUST BE REMOVED FROM THE FIRING PIN'S RELEASE PIN HOLE, BEFORE THE RELEASE PIN CAN BE INSTALLED.

FAILURE TO DO SO COULD PREVENT THE OXYGEN GENERATOR FROM PROPERLY ACTIVATING WHEN OXYGEN MASK'S ARE DEPLOYED.

(4) Remove the secondary safety device, if installed, from the release pin hole in the firing pin.

NOTE: The release pin hole is the larger of the two holes on the firing pin of the oxygen generator.

S 214-068

CAUTION: MAKE SURE THAT THE RELEASE PIN IS INSTALLED IN THE LARGER OF THE TWO HOLES, AND THAT THE SAFETY PIN IS INSTALLED IN THE SMALLER OF THE TWO HOLES IN THE FIRING PIN.

FAILURE TO DO SO COULD PREVENT THE OXYGEN GENERATOR FROM PROPERLY ACTIVATING WHEN OXYGEN MASKS ARE DEPLOYED.

(5) Install the release pin through the larger of the two holes in the oxygen generator firing pin.

S 914-075

(6) Do the oxygen generator activation procedure (AMM 35-21-04/201).

S 414-024

(7) Close the PSU, the ASU, or the LSU as necessary.

S 864-025

(8) Remove DO-NOT-CLOSE tags and close these circuit breakers on the P11 panel:
(a) 11A24 (or 11A25), PASSENGER OXYGEN CONT
(b) 11A25 (or 11A26), PASSENGER OXYGEN MANUAL DEPLOY

PASSENGER OXYGEN MASKS - MAINTENANCE PRACTICES

1. General
   A. Do this procedure when you pack a passenger oxygen mask that was deployed. When you do this procedure the oxygen box must be fully and correctly installed.

TASK 35-21-05-402-001

2. Pack the Passenger Oxygen Masks
   A. References
      (1) AMM 35-21-04/401, Oxygen Generator
   B. Access
      (1) Location Zones
          200 Upper Half of the Fuselage

   C. Procedure - Repack the Oxygen Masks

S 442-002

(1) Examine the door latch actuator to find if the plunger is out. If the plunger is out, push the reset lever to reset the actuator (View C, Fig. 201).

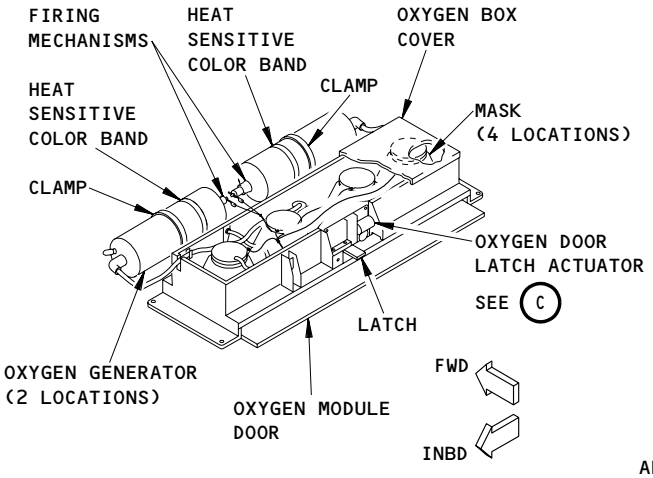
S 422-005

(2) For the PSU primary oxygen masks or the sustaining (therapeutic) oxygen masks, if they are installed, do the steps that follow:
   (a) Lower the PSU.
   (b) Remove the cover from the oxygen box.
   (c) Remove the cover from the primary oxygen box (Fig. 201) or from the sustaining (therapeutic) oxygen box (Fig. 203).
   (d) Carefully pull the masks up through the oxygen box.
   (e) Close and latch the oxygen box door.

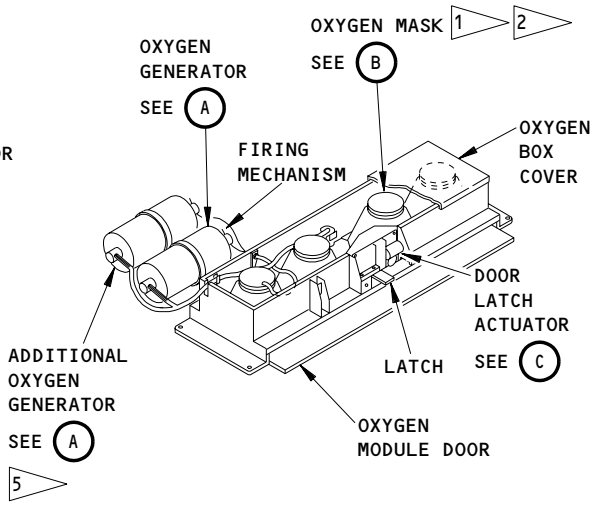
S 212-006

(3) Make sure the generator did not fire.

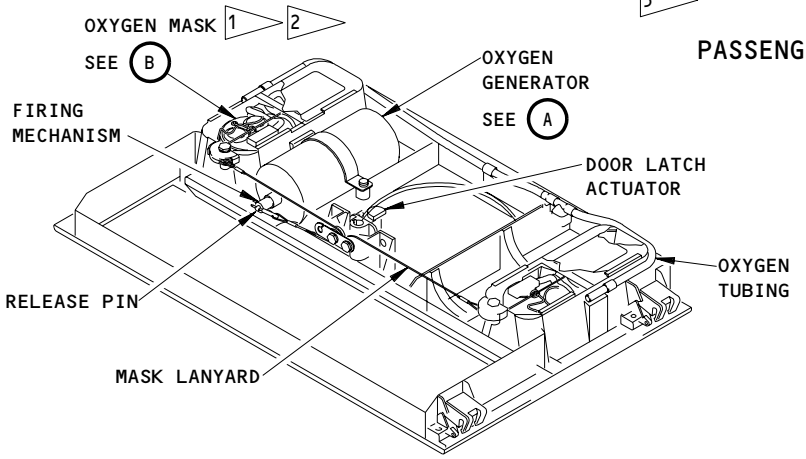
NOTE: If the release pin is pulled from the generator firing mechanism or the heat-sensitive band on the generator is black, the generator fired. You must replace the generator before you repack the mask (Ref 35-21-04).



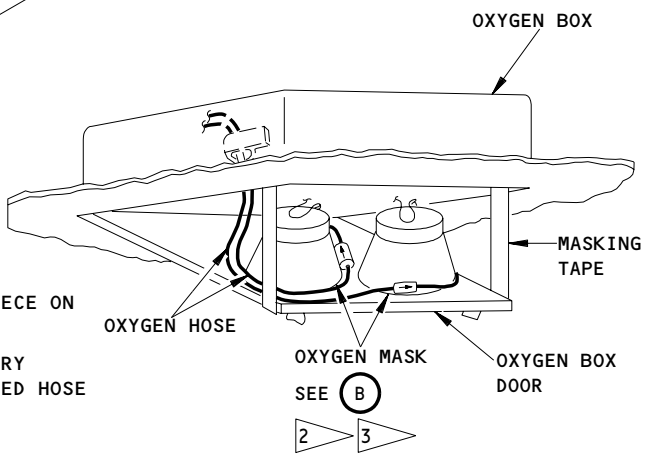
PASSENGER SERVICE UNIT (PSU)
OXYGEN MODULE 7



PASSENGER SERVICE UNIT (PSU)
OXYGEN MODULE 4



PASSENGER SERVICE UNIT (PSU)
OXYGEN MODULE 6



ATTENDANT AND LAVATORY
OXYGEN BOX

1 > THE NUMBER OF MASKS IN EACH OXYGEN BOX IS NOT ALWAYS THE SAME

2 > INSTALL THE OPEN END OF THE OXYGEN MASK FACEPIECE ON THE SIDE OF THE OXYGEN BOX THAT HAS THE DOOR

3 > FOLD THE PULL STREAMERS THAT ARE ON THE LAVATORY OXYGEN MASKS. PUT THEM ON THE TOP OF THE COILED HOSE

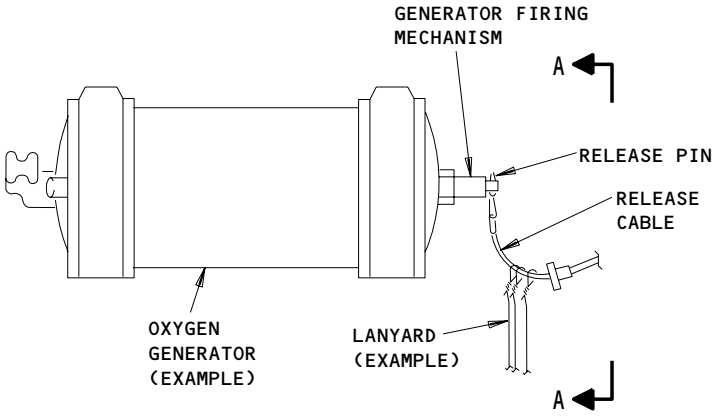
4 > GUI 005, 008 PRE-SB 35-0030;
GUI 001-004, 006, 009-011

5 > GUI 115

6 > GUI 012-114,116-999

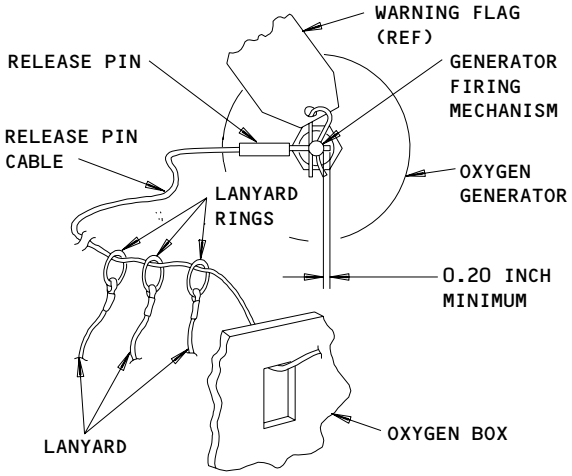
7 > GUI 005, 008 POST-SB 35-0030

Passenger Oxygen Mask Repacking Procedure
Figure 201 (Sheet 1)

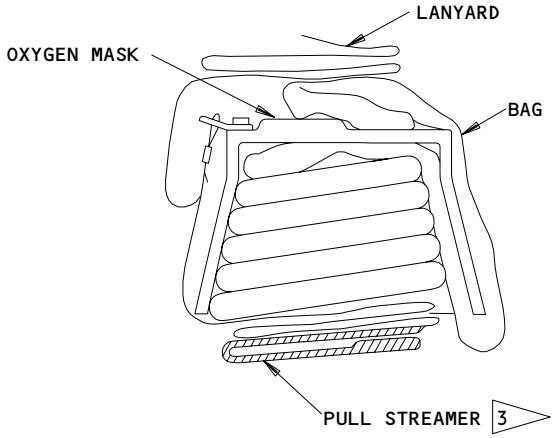


OXYGEN GENERATOR

A

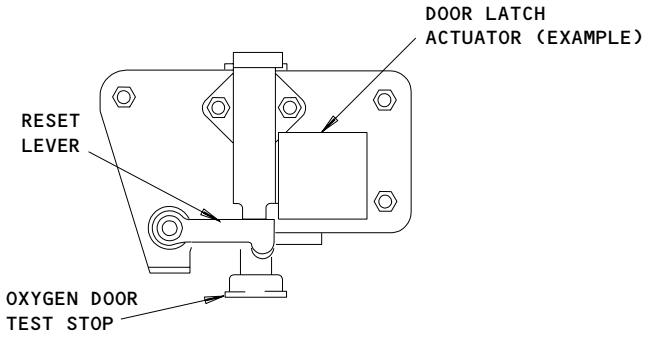


A-A



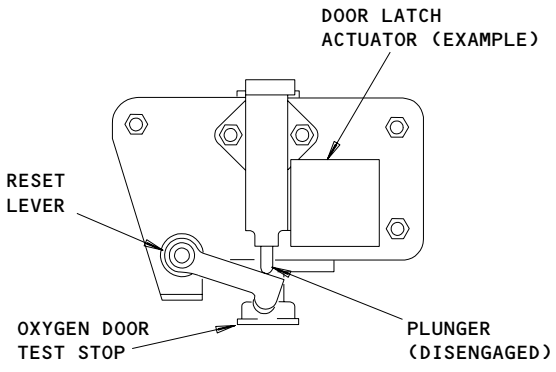
OXYGEN MASK

B



DOOR LATCH ACTUATOR IN RESET POSITION

C



DOOR LATCH ACTUATOR IN FIRED POSITION

C

Passenger Oxygen Mask Repacking Procedure
Figure 201 (Sheet 2)

S 212-008

WARNING: MAKE SURE THE RING ON THE END OF EACH MASK LANYARD HAS 2.0 COILS. IF THE RING HAS LESS THAN 2.0 COILS, THE OXYGEN GENERATOR WILL NOT OPERATE IN AN EMERGENCY.

(4) Make sure the ring on the end of each mask lanyard has 2.0 coils (View A-A, Fig. 201).

NOTE: If the ring has 1.5 coils, replace the ring.

S 212-009

(5) Make sure the release pin is threaded through the lanyard rings and is installed in the generator firing mechanism (View A, Fig. 201).

S 212-022

(6) Make sure the release pin is installed through the larger of the two holes in the firing pin as shown (View A-A, Fig. 201).

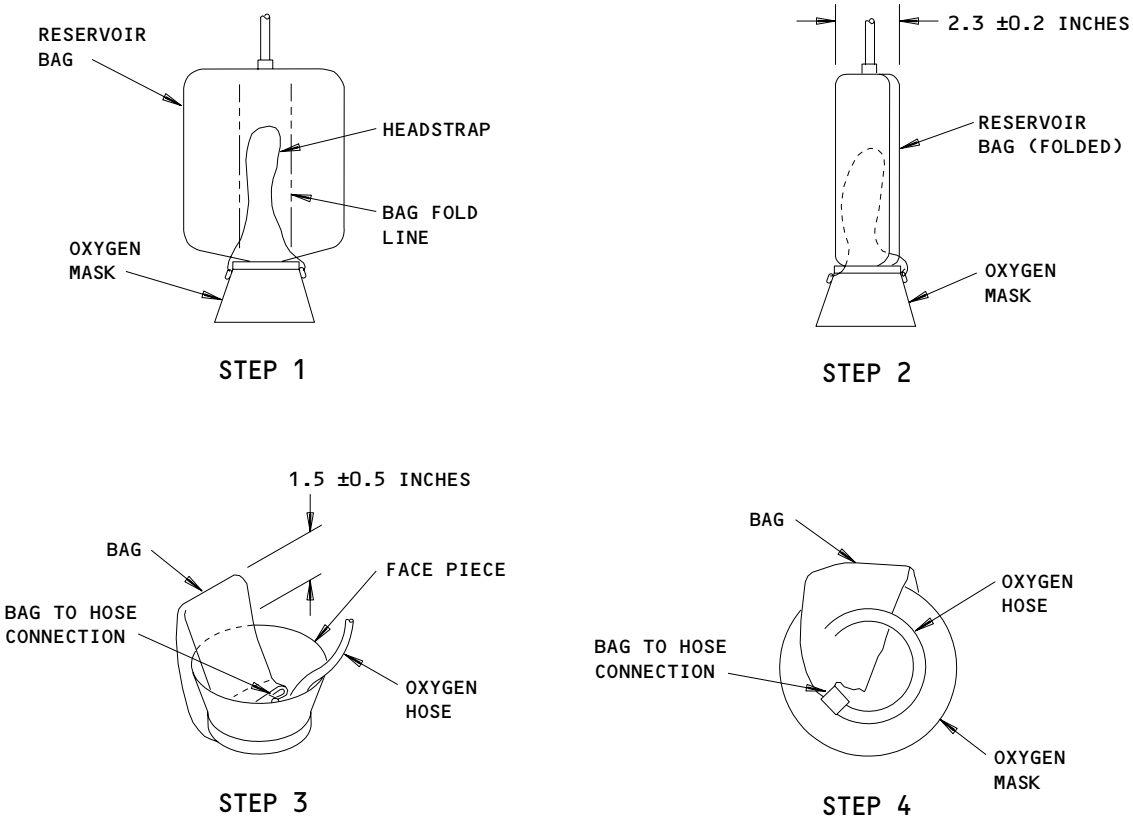
S 212-014

(7) Examine the masks to make sure the masks are serviceable before you pack them.

S 422-015

CAUTION: DO NOT PULL ON THE LANYARDS WHEN YOU PACK THE MASK. IF YOU PULL ON THE LANYARDS, YOU WILL CAUSE THE OXYGEN GENERATOR TO FIRE. IF THE GENERATOR FIRES, DO NOT CONTINUE WORK OR TRY TO REMOVE GENERATOR UNTIL THE GENERATOR BECOMES COOL. A FIRED GENERATOR GETS VERY HOT (475°F OR HOTTER). YOU WILL GET AN INJURY IF YOU TOUCH A HOT GENERATOR.

(8) Fold the masks and put the oxygen hoses in coils as follows (Fig. 202):
   (a) Separate all the lanyards and hoses.
   (b) Unfold and flatten the reservoir bag. Put the headstrap on the reservoir bag (Step 1, Fig. 202).
   (c) Fold the bag in thirds, lengthwise, over the headstrap (Step 2, Fig. 202).
   (d) Wrap the folded reservoir bag up the side of the facepiece and put it on the facepiece. Make sure the bag-to-hose connection in the center and bottom of the facepiece (Step 3, Fig. 202).



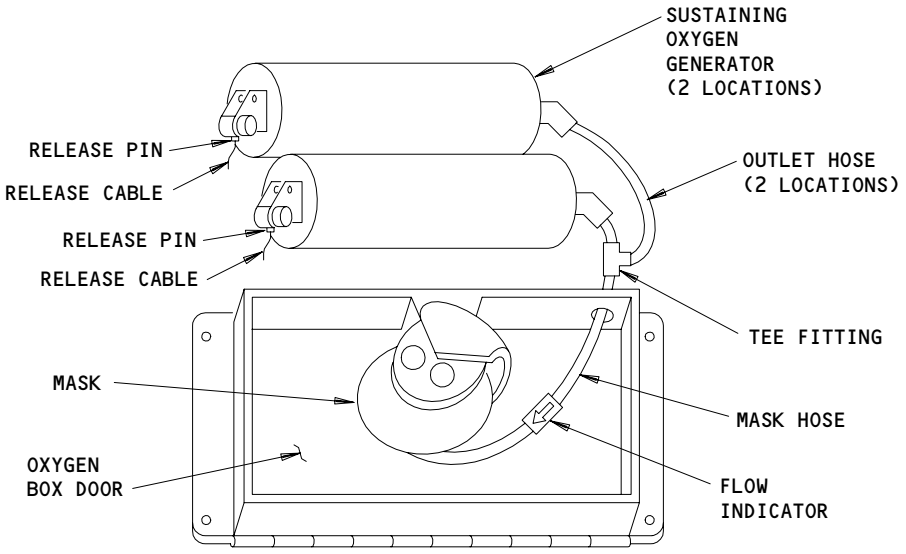
Oxygen Mask Folding and Hose Coiling Procedure
Figure 202

(e) Push the bag-to-hose connection to the left side of the facepiece. Start coiling the hose counterclockwise on the top of the bag (Step 4, Fig. 202). Coil the hose to the flow indicator.

NOTE: Press the hose firmly down and against the inside wall of the facepiece to get the correct coils in the hose. Keep the hose coil in the envelope of the facepiece.

(f) If the mask has a lanyard attached to the hose, put the lanyard over the facepiece (Step 5, Fig. 202).
(g) If the mask has a lanyard attached to the mask facepiece, leave the lanyard out of the mask (Step 5, Fig. 202).

S 422-018
(9) For the flight attendant and lavatory oxygen masks, do the steps that follow (Fig. 201):
(a) Hold the oxygen box door in the half-closed position. Apply the masking tape to hold it in that position.
(b) Turn the masks until the closed end of the mask facepieces are up (View B, Fig. 201).
(c) For the lavatory masks, if a PULL streamer is attached, coil the streamer and put it under the mask (View B, Fig. 201).
(d) Move the masks on to the door.



SUSTAINING (THERAPEUTIC) OXYGEN BOX
SHOWN WITH THE COVER REMOVED

Mask and Hose
Figure 203

(e) Make sure the masks do not keep the door from closing. If it is necessary, move the masks to a new place on the door.
(f) Make sure the hoses are not bent too much or crimped.
(g) Make sure the mask lanyards are not wrapped around a hose, elastic band, end clip, or other object.
(h) Put the remaining length of the lanyard on the top of the mask facepiece.
(i) Remove the masking tape, and close the oxygen box door.

S 422-019
(10) For the PSU oxygen masks, do the steps that follow (Fig. 201):
(a) Turn the masks until the closed end of the mask facepieces are up (View B, Fig. 201).
(b) Put the masks on the top of the oxygen box door.
(c) Turn the mask to a position that will make sure that there is a smooth radius.
(d) Make sure the masks do not keep the door from closing. If it is necessary, move the masks on the door.
(e) Make sure the hoses are not bent too much or crimped.
(f) Make sure the mask lanyards are not wrapped around a hose, elastic band, end clip, or other object.
(g) Put the remaining lanyard on the top of the mask facepiece.
(h) Make sure that no part of the mask or the reservoir bag goes over the manifold or the cable.
(i) Install the cover on the oxygen box.
(j) Close the PSU.

S 422-021
(11) AIRPLANES WITH SUSTAINING (THERAPEUTIC) OXYGEN MASKS;
To pack a sustaining (therapeutic) oxygen mask,
do the steps that follow:
(a) Invert the mask.
(b) Put the mask on the top of the oxygen box door.
(c) Put the remaining lanyard on the top (closed end) of the mask.
(d) Make sure there are no sharp bends or crimps in the oxygen hose.
(e) Make sure that the release pins are connected to the lanyards and are installed in generator firing mechanisms as shown (View A-A, Fig. 201).
(f) Install the cover on the sustaining oxygen box.
(g) Close the PSU.

OXYGEN MASKS - REMOVAL/INSTALLATION

1. General
   A. This procedure gives the instructions for the removal and installation of the oxygen masks installed in the passenger service units (PSU). These masks are removed and installed through the open top of the mask box. These mask boxes contain three or four oxygen masks.
   B. This procedure gives the instructions for the removal and the installation of the oxygen masks installed in attendant's and lavatory mask boxes. These masks are removed and installed through the open mask box door.
   C. This procedure gives the instructions for the removal and the installation of the oxygen masks installed in the therapeutic mask boxes. These masks are removed and installed through the open top of the mask box. These mask boxes contain one oxygen mask.

TASK 35-21-05-004-002

2. Oxygen Masks in the Mask Box Removal
   A. References
      (1) AMM 35-21-04/201, Oxygen Generator - Maintenance/Practices
      (2) AMM 35-21-05/701, Passenger Oxygen Masks - Cleaning/Painting
   B. Access
      (1) Location Zone
          100 Upper Half of the Fuselage

   C. Procedure - Remove the Oxygen Masks

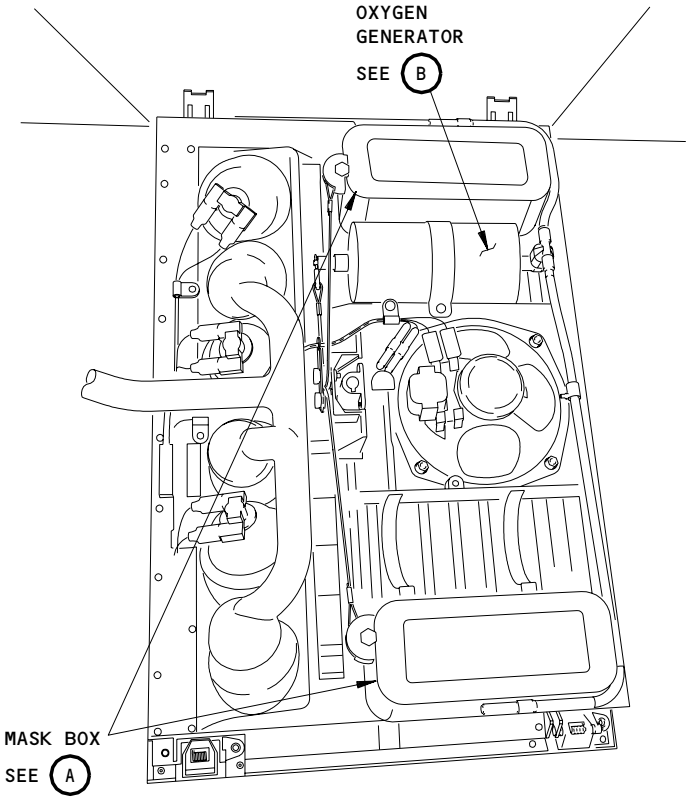
      S 424-056
      (1) Lower the passenger service unit (Fig.401)

      S 044-003
      (2) Deactivate the oxygen generator (AMM 35-21-04/201).

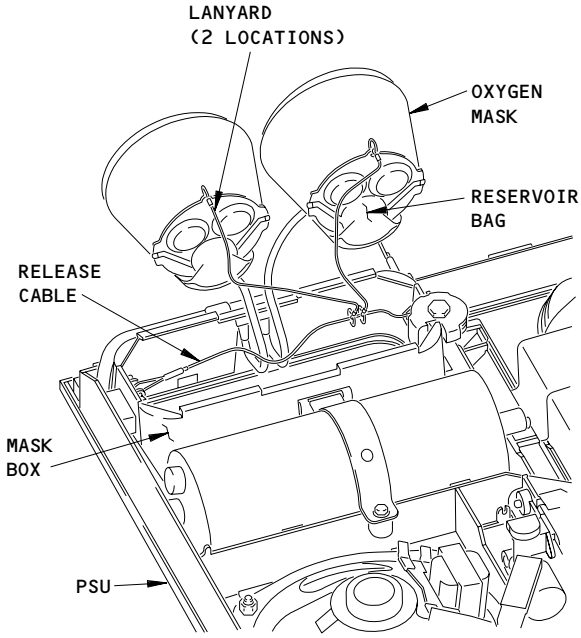
      S 034-004

      WARNING: WHEN YOU REMOVE AND INSTALL THE MASKS, DO NOT PULL THE LANYARDS. TOO MUCH PRESSURE ON THE RELEASE CABLE WILL RELEASE THE FIRING PIN AND FIRE THE GENERATOR. IF YOU PULL THE RELEASE PIN AND THE GENERATOR FIRES, THE GENERATOR TEMPERATURE CAN BE 450°F AND HIGHER. THESE HIGH SURFACE TEMPERATURES CAN CAUSE BAD BURNS. DO NOT TOUCH THE GENERATOR UNTIL IT IS COOL.

      (3) Carefully pull the release pin from the generator firing mechanism. (Fig. 401).

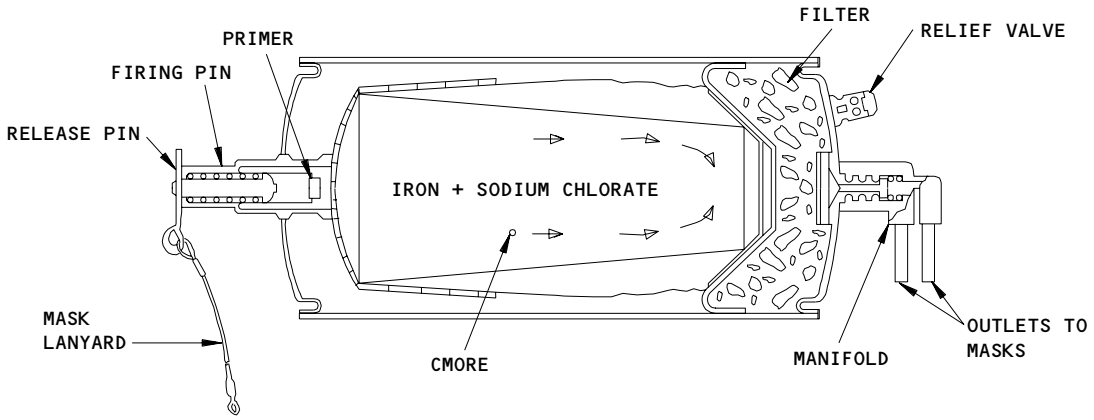


PASSENGER SERVICE UNIT (PSU)



MASK BOX

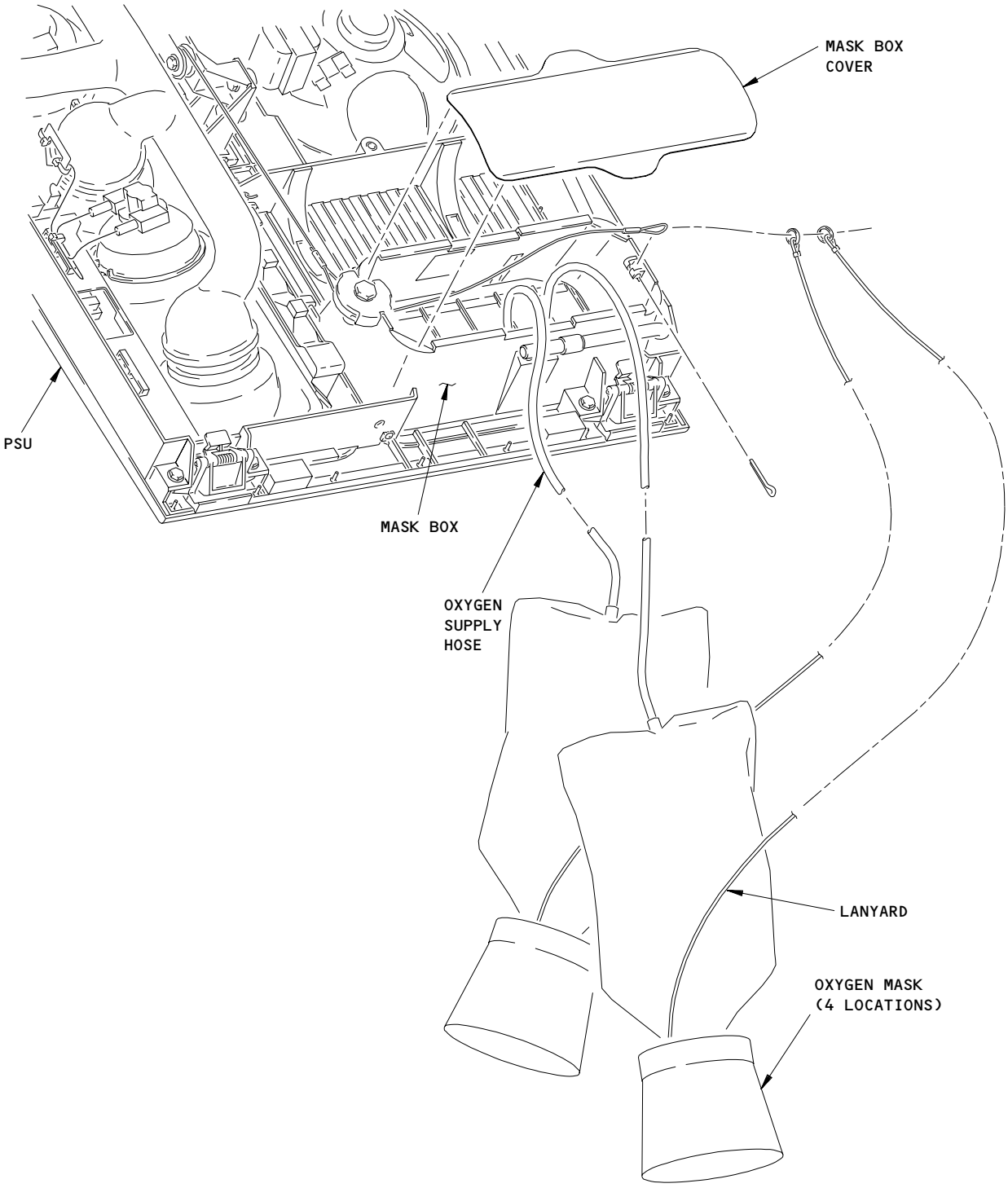
A



OXYGEN GENERATOR

B

Passenger Oxygen Masks Installation
Figure 401 (Sheet 1)



MASK BOX

Passenger Oxygen Masks Installation
Figure 401 (Sheet 2)

S 014-005
(4) To remove the mask box cover, do the step that follows:
(a) Carefully lift the cover away from the mask box.

S 824-006
(5) Pull the release cable through the slot into the mask box.

S 824-007
(6) Move the release cable through and away from the mask lanyard rings.

S 014-008
(7) Remove the mask tubing from the manifold outlets.

S 024-009
(8) Remove the masks.

S 164-010
(9) If you install the same mask, make sure you clean the masks (AMM 35-21-05/701).

TASK 35-21-05-404-012

3. Oxygen Masks in the Mask Box Installation

A. References
(1) AMM 35-21-04/201, Oxygen Generator - Maintenance/Practices
(2) AMM 35-21-05/201 Passenger Oxygen Masks - Maintenance/Practices
(3) AMM 35-21-05/701, Passenger Oxygen Masks - Cleaning/Painting
(4) AMM 20-10-26/201 Heat Guns, Soldering Guns and Soldering Irons - Maintenance/Practices

B. Access
(1) Location Zone
100 Upper Half of the Fuselage

C. Procedure - Install the Oxygen Masks

S 424-013
(1) Connect the mask tubing on the manifold outlets (Fig. 401).
(a) Push the mask tubing fully on the manifold outlets.

NOTE: If the oxygen box is not installed on the airplane a heat gun can be used to make it easier to install (AMM 20-10-26/201).

S 864-014
(2) Pack the oxygen masks (AMM 35-21-05/201).

TASK 35-21-05-004-015

4. Attendant's and Lavatory Oxygen Mask Removal

A. References

(1) AMM 35-21-04/201 Oxygen Generator - Maintenance/Practices
(2) AMM 35-21-05/201 Passenger Oxygen Masks - Maintenance/Practices
(3) AMM 35-21-04/401 Oxygen Generator - Removal/Installation
(4) AMM 35-21-05/701 Passenger Oxygen Masks - Cleaning/Painting

B. Access

(1) Location Zone
100 Upper Half of the Fuselage

C. Prepare to Remove the Oxygen Masks

S 014-017
(1) Open the attendant's oxygen mask box door. (Fig. 402):
(a) Permit the oxygen masks to fall.

S 014-020
(2) Open the door on the lavatory mask box. (Fig. 402):
(a) Permit the oxygen masks to fall.

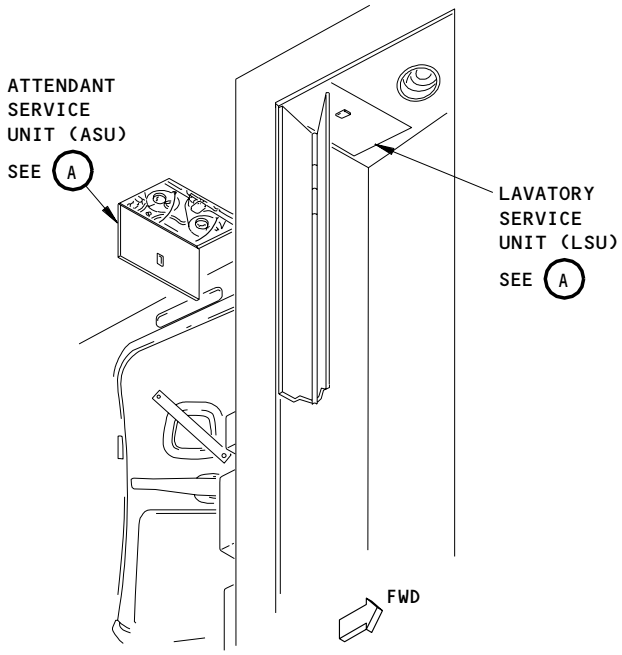
S 214-022
(3) To see if the generator fired, do the steps that follow:
(a) When fired, the heat sensitive band on the generator is a black color.
(b) When the heat sensitive band on the generator is not a black color, the generator did not fire.

S 044-023
(4) Before you install the generator that did not fire, deactivate the generator (AMM 35-21-04/201).

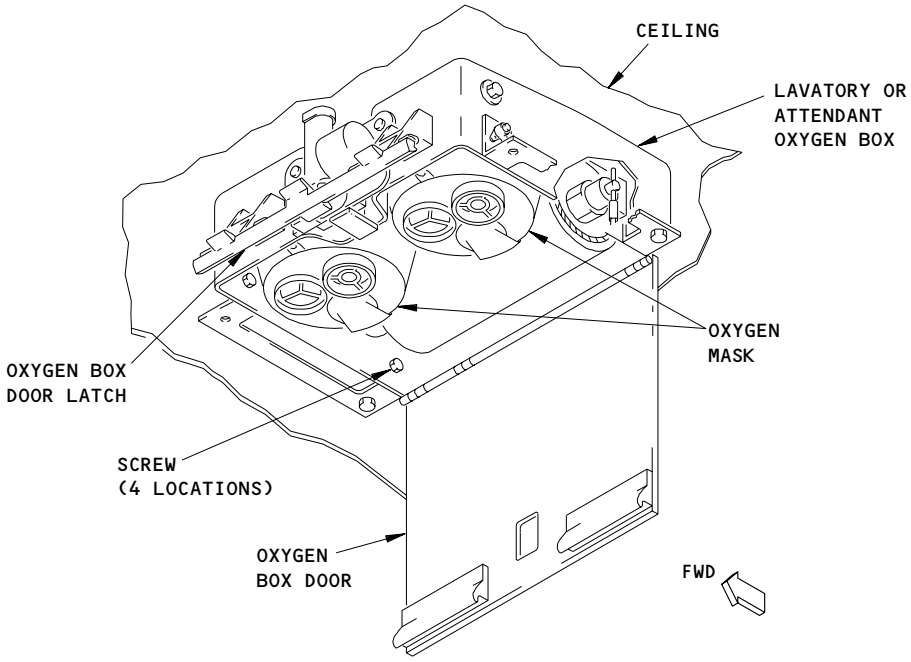
S 014-024
(5) Carefully pull the release pin from the generator firing pin (Fig. 401).

S 824-025
(6) Move the release cable through and away from the mask lanyard rings.

D. Procedure - Remove the Oxygen Masks



FORWARD ATTENDANT STATION
AND LAVATORY



SERVICE UNIT
(EXAMPLE)
A

Attendant/Lavatory Oxygen Mask Installation
Figure 402

S 034-058

WARNING: WHEN YOU REMOVE THE MASKS, DO NOT PULL THE LANYARDS. TOO MUCH PRESSURE ON THE RELEASE CABLE WILL RELEASE THE FIRING PIN AND FIRE THE GENERATOR. IF YOU PULL THE RELEASE PIN AND THE GENERATOR FIRES THE GENERATOR TEMPERATURE CAN BE 450°F AND HIGHER. THESE HIGH SURFACE TEMPERATURES CAN BURN YOU. THE GENERATOR MUST BE COOL BEFORE YOU TOUCH IT.

(1) On the masks, do the steps that follow:
  (a) Cut the tiedown strap that holds the open end of the mask tubing clamp.
  (b) Move the mask tubing apart and away from the clamp.

S 024-028
(2) Pull the mask tubing from the generator outlets.

S 024-029
(3) Remove the oxygen masks.

S 224-030
(4) If the oxygen generator fired, do the steps that follow:
  (a) Cut off one inch of the tubing end.

    NOTE: The tubing end attached to the generator outlet can increase in dimension if the generator fires. The mask tubing end can be cut off three times and have sufficient length to be installed.

  (b) Remove the oxygen generator (AMM 35-21-04/401).

S 164-031
(5) Clean the oxygen masks (AMM 35-21-05/701).

S 354-032
(6) If the lavatory or the attendant masks have a PULL streamer and the masks are discarded, do the steps that follow:
  (a) Cut the cord that attaches the PULL streamer to the oxygen mask.
  (b) Keep the PULL streamer for installation.

TASK 35-21-05-404-033

5. Attendant's and Lavatory Oxygen Mask Installation

A. Equipment
  (1) Cord - MIL-C-5040 Type 1, 1/16 diameter (AMM 20-30-07/201)

(2) Tiedown Strap - MS3367-4-9
(3) Strap Installation Tool - MS90387-1
(4) Sleeve - BACS13S128C
(5) Sleeve - MS51844-82
(6) Sleeve Installation Tool - 51-C-887 from National Telephone Supply Company; 5100 Superior Ave., Cleveland, Ohio, 44183

B. References
(1) AMM 35-21-04/201 Oxygen Generator - Maintenance/Practices
(2) AMM 35-21-05/201 Passenger Oxygen Masks - Maintenance/Practices
(3) AMM 35-21-04/401 Oxygen Generator - Removal/Installation
(4) AMM 35-21-05/701 Passenger Oxygen Masks - Cleaning/Painting

C. Access
(1) Location Zone
100 Upper Half of the Fuselage

D. Prepare to Install the Oxygen Masks

S 414-060
(1) If a PULL streamer was originally installed and no PULL streamer is attached to the lavatory or attendant oxygen mask, do the step that follows:
(a) Install the PULL streamer.

S 424-035
(2) If you remove the oxygen generator, install a generator that did not fire (AMM 35-21-04/401).
(a) Do not activate the generator.

E. Procedure - Install the Oxygen Masks

S 434-036
(1) Connect the mask tubing on the generator outlets.

S 434-037
(2) Push the tubing fully on the outlets.

S 434-040
(3) On the masks, do the steps that follow:
(a) Put each of the mask tubes in the clamp.
(b) Make sure that each mask tube has a smooth bend radius and has no kinks or sharp bends.
(c) Use a strap installation tool to install a tiedown strap through the slot in the clamp.

S 864-042

(4) Put the release pin through the ring that is on the end of each mask lanyard.

NOTE: Make sure you include all of the mask lanyard rings on the release cable.

S 444-043

(5) Do the oxygen generator activation procedure (AMM 35-21-04/201).

S 864-044

(6) Pack the oxygen masks (AMM 35-21-05/201).

TASK 35-21-05-354-045

6. Therapeutic Oxygen Mask Removal

A. References

(1) AMM 35-21-04/201 Oxygen Generator - Maintenance/Practices

(2) AMM 35-21-05/701 Passenger Oxygen Masks - Cleaning/Painting

B. Access

(1) Location Zone

100 Upper Half of the Fuselage

C. Procedure - Remove the Oxygen Mask

S 044-046

(1) Do the deactivation procedure for the two generators (AMM 35-21-04/201).

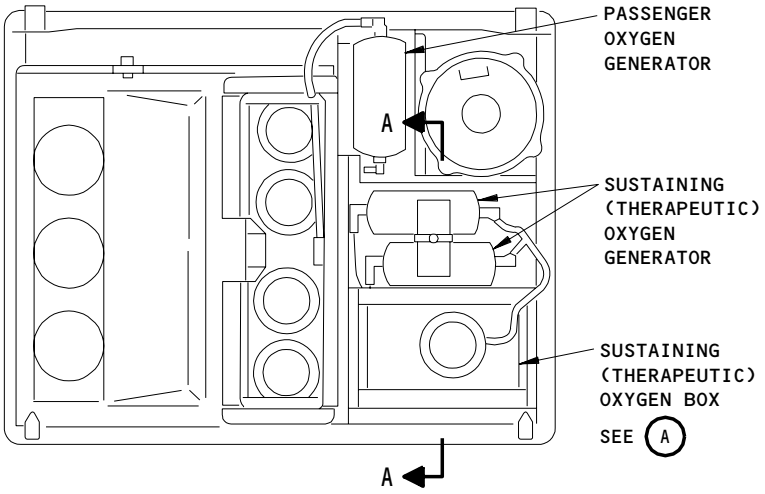
S 914-059

WARNING: WHEN YOU REMOVE AND INSTALL THE MASKS, DO NOT PULL THE LANYARDS. TOO MUCH PRESSURE ON THE RELEASE CABLE WILL RELEASE THE FIRING PIN AND FIRE THE OXYGEN GENERATORS. IF YOU PULL THE RELEASE PIN AND THE GENERATOR(S) FIRE, THE GENERATOR TEMPERATURE CAN BE 450°F AND HIGHER. THE HIGH TEMPERATURE OF THE GENERATOR CAN BURN YOU. DO NOT TOUCH THE GENERATOR UNTIL IT IS COOL.

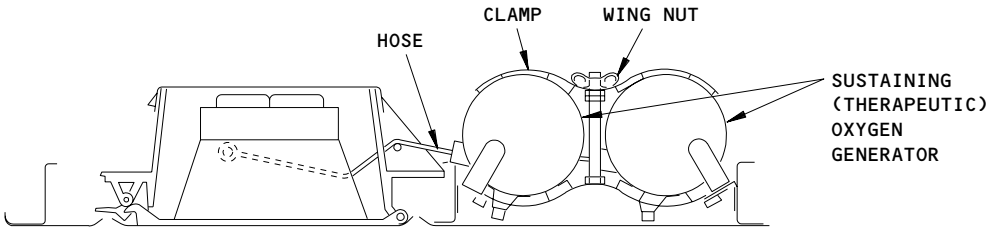
(2) Obey this WARNING for all of this task.

S 014-047

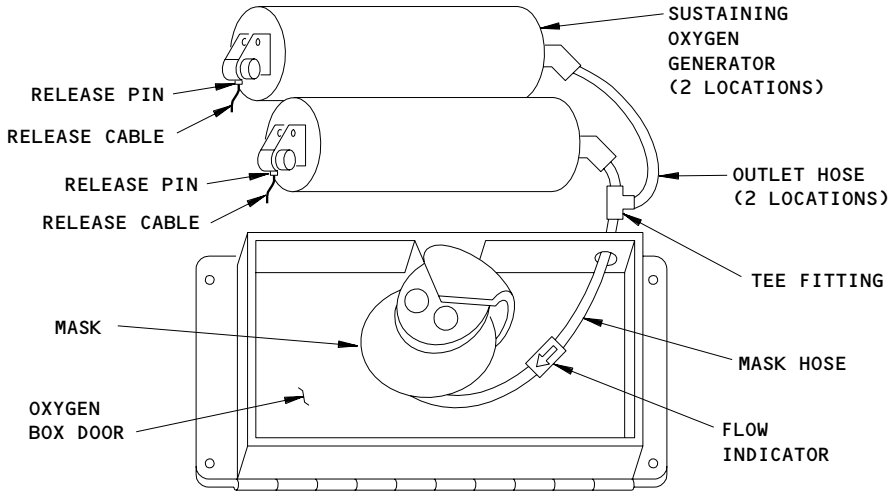
(3) To open the mask box cover, carefully lift the edge of the cover away from the mask box (Fig 403).



LEFT PASSENGER SERVICE UNIT (PSU)
(EXAMPLE)



A–A



SUSTAINING (THERAPEUTIC) OXYGEN BOX
(SHOWN WITH THE COVER REMOVED)

A

Therapeutic Oxygen Masks Installation
Figure 403

S 034-048
(4) On the release cable without the pull ring, do the steps that follow:
(a) Carefully pull the release pin from the generator firing pin (Fig. 401).
(b) Pull the release cable through and away from the slot in the mask box.
(c) Carefully pull the release cable out through the lanyard rings.

S 014-049
(5) Pull the mask tubing off the T-fitting (Fig.403).

S 024-050
(6) Remove the oxygen mask.

S 164-051
(7) If you install the same oxygen mask that you removed, clean the mask (AMM 35-21-05/701).

TASK 35-21-05-404-052

7. Therapeutic Oxygen Mask Installation

A. Access

(1) Location Zone
100 Upper Half of the Fuselage

B. Procedure - Install the Oxygen Mask

S 424-053
(1) Put the mask tubing through the hole in the mask box and connect the tubing on the T-fitting (Fig. 403).

S 424-054
(2) Push the tubing fully on the T-fitting.

S 864-055
(3) Put the oxygen masks in the mask box (AMM 35-21-05/201).

PASSENGER OXYGEN MASKS - INSPECTION/CHECK

1. General
   A. This procedure includes these tasks:
      (1) Inspection and check of the facepiece on the passenger oxygen mask
      (2) Inspection and check of the hose on the passenger oxygen mask.
   B. The mask for the PSU's (passenger service unit) is installed in each PSU oxygen box. You must lower the mask door on the oxygen box to get access to the mask.
   C. The oxygen masks are installed in the oxygen box at the the areas identified below. You must manually open the mask door on the oxygen box to get access to the masks.
      (1) Lavatories
      (2) Attendants Station

TASK 35-21-05-206-001

2. Passenger Oxygen Mask Facepiece - Inspection and Check
   A. Equipment
      (1) Rod - Metal, 0.125 inch diameter
   B. References
      (1) AMM 35-21-05/201, Passenger Oxygen Mask
      (2) AIPC 35-21-01
   C. Access
      (1) Location Zone
          200 Upper Half Fuselage

   D. Procedure

      S 916-002
      (1) Read and obey the safety precautions and general instructions before you do the maintenance (AMM 35-21-05/201).

      S 016-003
      (2) Manually open the mask door on the oxygen box.
          (a) Push a 0.125 inch diameter rod into the access hole on the door.
          (b) Operate the latch and release the mask door.
          (c) Permit the masks to fall free.

      S 216-004
      (3) Make sure the facepiece of the oxygen mask is clean and is in a satisfactory condition.
          (a) Examine the facepiece for the contamination (dirt, grease, oil, or any other unwanted material).

(b) Examine the facepiece for damage or deterioration.
1) Make sure it does not have cuts.
2) Make sure it is soft and flexible.
3) Examine it for deterioration.
4) Make sure it does not have more damage.
(c) Do a check of the headstrap.
1) Make sure it retracts and extends correctly.
2) Make sure it is correctly installed to the facepiece.

S 026-005
(4) Replace the mask if it is not in a satisfactory condition (AMM 35-21-05/201).

S 866-006
(5) Put the mask back in the oxygen box (AMM 35-21-05/201).

TASK 35-21-05-206-007

3. Passenger Oxygen Mask Hose and Bag - Inspection and Check

A. Equipment
(1) Rod - Metal, 0.125-inch (0.3175 cm) diameter

B. References
(1) AMM 35-21-05/201, Passenger Oxygen Mask
(2) AMM 35-21-06/401, Passenger Oxygen Mask
(3) AIPC 35-21-01

C. Access
(1) Location Zone
200 Upper Half Fuselage

D. Procedure

S 916-008
(1) Read and obey the safety precautions and general instructions before you do the maintenance (AMM 35-21-05/201).

S 016-009
(2) Manually open the mask door on the oxygen box.
(a) Push a 0.125 inch (0.3175 cm) diameter metal rod into the access hole on the door.
(b) Operate the latch and release the mask door.
(c) Permit the masks to fall free.

S 216-015
(3) Visually examine the oxygen mask hoses and oxygen mask bags for the presence of liquid contaminants on the inside and outside surfaces.

NOTE: A liquid substance on the inside and outside surfaces may indicate the diffusion of phthalate plasticizer, a substance used to make the material flexible over the normal operating temperature range. The plasticizer can diffuse out of the material due to aging, thermal effects, and humidity.

(a) If there are liquid contaminants found, replace the oxygen mask assembly (AMM 35-21-05/201).

S 216-010
(4) Carefully examine the hose on the passenger oxygen mask.
(a) Make sure it is soft and flexible.
(b) Examine the color on the hose.

NOTE: A change in the color of the hose occurs with time. This is not a satisfactory cause to replace the hose.

S 906-011
(5) Replace the oxygen mask assembly, if it is not in satisfactory condition (AMM 35-21-05/201).

S 226-012
(6) Pull on each hose at a point near the bayonet fitting with a force of 18 pounds.
(a) If the hose comes off when you pull on it, replace the mask (AMM 35-21-05/201).

S 866-013
(7) Put the masks back in the oxygen box (AMM 35-21-05/201).

PASSENGER OXYGEN MASKS - CLEANING/PAINTING

1. General
   A. This procedure has one task. This task is instructions to clean the passenger oxygen masks.
   B. Clean and use a disinfectant on the oxygen mask face pieces after each use.

TASK 35-21-05-107-001

2. Clean the Oxygen Mask Face Piece
   A. Equipment
      (1) Cheesecloth - (commercially available)
      (2) Sponge applicator - (optional) (commercially available)
   B. Consumable Materials
      (1) Detergent disinfectant

NOTE: Use one of these disinfectants.

(a) GO2198 Airwick Antimicrobial Topical Gel
(b) GO2197 West Wescodyne
(c) GO2199 Lysol Brand Disinfectant
(d) BO0130 Isopropyl Alcohol

   C. References
      (1) AMM 35-21-05/201, Passenger Oxygen Masks
   D. Access
      (1) Location Zone
          200 Upper Half of Fuselage

   E. Procedure

S 847-002
(1) Mix a solution of detergent disinfectant with warm water.

NOTE: Obey the instructions on the label.

S 167-003
(2) Apply the solution to the face piece with the cheesecloth or the sponge applicator.

S 167-004
(3) Rinse the face piece in clear, warm water.

S 847-005
(4) Do the repacking procedure for the oxygen masks (AMM 35-21-05/201).

DOOR LATCH ACTUATOR - REMOVAL/INSTALLATION

1. General
   A. This procedure contains two tasks. The first task is the instructions to remove the door latch actuator from an oxygen box. The second task is the instructions to install the door latch actuator for the oxygen box.

TASK 35-21-06-004-001

2. Remove the Door Latch Actuator (Fig. 401)
   A. Access
      (1) Location Zones
          200 Upper Half of the Fuselage

   B. Procedure

      S 864-002
      (1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
          (a) 11A25 (or 11A26), PASSENGER OXYGEN MANUAL DEPLOY

      S 014-003
      (2) For access to the actuator on the PSU (1) or the ASU/Lavatory service unit (8), lower the applicable service unit.

      S 014-004
      (3) For access to the actuator on the lavatory or the attendant oxygen box (3), remove the box (3) as follows:
          (a) Release the door latch (7) and open the box door (5).

              NOTE: Hold the masks (4) in the box (3) or they will fall out.

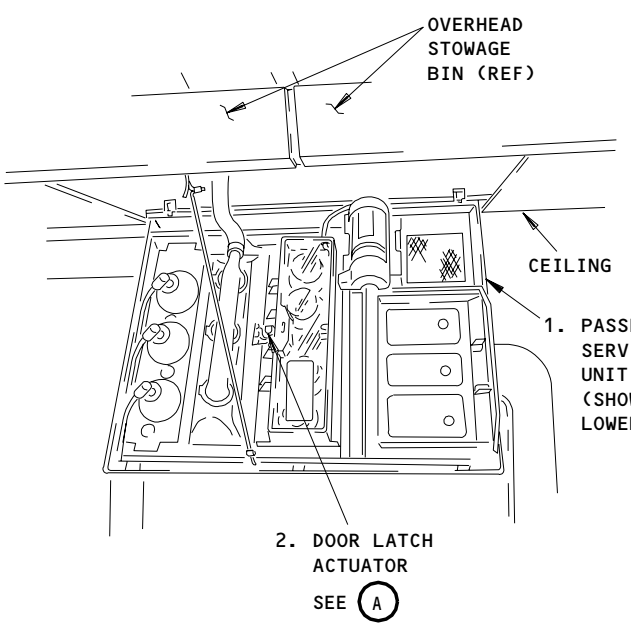
          (b) Remove the screws (6) and lower the box (3) through the opening in the ceiling.

      S 034-005
      (4) Disconnect the electrical wires (10) at the nearest splice.

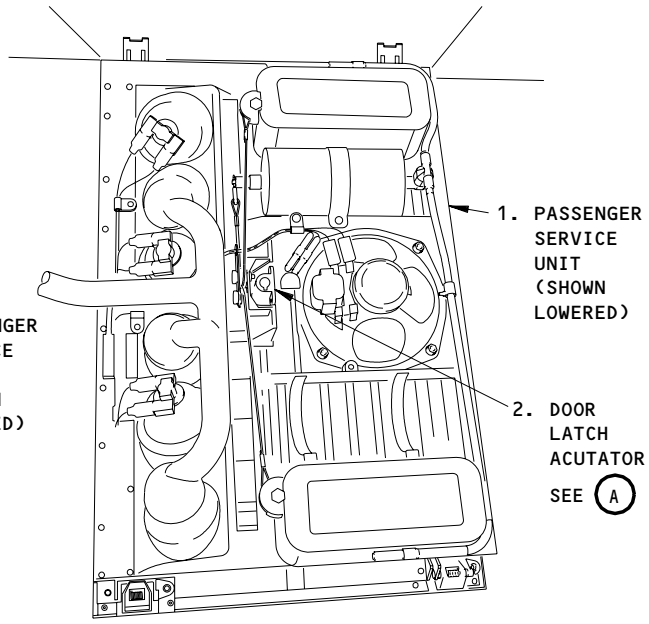
      S 024-006
      (5) Remove the nuts, washers, and screws (9) and the door latch actuator (2).

TASK 35-21-06-404-007

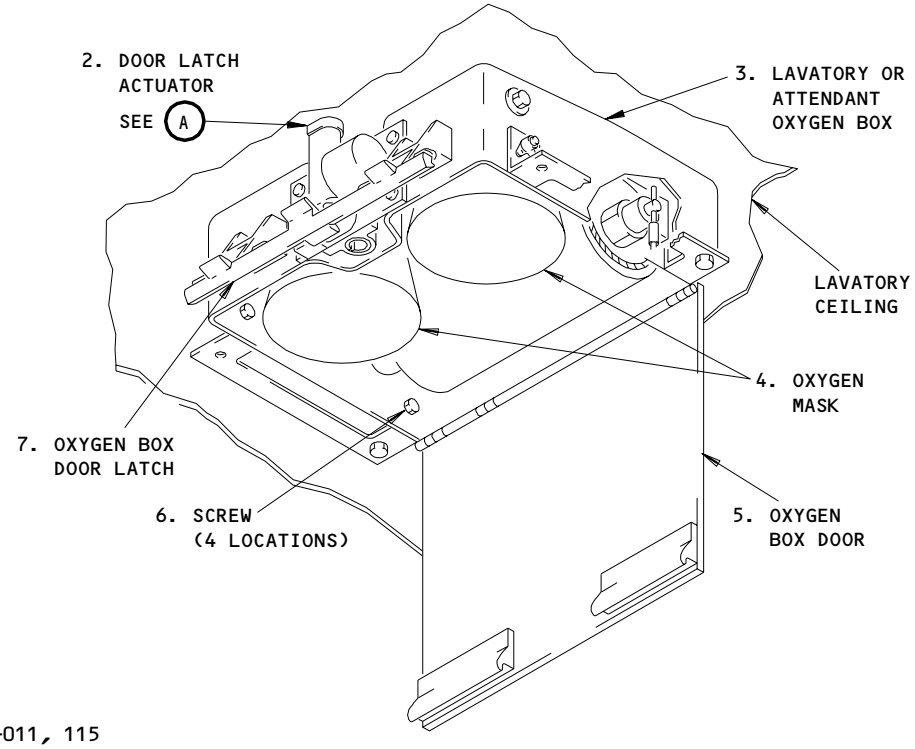
3. Install the Door Latch Actuator (Fig. 401)
   A. Parts



PASSENGER SERVICE UNIT (PSU)
(EXAMPLE) 1



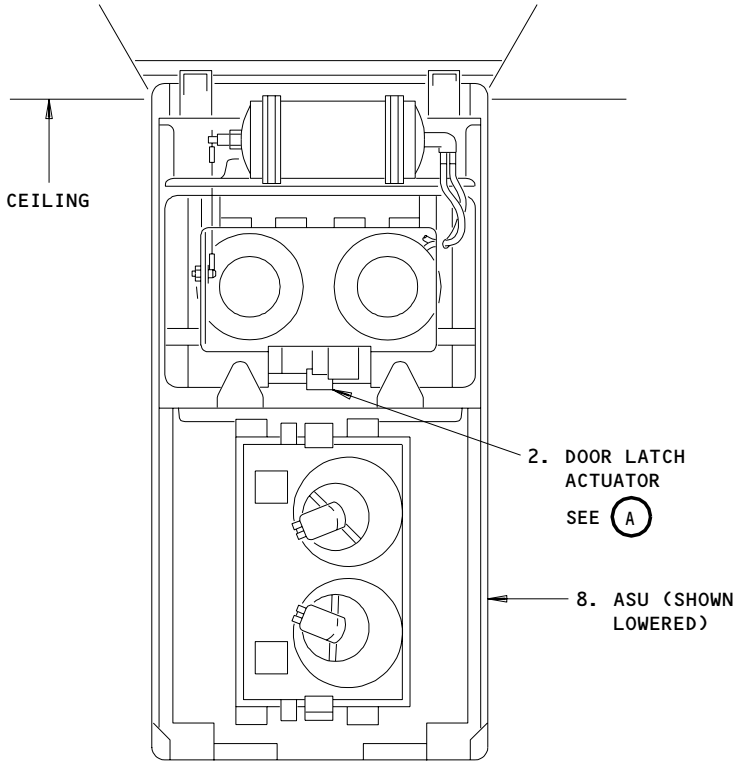
PASSENGER SERVICE UNIT (PSU)
(EXAMPLE) 2



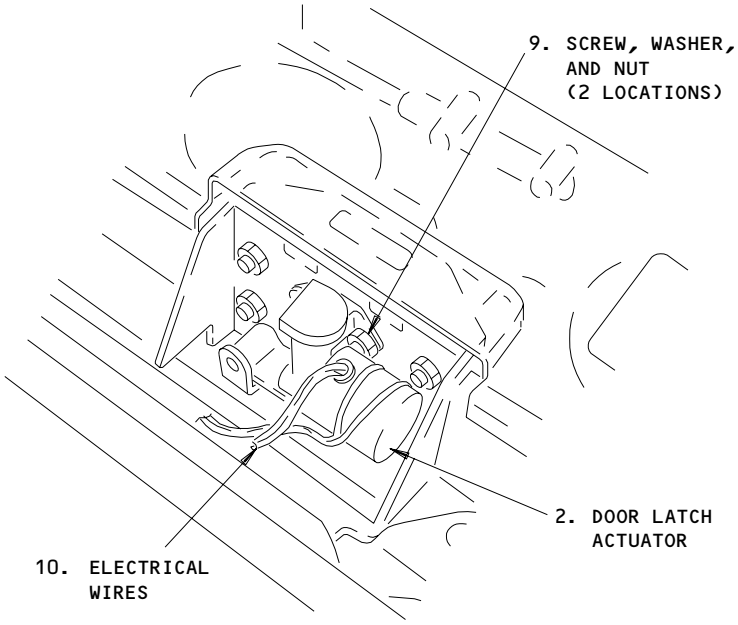
1 GUI 001-011, 115
2 GUI 012-114, 116-999

LAVATORY OR ATTENDANT SERVICE
UNIT (EXAMPLE)

Door Latch Actuator
Figure 401 (Sheet 1)



ATTENDANT SERVICE UNIT
(EXAMPLE)



DOOR LATCH ACTUATOR
A

Door Latch Actuator
Figure 401 (Sheet 2)

MM		NOMENCLATURE	IPC		
FIG	ITEM		SUBJECT	FIG	ITEM
401	2	Actuator	35-21-52	01	55,205 355,555
	3	Oxygen Box			10
	6	Screw			15

B. References
(1) AMM 35-21-00/501, Passenger Oxygen System

C. Access
(1) Location Zones
200 Upper Half of the Fuselage

D. Procedure

S 424-008
(1) Hold the door latch actuator (2) in its position and install the screws, washers, and nuts (9).

S 434-009
(2) Connect the electrical wires (10).

S 414-010
(3) Install the oxygen box (3) as follows:
(a) Hold the box (3) in the opening in the lavatory ceiling and install the screws (6).
(b) Reset the door latch (7).
(c) Remove the restraint that holds the masks (4) in the box (3).
(d) Make sure the door (5) is correctly closed and latched.

S 414-011
(4) Close the PSU (1) or the ASU/Lavatory service unit (8).

S 864-012

(5) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the the P11 panel:
(a) 11A25 (or 11A26), PASSENGER OXYGEN MANUAL DEPLOY

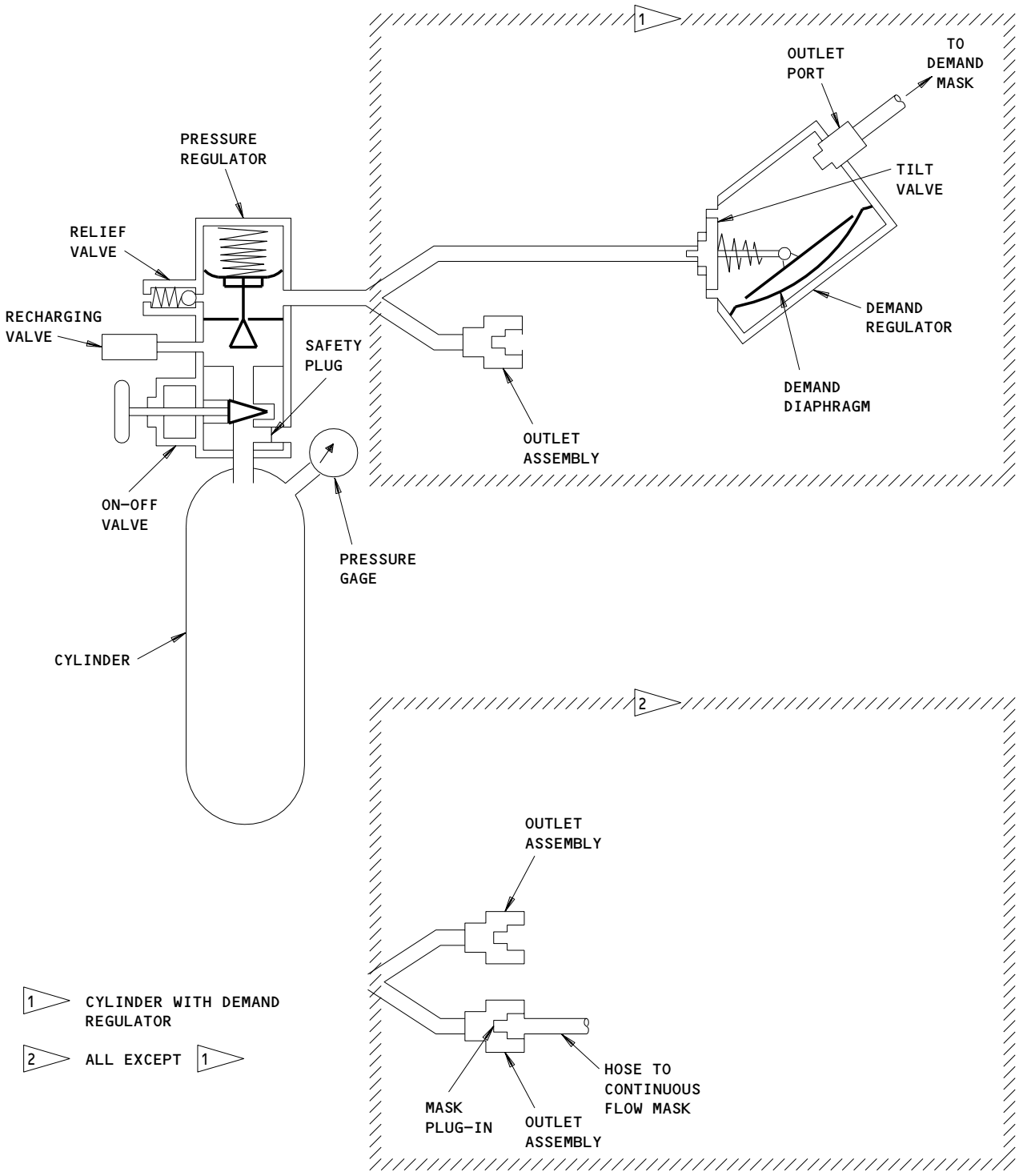
S 714-014

(6) Do the Passenger Oxygen Door Deployment Test procedure (AMM 35-21-00/501).

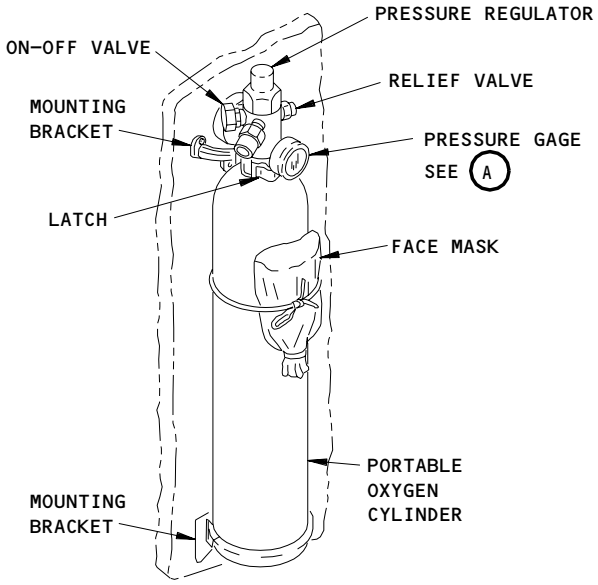
PORTABLE OXYGEN SYSTEM - DESCRIPTION AND OPERATION

1. General
   A. Oxygen for first aid and sustaining purposes are kept in portable oxygen cylinders. These cylinders are installed at easily reached locations throughout the airplane.
2. Portable Oxygen Cylinder (Fig. 1 and 2)
   A. There are two types of portable oxygen cylinders, those with a demand regulator and those without a demand regulator. A demand-type mask can be attached to cylinders with a demand regulator (Fig. 1). The basic cylinder assembly contains these parts:
      (1) a high pressure oxygen cylinder,
      (2) a constant flow pressure regulator,
      (3) a pressure gage,
      (4) a safety plug,
      (5) a charging valve,
      (6) a relief valve,
      (7) an ON-OFF valve; and
      (8) two or three outlet assemblies.
   B. The pressure gage shows oxygen pressure in the cylinder and thereby the quantity of oxygen available (Fig. 2). Cylinder pressure should be 1750-1850 psig (12066-12755 kPa) at 70°F (21°C). The safety plug contains a fusible alloy which melts in case of too much heat. This permits the cylinder to vent into the atmosphere. The ON-OFF valve controls the flow of high pressure oxygen into the pressure regulator.
   C. The pressure regulator contains a pressure reducing mechanism which reduces the oxygen pressure before it is supplied to the outlet assembly or the demand regulator. The oxygen pressure is reduced because low pressure oxygen is required for the masks. The pressure regulator also has a recharging valve assembly which permits the cylinder to be refilled.
   D. Outlet assemblies are connected directly to the constant flow pressure regulator. There are two outlet assemblies on each cylinder without a demand regulator and one on each cylinder with a demand regulator. Each outlet assembly contains an internal check valve, a flow metering device and an oxygen hose plug-in adapter. When a plug-in is inserted, it opens the check valve and permits oxygen to flow into a mask when the cylinder ON-OFF valve is open. The two outlet assemblies on cylinders without a demand regulator have flow rates of 2 liters per minute (LPM) and 4 LPM. The outlet assembly on cylinders with a demand regulator has a flow rate of 3 LPM.

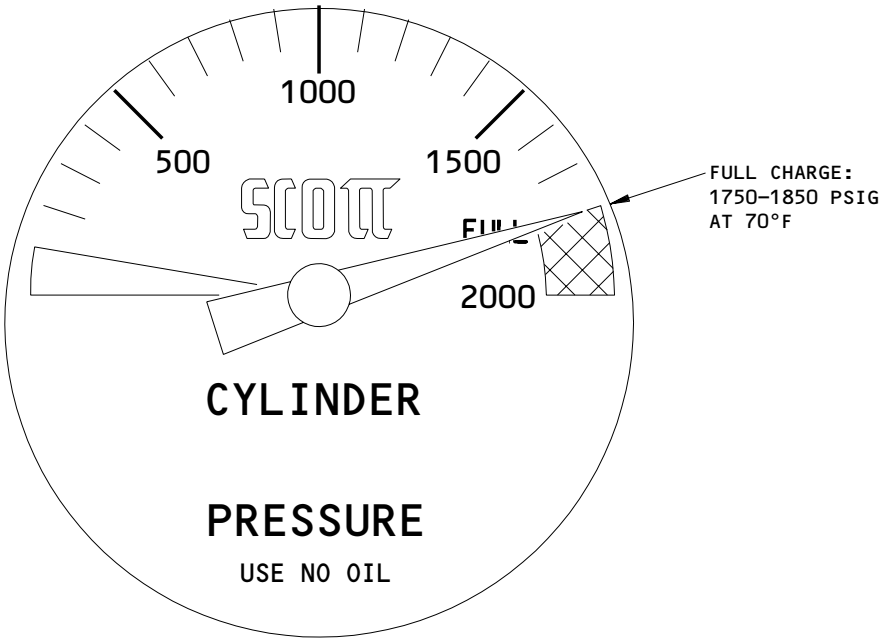
E. On cylinders with a demand regulator, the regulator consists of a tilt valve, a diaphragm and a connection for a demand-type mask.
F. An oxygen mask and hose is attached to each portable oxygen cylinder assembly. For use, the hose must be connected to the oxygen outlet on the cylinder.



Portable Oxygen Equipment Schematic
Figure 1



PORTABLE OXYGEN CYLINDER
(EXAMPLE)



PRESSURE GAGE
A

Portable Oxygen Cylinder
Figure 2

PORTABLE OXYGEN SYSTEM - CLEANING/PAINTING

1. General
   A. This procedure contains this task:
      (1) Clean the portable oxygen system components.
   B. When you do maintenance on the oxygen system, it is important that the work area is clean and free from contamination. If the work area is not clean, these conditions can occur:
      (1) When contamination and an ignition source are near the oxygen, a fire or an explosion can occur.
      (2) Contamination can inhibit the usual operation of the oxygen equipment.
      (3) Contamination can supply dangerous fumes to the users of the oxygen equipment.
   C. Clean and use a disinfectant on the oxygen mask face pieces after each use.
   D. All oxygen system components must be clean and dry when they are installed.

TASK 35-31-00-207-001

2. Clean the Portable Oxygen System Components
   A. Equipment
      (1) Cheesecloth - (commercially available)
      (2) Sponge applicator - (optional) (commercially available)
   B. Consumable Materials
      (1) Detergent disinfectant

          NOTE: Use one of these disinfectants.

          (a) G02198 Airwick Antimicrobial Topical Gel
          (b) G02197 West Wescodyne
          (c) G02199 Lysol Brand Disinfectant
          (d) B00130 Isopropyl Alcohol
   C. Reference
      (1) SOPM 20-30-80, General Cleaning and Disinfection
   D. Access
      (1) Location Zones
          200 Upper Half of Fuselage

   E. Clean the Portable Oxygen Cylinders

      S 147-002
      (1) To remove surface contamination from the portable oxygen cylinder, do this step:
          (a) Rub the component(s) with a clean, dry, cheesecloth (or equivalent).

S 147-003

(2) If you cannot remove the surface contamination with a dry cloth only, do this step:

WARNING: ONLY USE CLEANING SOLVENTS ON THE OUTSIDE OF THE OXYGEN SYSTEM COMPONENTS. DO NOT USE CLEANING SOLVENTS ON THE INSIDE OF THE OXYGEN SYSTEM COMPONENTS.

(a) Clean the contamination with a clean cheesecloth and an approved cleaning solvent (SOPM 20-30-80).

S 167-009

(3) Do these steps to clean the portable oxygen cylinder sub-assembly component(s):
(a) Remove the portable oxygen cylinder from the airplane.
(b) Use the instructions in the manufacturers overhaul manual to clean the component(s).
(c) Fully service the portable oxygen cylinder.
(d) Install the portable oxygen cylinder(s) in their applicable stowage areas.

F. Clean the Portable Oxygen Cylinder Masks

S 167-011

(1) For portable oxygen cylinders that have the part number 289--601 series oxygen masks, do these steps if it is necessary to clean the oxygen mask assemblies:
(a) Remove the tape, or velcro strap, that attaches the oxygen mask bag to the portable oxygen cylinder.
(b) Remove the mask and bag assembly.
(c) Clean the mask assembly per the manufacturers CMM (AVOX Systems CMM 35--22--26).
(d) Reattach the oxygen mask and bag assembly to the portable oxygen cylinder.
1) Use the velcro strap, the tape, G50536, or the double faced cloth tape, A50074, as applicable.
a) Overlap the ends of the tape by a minimum of 1 inch (3 cm) and a maximum of 4 inches (11 cm).

NOTE: The mask must be easy to remove.

NOTE: Use only one thickness of the tape.

2) Make sure that the mask bag is positioned so that the oxygen cylinder pressure gauge is visible when the cylinder is installed in the mounting brackets.

PORTABLE OXYGEN CYLINDER - REMOVAL/INSTALLATION

1. General
   A. This procedure contains two tasks:
      (1) Portable oxygen cylinder removal
      (2) Portable oxygen cylinder installation.
   B. Portable oxygen cylinders for first aid or other auxiliary uses are installed at designated locations throughout the in airplane cabin for quick and easy access.
   C. A fully charged portable oxygen cylinder has a pressure of 1750-1850 psig (12066-12755 kPa) at 70°F (21°C).
   D. Make sure that only approved persons are allowed to repair damage to oxygen cylinders.

TASK 35-31-02-004-001

2. Portable Oxygen Cylinder Removal (Fig. 401)
   A. Access
      (1) Location Zone
          200 Upper Half of Fuselage
   B. Remove the Cylinder

      S 014-013
      (1) Open the stowage compartment door, where applicable to get access to the portable oxygen cylinder.

      S 014-028
      (2) Unlatch the clamp which holds the portable oxygen cylinder to the mounting bracket.

      S 024-004
      (3) Remove the portable oxygen cylinder.
          (a) If it is necessary to remove the oxygen mask(s) from the cylinder, peel the velcro tape apart and remove the oxygen mask from the protective bag.

      S 414-016
      (4) Close the stowage compartment door, where applicable.

TASK 35-31-02-404-006

3. Portable Oxygen Cylinder Installation (Fig. 401)

A. Consumable Material

(1) G50263 - Lint free, nylon gloves

B. Access

(1) Location Zone

200 Upper Half of Fuselage

C. Prepare to Install the Cylinder

S 214-027

(1) Make sure the cylinder is fully charged and has a pressure of 1750-1850 psig (12066-12755 kPa) at 70°F (21°C).

S 424-026

(2) Put the oxygen mask(s) in the protective bag and secure it to the cylinder.

D. Install the Cylinder

S 014-017

(1) Open the stowage compartment door, where applicable.

S 424-008

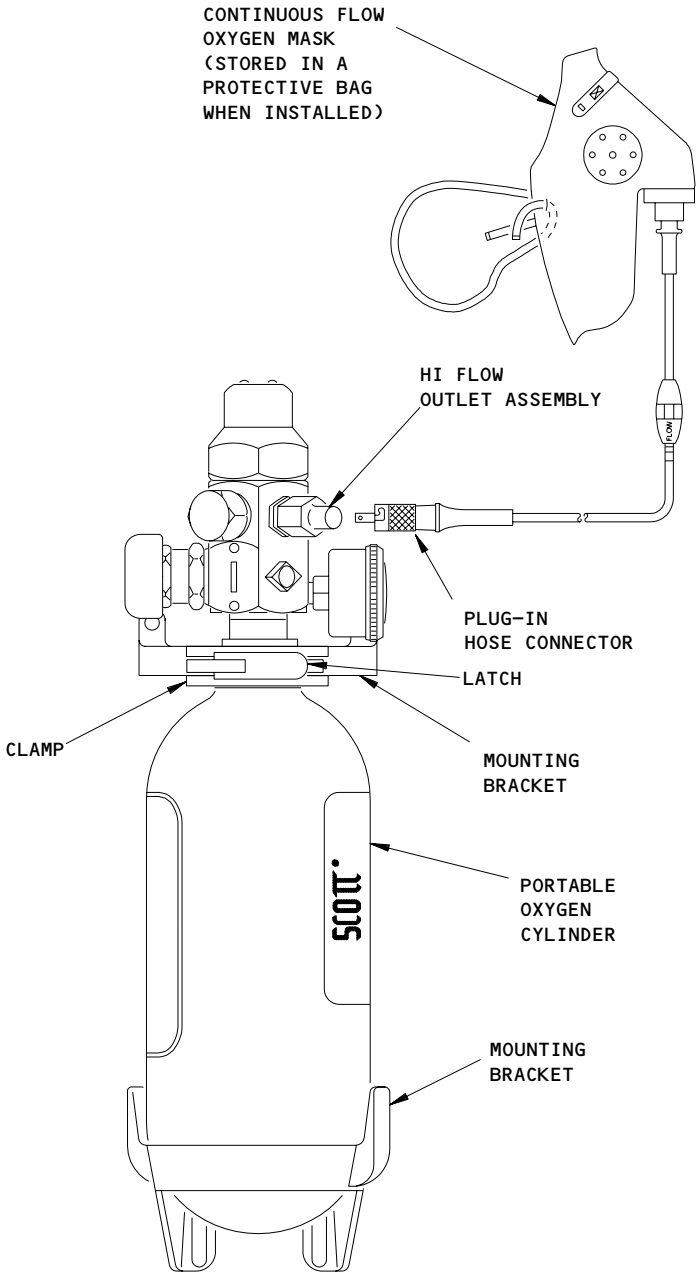
(2) Install the portable oxygen cylinder onto the mounting bracket.

S 434-009

(3) Secure the latch on the clamp to keep the portable oxygen cylinder in place.

S 414-022

(4) Close the stowage compartment door, where applicable.



PORTABLE OXYGEN CYLINDER INSTALLATION
(EXAMPLE)

Portable Oxygen Cylinder Installation
Figure 401

PORTABLE OXYGEN CYLINDER - INSPECTION/CHECK

1. General
   A. This procedure has these tasks:
      (1) Portable Oxygen Cylinder Pressure and Condition Check
      (2) Portable Oxygen Cylinder Leak Check.

TASK 35-31-02-206-005

2. Portable Oxygen Cylinder Pressure and Condition Check (Fig. 601, 602)
   A. Consumable Materials
      (1) G00029 Oxygen System Leak Detector
   B. References
      (1) AMM 35-31-00/701, Portable Oxygen System
   C. Access
      (1) Location Zone
          200 Upper Half of Fuselage

   D. Procedure

S 216-024

(1) Make sure the oxygen cylinder is in compliance with local regulatory requirements currently in effect for hydrostatic test.

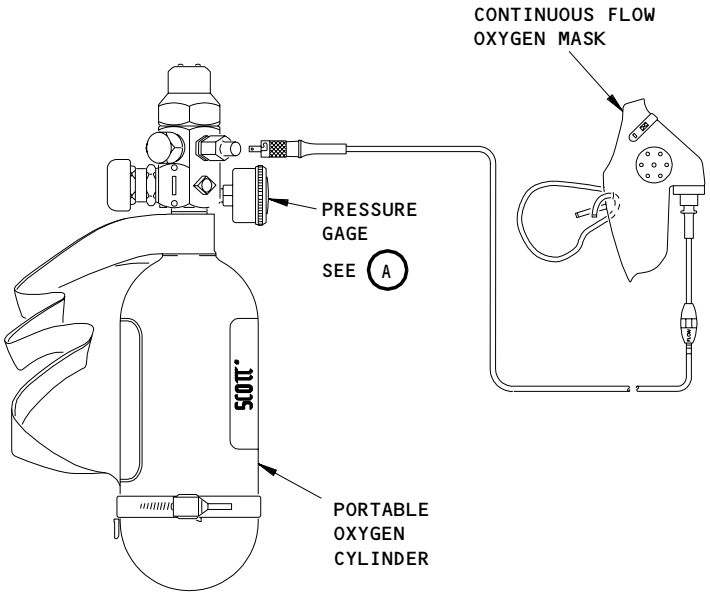
NOTE: The last hydrostatic test date will be on a label near the top of the oxygen cylinder.

(a) Replace the portable oxygen cylinder, if it is not in compliance with local regulatory requirements currently in effect for hydrostatic test.

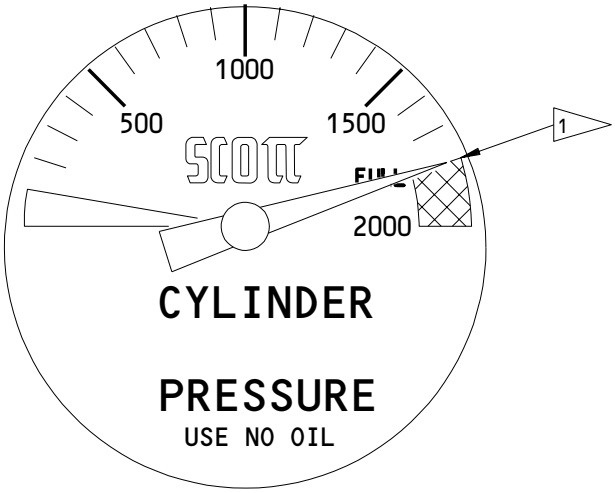
S 216-027

(2) Make sure that the pressure is not more than 1850 psi at 70°F (21°C).

NOTE: See Fig. 602 for equivalent portable oxygen cylinder pressures for temperatures other than 70°F (21°C).



PORTABLE OXYGEN CYLINDER
(EXAMPLE)



PRESSURE GAGE
A

1 THE PRESSURE GAGE SHOWS THE PORTABLE OXYGEN CYLINDER FULLY CHARGED (1750–1850 PSIG AT 70°F)

Portable Oxygen Cylinder Inspection
Figure 601

S 966-028
(3) Replace the portable oxygen cylinder, if the gage pressure is below the minimum guideline set for the airline or regulatory authority.

E. Portable Oxygen Cylinder Condition Check

S 216-029
(1) Make sure the portable oxygen cylinder is stowed correctly.

S 216-030
(2) Make sure the portable oxygen cylinder is in satisfactory condition:
(a) Make sure the portable oxygen cylinder and their attached masks are clean.
1) If you need to clean the portable oxygen cylinder or oxygen mask, do this task: Clean the Portable Oxygen System Components (AMM 35-31-00/701).
(b) Make sure the portable oxygen cylinder is not damaged.
(c) If the portable oxygen cylinder or oxygen mask is damaged, replace the oxygen cylinder or the mask.

TASK 35-31-02-706-026

3. Portable Oxygen Cylinder Leak Check (Fig. 601)

A. Equipment
(1) Cheesecloth - (commercially available)

B. Consumable Materials
(1) G00092 Oxygen System Leak Detector

C. Access
(1) Location Zone
200 Upper Half of Fuselage

D. Procedure

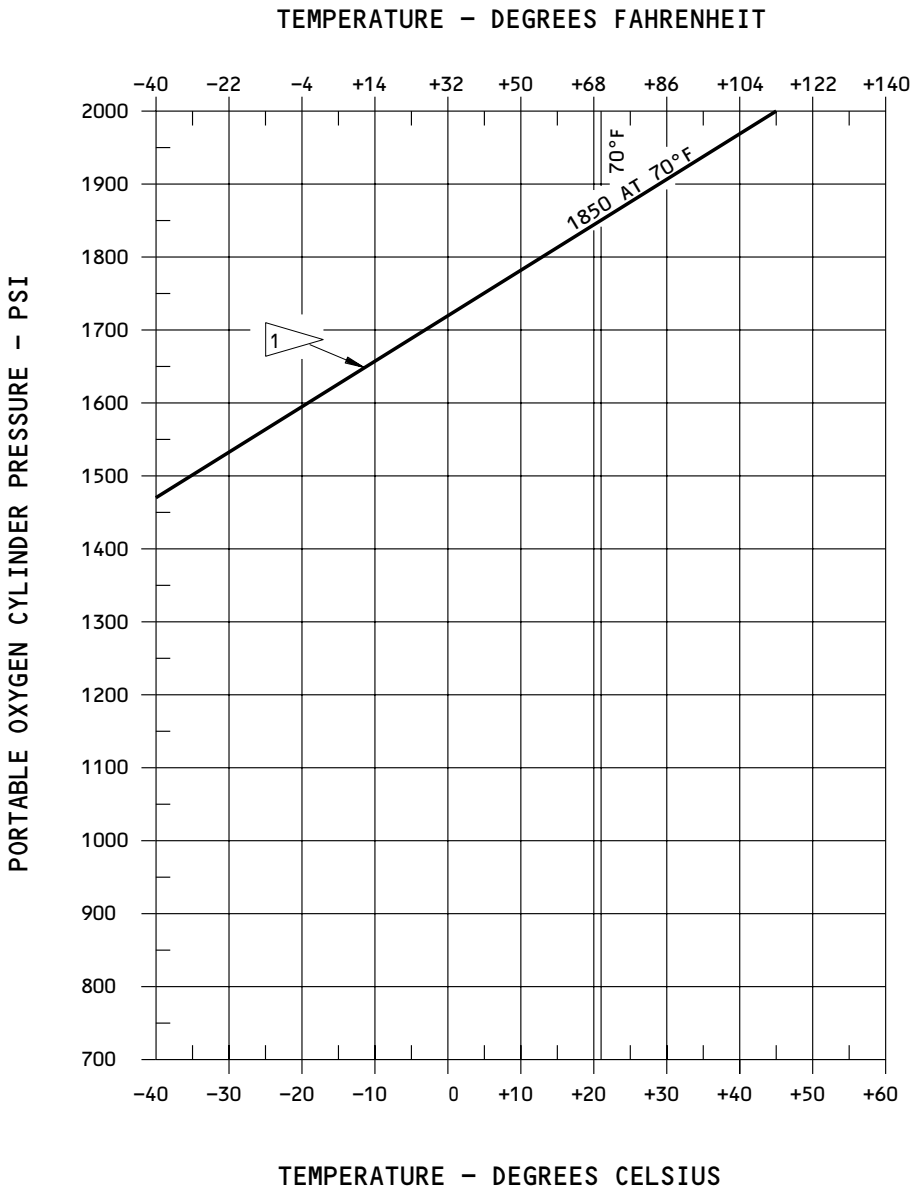
S 866-031
(1) Turn the knob on ON-OFF valve a minimum of one-half of a turn in the counterclockwise direction to open the valve.

S 796-032
(2) Apply the leak detection compound to all of the valve fittings.

S 216-033
(3) Look for bubbles to find leaks.

S 116-034
(4) Remove the leak detection compound from the cylinder components with a dry piece of cheesecloth immediately after you check for leaks.

S 796-035
(5) If you find a leak, do these steps:



1 MAXIMUM ALLOWABLE PRESSURE FOR FULLY SERVICED PORTABLE OXYGEN CYLINDER

Portable Oxygen Cylinder – Pressure/Temperature Correction Chart
Figure 602

CAUTION: TIGHTEN THE VALVES TO THE TORQUE VALUES GIVEN IN THE COMPONENT MAINTENANCE MANUAL FROM THE MANUFACTURER OF THE OXYGEN CYLINDER. IF YOU TIGHTEN THE VALVES TOO TIGHT, DAMAGE COULD OCCUR.

(a) Tighten the valve fitting(s) to repair the leakage.

NOTE: Leakage is not permitted.

(b) If the leakage continues, remove the portable oxygen cylinder from the airplane and send the portable oxygen cylinder to an approved overhaul shop.
(c) Install a fully serviced portable oxygen cylinder.

S 796-036
(6) If there are no leaks, the portable oxygen cylinder is satisfactory.

S 436-038
(7) Turn the knob on ON-OFF valve in the clockwise direction to close the valve.