Scandinavian Airlines System

PAGE	DATE	CODE
CHAPTER 35 TAB		
OXYGEN		
EFFECTIVE PAGES SEE LAST PAGE OF LIST FOR NUMBER OF PAGES		
35-CONTENTS		
R 1	AUG 22/09	SAS.1
R 2	AUG 22/09	SAS.1
R 3	AUG 22/09	SAS.1
4	BLANK	
35-00-00		
1	NOV 10/92	01
2	BLANK	
35-00-00		
201	APR 22/06	01
202	DEC 22/04	01
203	DEC 22/04	01
204	APR 22/06	02
205	DEC 22/04	01
206	AUG 10/98	01
207	AUG 22/04	01
208	DEC 22/04	01
209	APR 22/08	03
210	APR 22/08	02
35-00-00		
601	APR 22/01	01
602	APR 22/01	01
35-00-00		
701	AUG 22/01	01
702	AUG 22/01	01
703	AUG 22/04	01
704	AUG 22/05	01
705	AUG 22/05	01
706	BLANK	
35-00-00		
901	AUG 10/98	SAS
902	AUG 10/98	02
903	AUG 10/98	SAS
904	AUG 10/98	SAS
35-11-00		
R 1	AUG 22/09	02.1
2	AUG 22/01	02
3	NOV 10/92	10
R 4	AUG 22/09	06.101
D 5	DELETED	05
D 6	DELETED	

PAGE	DATE	CODE
35-11-00		
101	DEC 22/00	02
102	FEB 10/95	01
103	AUG 22/01	05
104	FEB 10/95	02
35-11-00		
R 501	AUG 22/09	04.1
R 502	AUG 22/09	03.101
503	AUG 22/01	02
504	APR 22/05	02
505	DEC 22/04	02
506	AUG 10/96	01
507	APR 22/05	06
R 508	AUG 22/09	15.1
R 509	AUG 22/09	12.1
R 510	AUG 22/09	06.101
R 511	AUG 22/09	06.1
512	BLANK	
35-11-00		
601	DEC 22/08	01
602	DEC 22/08	02
603	DEC 22/08	01
604	DEC 22/08	02
35-11-03		
401	DEC 22/04	01
402	APR 22/04	02
403	APR 22/06	11
404	APR 22/06	04
405	APR 22/06	05
406	BLANK	
35-11-04		
401	AUG 10/98	01
402	AUG 22/04	02
403	APR 22/06	02
404	APR 22/05	01
405	APR 22/06	04
406	BLANK	
35-11-51		
201	DEC 22/04	01
202	AUG 10/90	01
203	AUG 22/05	01
204	AUG 22/05	01
35-11-51		
401	AUG 22/00	01
402	DEC 22/06	01
403	APR 22/09	03
404	APR 22/09	02
405	DEC 22/06	02
406	AUG 22/08	02
407	AUG 22/08	02
408	BLANK	

PAGE	DATE	CODE
35-21-00		
R 1	AUG 22/09	06.1
2	AUG 22/99	01
3	NOV 10/92	01
R 4	AUG 22/09	05.101
R 5	AUG 22/09	04.101
R 6	BLANK	
35-21-00		
101	AUG 22/99	02
102	NOV 10/90	01
103	MAY 10/91	02
104	MAY 10/91	01
35-21-00		
501	AUG 22/05	06
502	AUG 22/05	10
503	AUG 22/01	06
504	AUG 22/07	05
505	AUG 22/03	01
506	AUG 22/99	07
507	AUG 22/02	06
508	AUG 22/02	02
35-21-04		
201	APR 22/08	04
202	APR 22/01	01
203	APR 22/01	01
204	APR 22/08	02
205	APR 22/06	03
206	APR 22/06	02
207	APR 22/06	05
208	APR 22/06	05
209	AUG 22/08	05
210	AUG 22/08	04
35-21-04		
401	AUG 22/02	04
402	AUG 22/05	04
403	DEC 22/99	02
404	BLANK	
35-21-05		
601	DEC 22/05	01
602	DEC 22/05	02
603	DEC 22/06	02
604	BLANK	
35-21-05		
701	AUG 22/05	04
702	AUG 22/05	04
35-21-10		
201	DEC 22/00	01
202	DEC 22/99	01
203	DEC 22/07	01
204	APR 22/08	02
205	APR 22/08	02
206	AUG 22/05	01

Scandinavian Airlines System

PAGE	DATE	CODE
35-21-10		CONT.
207	DEC 22/07	02
208	APR 22/09	02
209	DEC 22/07	02
210	DEC 22/07	02
211	DEC 22/07	02
212	DEC 22/07	02
213	DEC 22/07	02
214	DEC 22/07	02
215	DEC 22/07	01
216	DEC 22/07	02
217	DEC 22/07	02
218	BLANK	
35-21-11		
201	DEC 22/00	01
202	AUG 22/01	01
203	AUG 22/99	01
204	APR 22/08	02
205	APR 22/08	02
206	AUG 22/05	01
207	DEC 22/07	01
208	APR 22/09	02
209	DEC 22/07	03
210	DEC 22/07	02
211	DEC 22/07	02
212	DEC 22/07	02
213	DEC 22/07	02
214	DEC 22/07	02
215	DEC 22/07	02
216	DEC 22/07	02
217	AUG 22/05	03
218	DEC 22/07	04
35-21-12	CONFIG 1	
201	APR 22/09	04
202	APR 22/09	04
203	APR 22/09	01
204	APR 22/09	02
205	APR 22/09	09
206	APR 22/09	02
207	APR 22/09	06
208	APR 22/09	02
209	APR 22/09	06
210	APR 22/09	02
211	APR 22/09	02
212	APR 22/09	01
213	APR 22/09	02
214	APR 22/09	02
215	APR 22/09	02
216	APR 22/09	01
217	APR 22/09	01
218	APR 22/09	01
35-21-12	CONFIG 2	
201	AUG 22/03	01A
202	BLANK	

PAGE	DATE	CODE
35-21-13	CONFIG 1	
201	APR 22/09	03
202	APR 22/09	03
203	APR 22/09	04
204	APR 22/09	03
205	APR 22/09	03
206	APR 22/09	03
207	APR 22/09	04
208	APR 22/09	03
209	APR 22/09	02
210	APR 22/09	02
211	APR 22/09	02
212	APR 22/09	02
213	APR 22/09	02
214	APR 22/09	02
215	APR 22/09	02
216	APR 22/09	02
217	APR 22/09	03
218	APR 22/09	01
35-21-13	CONFIG 2	
201	AUG 22/03	01A
202	BLANK	
35-21-14	CONFIG 1	
201	DEC 22/05	02
202	AUG 22/05	01
203	AUG 22/03	02
204	APR 22/08	SAS
205	AUG 22/05	01
206	APR 22/08	02
207	APR 22/06	02
208	APR 22/06	04
209	APR 22/06	02
210	DEC 22/07	02
211	APR 22/06	02
212	APR 22/09	05
213	APR 22/09	06
214	APR 22/09	05
215	APR 22/09	05
216	APR 22/09	05
217	APR 22/09	04
218	APR 22/09	05
219	DEC 22/07	01
220	APR 22/09	02
35-21-14	CONFIG 2	
201	AUG 22/03	01A
202	BLANK	
35-21-15	CONFIG 1	
201	APR 22/09	04
202	APR 22/09	04
203	APR 22/09	04
204	APR 22/09	SAS
205	APR 22/09	03
206	APR 22/09	02
207	APR 22/09	02
208	APR 22/09	02

PAGE	DATE	CODE
35-21-15	CONFIG 1	CONT.
209	APR 22/09	02
210	APR 22/09	02
211	APR 22/09	02
212	APR 22/09	03
213	APR 22/09	02
214	APR 22/09	02
215	APR 22/09	03
216	APR 22/09	04
217	APR 22/09	03
218	BLANK	
35-21-15	CONFIG 2	
201	AUG 22/03	01A
202	BLANK	
35-21-16		
201	AUG 22/99	01
202	DEC 22/99	01
203	AUG 22/99	01
204	DEC 22/04	01
205	AUG 22/01	01
206	DEC 22/04	01
207	AUG 22/01	01
208	AUG 22/01	01
209	AUG 22/99	01
210	DEC 22/04	01
211	AUG 22/99	01
212	AUG 22/01	01
213	AUG 22/01	01
214	AUG 22/99	01
215	AUG 22/01	01
216	AUG 22/99	01
35-31-00		
1	DEC 22/00	01
2	AUG 22/02	01
3	AUG 22/02	01
4	AUG 22/02	01
35-31-00		
701	APR 22/01	01
702	AUG 22/01	01
703	DEC 22/00	01
704	BLANK	
35-31-01		
401	DEC 22/00	01
402	DEC 22/00	01
403	DEC 10/98	01
404	BLANK	
35-31-01		
601	APR 22/09	03
602	DEC 22/00	01
603	AUG 22/01	01
604	APR 22/09	04
605	APR 22/09	04
606	APR 22/09	07

CHAPTER 35 - OXYGEN

TABLE OF CONTENTS

Subject	Chapter Section Subject	Page	Effectivity
OXYGEN	35-00-00		
Description and Operation		1	ALL
General		1	
Maintenance Practices		201	ALL
Inspection/Check		601	ALL
OXYGEN MODULE GENERATOR		601	
Cleaning/Painting		701	ALL
DDG Maintenance Procedures		901	ALL
DDG 35-11-2 Preparation - Crew Oxygen System Inoperative		901	
DDG 35-11-2 Restoration - Crew Oxygen System Inoperative		903	
DDG 35-21-1 Preparation - Passenger Oxygen System Inoperative		903	
DDG 35-21-1 Restoration - Passenger Oxygen System Inoperative		904	
OXYGEN PRESSURE VESSEL	35-10-00		
CREW OXYGEN SYSTEM	35-11-00		
Description and Operation		1	ALL
General		1	
Crew Oxygen Masks		1	
Overboard Discharge		1	
Oxygen Cylinder		1	
Pressure Regulator		4	
Operation		4	
Control		4	
Functional Description		4	
Component Location		101	ALL
Component Index			
Component Location			
Adjustment/Test		501	ALL
Inspection/Check		601	ALL
MASK - CREW OXYGEN/STOWAGE BOX	35-11-51		
Maintenance Practices		201	ALL
Removal/Installation		401	ALL
REGULATOR - OXYGEN PRESSURE	35-11-03		
Removal/Installation		401	ALL

CHAPTER 35 - OXYGEN

TABLE OF CONTENTS

Subject	Chapter Section Subject	Page	Effectivity
TRANSDUCER - PRESSURE	35-11-04		
Removal/Installation		401	ALL
PASSENGER	35-20-00		
PASSENGER OXYGEN SYSTEM	35-21-00		
Description and Operation		1	ALL
General		1	
Chemical Oxygen Generator		1	
Passenger System Latch Mechanism		1	
Operation		4	
Control		5	
Functional Description		4	
Component Location		101	ALL
Component Index Component Location			
Adjustment/Test		501	ALL
GENERATOR - OXYGEN	35-21-04		
Maintenance Practices		201	ALL
Removal/Installation		401	ALL
MASKS - PASSENGER OXYGEN	35-21-05		
Inspection/Check		601	ALL
Cleaning/Painting		701	ALL
OXYGEN MODULE - AFT CEILING-MOUNTED ATTENDANT	35-21-10		
Maintenance Practices		201	ALL
OXYGEN MODULE - CENTER PASSENGER	35-21-15		
Maintenance Practices		201	CONFIG 1 [*]
[*] ALL			
Maintenance Practices		201	CONFIG 2 [*]
[*] CONFIGURATION NOT USED			
OXYGEN MODULE - FLIGHT CREW REST	35-21-16		
Maintenance Practices		201	[*]
[*] SAS 050-149; 162-999			
OXYGEN MODULE - FORWARD/MID CEILING-MOUNTED ATTENDANT	35-21-12		
Maintenance Practices		201	CONFIG 1 [*]
[*] ALL			

CHAPTER 35 - OXYGEN

TABLE OF CONTENTS

Subject	Chapter Section Subject	Page	Effectivity
Maintenance Practices		201	CONFIG 2 [*]
[*] CONFIGURATION NOT USED			
OXYGEN MODULE - LAVATORY	35-21-13		
Maintenance Practices		201	CONFIG 1 [*]
[*] ALL			
Maintenance Practices		201	CONFIG 2 [*]
[*] CONFIGURATION NOT USED			
OXYGEN MODULE - OUTBOARD PASSENGER	35-21-14		
Maintenance Practices		201	CONFIG 1 [*]
[*] CLASSIC INTERIOR			
Maintenance Practices		201	CONFIG 2 [*]
[*] CONFIGURATION NOT USED			
OXYGEN MODULE - WALL-MOUNTED ATTENDANT	35-21-11		
Maintenance Practices		201	ALL
PORTABLE	35-30-00		
PORTABLE OXYGEN SYSTEM	35-31-00		
Description and Operation		1	ALL
General		1	
Portable Oxygen Cylinder		1	
Cleaning/Painting		701	ALL
CYLINDER - PORTABLE OXYGEN	35-31-01		
Removal/Installation		401	ALL
Inspection/Check		601	ALL

OXYGEN - DESCRIPTION AND OPERATION

1. General
   A. The oxygen systems supply oxygen to the crew and passengers. There are two separate systems; a crew system and a passenger system. Portable oxygen cylinders with masks supply extra oxygen.
   B. Oxygen for the crew system is kept in a cylinder on the right side of the forward equipment compartment. An oxygen line connects the cylinder to the crew stations in the flight compartment.
   C. The passenger system supplies oxygen from chemical generators. The crew can automatically, or manually operate the system. An amber light on the pilot's overhead panel shows oxygen mask deployment.

OXYGEN - MAINTENANCE PRACTICES

1. General
   A. This procedure contains these tasks:
      (1) Safety Precautions
      (2) General Maintenance Practices
      (3) Installation of Caps on Open Oxygen Lines
   B. Read and follow this procedure before you do the maintenance on the crew oxygen system.

   TASK 35-00-00-912-005
2. Safety Precautions
   A. Consumable Materials
      (1) G00713 Cloth - Clean, Dry, Lint-Free, White, Cotton
      (2) G50263 Gloves - Lint free, Nylon
      (3) G00092 Oxygen System Leak Detection Compound - MIL-L-25567
      (4) G01293 Tape, Teflon - Specification MIL-T-27730 1/4 inch wide
      (5) G02479 Lockwire - Copper (0.020 inch Diameter) (NASM20995CY20)
   B. References
      (1) AMM 20-10-23/401, Lockwires
      (2) AMM 20-11-00/201, Standard Torque Values
      (3) AMM 20-41-00/201, Static Grounding
   C. Access
      (1) Location Zones

113	Area Forward of the NLG Wheel Well (Right)
200	Upper Half Fuselage
211/212	Control Cabin

   D. Procedure - Safety Practices

      S 912-006

      WARNING: DO NOT WORK ON THE PRESSURIZED OXYGEN SYSTEM WHEN THERE IS OIL, GREASE, FLAMMABLE SOLVENTS, DUST, LINT, METAL FILINGS, OR OTHER COMBUSTIBLE MATERIALS IN THE AREA. THESE MATERIALS CAN CAUSE A FIRE OR AN EXPLOSION WHEN THEY ARE NEAR PRESSURIZED OXYGEN. THIS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

      (1) Do not work on the pressurized oxygen system near oil, grease, flammable solvents, dust, lint, metal filings, or other flammable materials.

      S 862-007
      (2) Make sure the airplane is electrically grounded (AMM 20-41-00/201).

S 912-008
(3) Keep the oxygen away from hot exhaust, sparks, and flame.

S 912-009
(4) Keep the oxygen away from flammable material such as fuel, paint, thinners, and cleaning solvents.

S 912-010
(5) Make sure your hands, clothing, equipment, and tools are clean and free of petroleum products (AMM 35-00-00/701).

S 912-011
(6) Put on clean, white, nylon gloves that are lint free when you work on the oxygen system.

S 792-012
(7) Use the approved leak detection compounds to do leak tests.

S 792-013
(8) Immediately rub off the leak detection compound with a clean cloth after the leak detection test.

S 912-014
(9) Make sure there is a sufficient flow of air through the work area when you work on the oxygen system.

S 022-055

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.

(10) When you install a component in the oxygen system, make sure you remove all the protective caps.

S 212-046

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.

(11) Make sure the fittings are clean and free of contaminants, and thread chips.

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 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 912-043

WARNING: DO NOT USE THE B-NUT TO PULL THE FITTINGS INTO ALIGNMENT. IF THE FITTINGS ARE NOT CORRECTLY ALIGNED, A LEAK CAN OCCUR WHICH CAN CAUSE A FIRE OR EXPLOSION.

(12) If two fittings are connected with a B-nut, make sure the fittings are aligned before you tighten the B-nut.

S 912-018

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

S 862-039

CAUTION: DO NOT TIGHTEN THE SHUTOFF VALVE ON THE OXYGEN CYLINDERS MORE THAN 25 POUND-INCHES. THIS CAN CAUSE DAMAGE TO THE SHUTOFF VALVE.

(14) When you close the shutoff valve, close them slowly and only with your hand.

S 862-044

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 WHICH CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(15) When you open a shutoff valve, open it slowly and only with your hand.
(a) Open the shutoff valve to full open.
(b) Close the shutoff valve one-fourth of a turn.
(c) Install a lockwire, GO2479, on the valve (AMM 20-10-23/401).

S 912-020

CAUTION: KEEP A GAP BETWEEN THE ELECTRICAL WIRING AND THE OXYGEN HOSES OR TUBINGS TO PREVENT CHAFING. THIS CAN CAUSE DAMAGE TO THE ELECTRICAL WIRING OR OXYGEN HOSES/TUBING.

(16) Keep a 2 inch gap between the oxygen hose and the electrical wiring when the oxygen boxes and mask stowage boxes are closed.

NOTE: If the gap is less than 2 inches, install a clamp hose around the wiring as necessary to prevent chafing.

S 412-035

WARNING: DO NOT INSTALL THE LOW PRESSURE HOSES IN THE HIGH PRESSURE SYSTEM. THE OXYGEN HOSE COULD BURST OR CATCH FIRE, WHICH CAN CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(17) Do not connect the low pressure oxygen hoses in the high pressure system.

NOTE: Flexible hose assemblies are used in the high and low pressure systems and can be connected to standard tubing connectors. Low pressure hoses operate at pressures of 100 psi and must not be installed in the high pressure system. High pressure can be greater than 1850 psi.

S 412-036
(18) Do not permit the oxygen hoses to twist, kink, or collapse.

TASK 35-00-00-912-040

3. General Maintenance Practices (Fig. 201 and 202)

A. Consumable Materials

(1) G00713 Cloth - Clean, Dry, Lint-Free, White, Cotton
(2) G50263 - Lint free, nylon gloves
(3) G00092 Oxygen System Leak Detection Compound - MIL-L-25567
(4) G01293 Tape, Teflon - Specification MIL-T-27730 1/4 inch wide
(5) G01505 Copper Lockwire - 0.020 inch diameter

B. References

(1) AMM 20-10-23/401, Lockwires
(2) AMM 20-11-00/201, Standard Torque Values
(3) AMM 35-00-00/201, Oxygen

C. Access

(1) Location Zones

113	Area Forward of the NLG Wheel Well (Right)
200	Upper Half of Fuselage
211/212	Control Cabin

D. Procedure - Maintenance Practices

S 912-047

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.

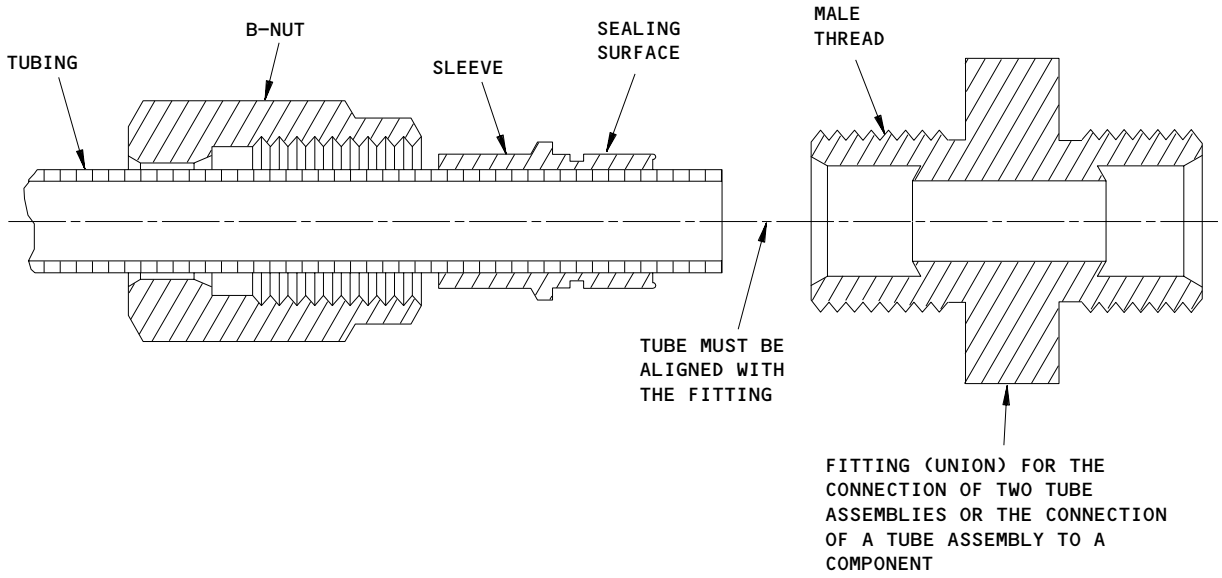
(1) Before you remove and install oxygen system fittings, tubing, or components, do these steps:
(a) Obey the safety precautions before you do the maintenance.
(b) Clean all tools, equipment, and fittings before you do the maintenance.
(c) Put on clean gloves and clean clothing during the maintenance.

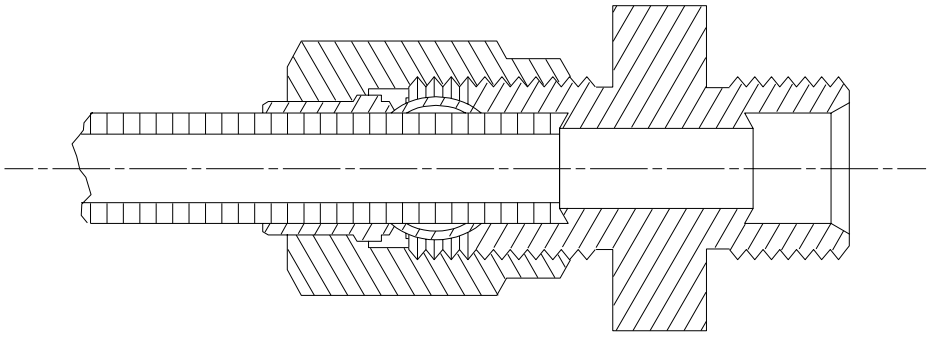
CAUTION: DO NOT TIGHTEN THE SHUTOFF VALVE ON THE OXYGEN CYLINDER TO A TORQUE OF MORE THEN 25 POUND-INCHES. THIS CAN CAUSE DAMAGE TO THE SHUTOFF VALVE.

(d) Close the shutoff valve (hand-tight) on the oxygen cylinder.

S 872-041

(2) When it is possible, bleed the oxygen lines off through a crew oxygen mask before you do maintenance.





TUBE AND SLEEVE ARE ALIGNED
AND ENGAGED AT THE END OF THE FITTING

Tube and Fitting Installation
Figure 201

S 872-042

WARNING: OPEN THE CONNECTIONS SLOWLY. THE RESIDUAL OXYGEN CAN RELEASE WITH A LARGE FORCE WHICH CAN CAUSE A FIRE. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

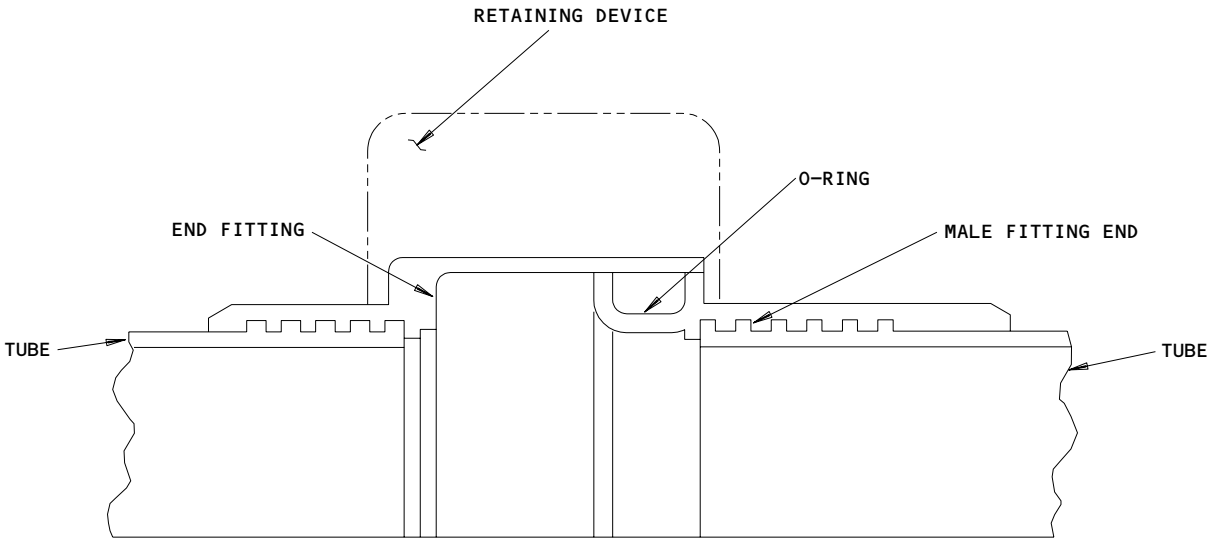
(3) If it is not possible to bleed off pressure through a mask, loosen the oxygen line connections to bleed off the pressure before you do maintenance.

S 912-026

(4) Do these steps to disconnect hose connections from oxygen tubing, components, and fittings (Fig. 201 and 202):

CAUTION: USE TWO WRENCHES TO LOOSEN THE FITTINGS. USE THE SECOND WRENCH TO HOLD THE FITTING TO PREVENT DAMAGE TO THE FITTING.

(a) Loosen the fitting connections slowly with a back-up wrench to prevent damage to the fitting.



COUPLING CROSS SECTION

Quick-Disconnect Coupling Installation
Figure 202

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.

(b) Install the clean caps or plugs immediately into the open fittings and the ports, AMM 35-00-00/201.

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 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.

(c) Seal the caps and plugs in polyethylene bags.

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.

(d) Install only components that are clean.
(e) If the component is not clean, discard the component and install a clean component.
(f) When you install a component, start all connectors with your hand.
(g) Make sure the connector engages the fitting threads at least two full turns before you use a wrench.
(h) Install the fitting connections with a back-up wrench to prevent damage to the fitting.
(i) Tighten all the crew oxygen system tubing and fittings to the standard torques (AMM 20-11-00/201).
(j) Examine all the connections for leaks.
(k) If you can not stop a leak replace the defective part.

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 WHICH CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

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

NOTE: The maximum torque is 25 pound-inches.

(m) Close the valve one quarter of a turn.

(n) Install a lockwire, GO2479, on the valve (AMM 20-10-23/401).

S 792-023

(5) Do the leak detection procedure:

(a) Use an approved leak detection compound to find small leaks.

1) Apply the approved leak detection compound with a soft brush on the connections that you think are a source of leaks.

2) Examine all the connections for bubbles.

3) Use a mirror and a light when necessary to examine areas that are not easy to see.

4) Rub off leak detection compound with a clean cloth immediately after the test.

S 392-024

(6) Seal the pipe thread with teflon tape, if it is necessary:

(a) Apply tape to the external threads.

NOTE: Do not apply the teflon to the last 1 1/2 to 2 1/2 threads at the end of the fitting.

(b) Apply 1-1/2 turns of the teflon tape, pulled tight, to the pipe threads.

(c) Make sure the tape is not installed beyond the end of the fitting.

TASK 35-00-00-402-053

4. Installation of Caps on Open Oxygen Lines

A. Consumable Materials

(1) G50310 Tape - Teflon, 1/4 inch wide, Permacel P-412

B. Equipment

(1) Cap - Protective, Aluminum, Flareless Tube, BACC14AG

(2) Plug - Protective, Aluminum, Flareless Tube, BACP20BG

C. Access

(1) Location Zones

113	Area Forward of the NLG Wheel Well (Right)
200	Upper Half of Fuselage
211/212	Control Cabin

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 422-048

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 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 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 862-049

(2) Make sure the threads are clean.

S 412-050

(3) Install Permacell P-412 tape, G50310 to the exterior threaded fittings.

S 412-051

(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 412-052

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

OXYGEN MODULE GENERATOR - INSPECTION/CHECK

1. General
   A. This procedure will help you know if the oxygen generators fired.

      NOTE: The temperature sensitive devices are black if the oxygen generator fired.

   B. Refer to the Portable Oxygen Cylinder - Inspection/Check procedure (AMM 35-31-01/601) for instructions to examine the portable oxygen cylinder for leakage and correct pressure.

   TASK 35-00-00-206-001

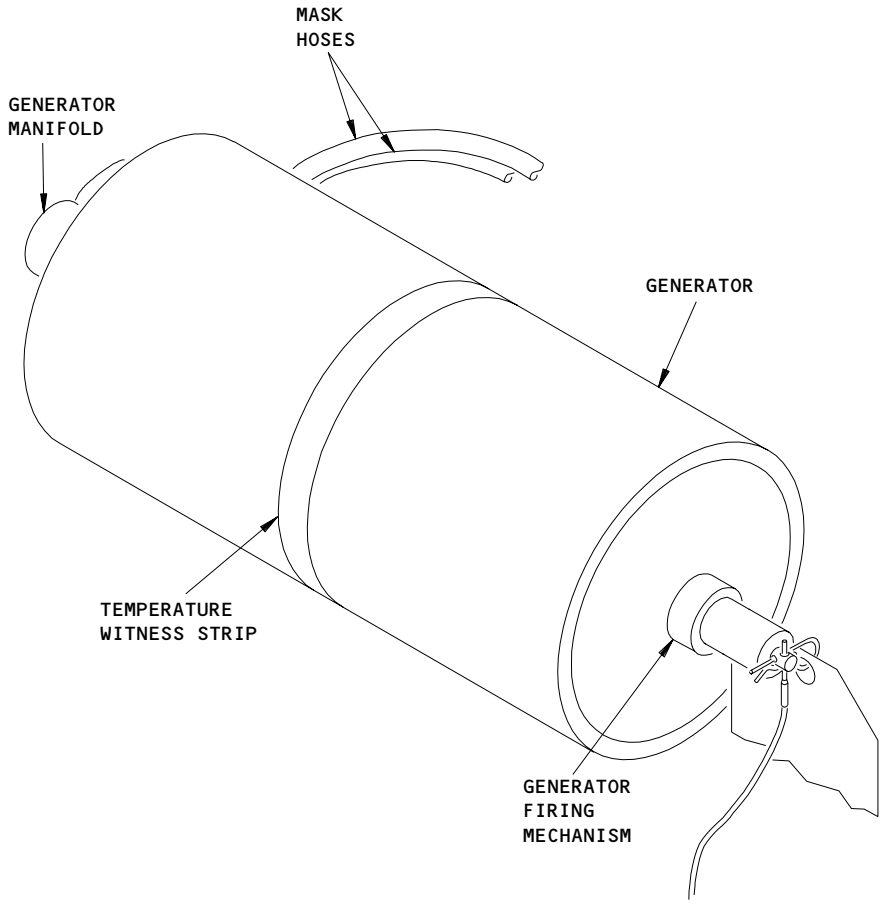
2. Temperature-Sensitive Tape Check - Oxygen Module Generators (Fig. 601)
   A. References
      (1) AMM 35-21-04/401, Oxygen Generator
   B. Procedure

      S 016-023
      (1) Get access to the oxygen generator (AMM 35-21-04/401).

      S 216-002
      (2) Examine the temperature sensitive tape on the oxygen generator. If the tape is black, the oxygen generator fired.

      NOTE: Replace the oxygen generator.

      S 216-003
      (3) Examine the firing pin position.
         (a) If the pin is in the fired position on the oxygen generator, replace the oxygen generator.



OXYGEN GENERATOR
(EXAMPLE)

Oxygen Generator Inspection
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 35-00-00/201, Oxygen
      (3) AMM 35-21-05/601, Passenger Oxygen Masks
      (4) AMM 35-21-05/701, Passenger Oxygen Masks
   C. Access
      (1) Location Zones
          113 Area Forward of the NLG Wheel Well (Right)
          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 35-00-00/201).

S 017-003
(2) Manually open the oxygen box doors and let the masks drop.

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) Install the passenger oxygen masks.

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 35-00-00/201, Oxygen

D. Access

(1) Location Zones

113 Area Forward of the NLG Wheel Well (Right)
200 Upper Half of Fuselage

E. Procedure

S 917-008

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

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.

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.

(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 167-014
(5) Rub with a clean, dry lint-free white cotton cloth to clean the oxygen system components.

S 557-013
(6) Store the components that are not to be installed in the airplane immediately:

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 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.

(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. FAILURE CAN OCCUR.

(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 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 (AMM 35-00-00/201):

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 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 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) Identify 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.

OXYGEN - DDG MAINTENANCE PROCEDURES

1. General
   A. This procedure contains the required maintenance tasks which are necessary to prepare the airplane for flight (dispatch) when certain oxygen systems/components are inoperative.
   B. These are the tasks for the components in the oxygen systems:
      (1) DDG 35-11-2 Preparation - Crew Oxygen System Inoperative
      (2) DDG 35-11-2 Restoration - Crew Oxygen System Inoperative
      (3) DDG 35-21-1 Preparation - Passenger Oxygen System Inoperative
      (4) DDG 35-21-1 Restoration - Passenger Oxygen System Inoperative.

TASK 35-00-00-869-008

2. DDG 35-11-2 Preparation - Crew Oxygen System Inoperative (Fig. 901)
   A. General
      (1) This task is for the operation of the airplane with the crew oxygen pressure indicator inoperative on EICAS.
   B. Access
      (1) Location Zones

113	Area Forward of the NLG Wheel Well (Right)
211/212	Control Cabin

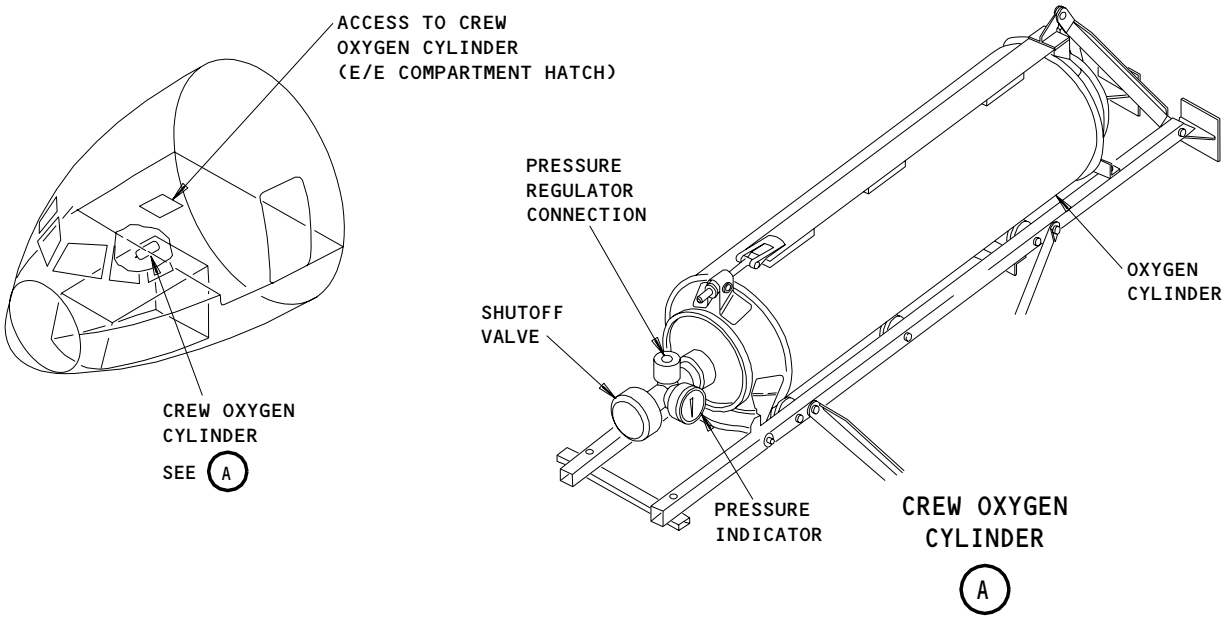
      (2) Access Panel

113AL	Forward Access Door

   C. Procedure

SAS
SAS S 789-003
SAS (1) Use the gage on the bottle to make sure of the system pressure.
SAS
SAS S 789-004
SAS (2) Find the temperature of the oxygen cylinder.
SAS
SAS S 979-005
SAS (3) Tell dispatch to find the number of crew and observers that will be
SAS in the flight compartment during the flight.
SAS
SAS S 979-006
SAS (4) Use the applicable "Crew Oxygen Minimum Dispatch Pressure" chart to
SAS make sure you have the necessary oxygen pressure for the flight.

SAS



AMBIENT TEMPERATURE DURING OPERATION		NUMBER OF CREW THAT USE THE OXYGEN			
°C	°F	2	3	4	5
−10	14	600	860	1110	1370
−5	23	610	875	1130	1395
0	32	620	890	1150	1420
5	41	635	910	1175	1445
10	50	645	925	1195	1475
15	59	655	940	1215	1500
20	70	670	960	1240	1530
25	77	680	975	1255	1550
30	86	690	990	1280	1580
35	95	700	1005	1300	1600
40	104	715	1020	1320	1630
45	113	725	1040	1340	1655
50	122	735	1055	1360	1680

NECESSARY PRESSURE FOR A 76 FT^3 CYLINDER (PSIG)

AMBIENT TEMPERATURE DURING OPERATION		NUMBER OF CREW THAT USE THE OXYGEN			
°C	°F	2	3	4	5
−10	14	430	600	770	940
−5	23	440	610	785	960
0	32	445	620	800	975
5	41	455	635	815	995
10	50	460	645	830	1010
15	59	470	655	840	1030
20	70	480	670	860	1050
25	77	485	680	870	1065
30	86	495	690	885	1080
35	95	505	700	900	1100
40	104	510	715	915	1120
45	113	520	725	930	1135
50	122	530	735	945	1155

NECESSARY PRESSURE FOR A 114 FT^3 CYLINDER (PSIG)

CREW OXYGEN MINIMUM DISPATCH PRESSURE

Crew Oxygen Pressure Indication
Figure 901

TASK 35-00-00-869-018

3. DDG 35-11-2 Restoration - Crew Oxygen System Inoperative (Fig. 901)

A. General

(1) This task puts the airplane back to its usual condition after the crew oxygen pressure indicator on EICAS is serviceable.

B. Access

(1) Location Zones

113	Area Forward of the NLG Wheel Well (Right)
211/212	Control Cabin

(2) Access Panel

113AL	Forward Access Door

C. Procedure

S 819-021

(1) Do the applicable chapter 35 FIM procedure to troubleshoot the crew oxygen pressure indication system.

S 979-023

(2) Use the applicable "Crew Oxygen Minimum Dispatch Pressure" chart to make sure you have the necessary oxygen pressure for the flight.

TASK 35-00-00-869-007

4. DDG 35-21-1 Preparation - Passenger Oxygen System Inoperative

A. General

(1) This task is for the operation of the airplane with inoperative automatic deploy system and/or passenger service unit(s).

B. Access

(1) Location Zones

200	Upper Half of Fuselage
211/212	Control Cabin

C. References

(1) AMM 35-21-00/501 Passenger Oxygen System

D. Procedure

SAS

SAS S 869-001

SAS (1) Do these steps if the Automatic Deploy System does not operate:

SAS (a) Make sure the passenger oxygen system will manually deploy (AMM 35-21-00/501).

SAS (b) If only the automatic deploy system does not operate, put the placard 'PASS OXY - AUTO MODE INOP' near the top EICAS screen.

SAS (c) Tell dispatch. This will affect flight dispatch.

SAS
SAS S 869-002
SAS (2) Do these steps if the Passenger Service Unit(s) do not operate.
SAS (a) Close the door that does not operate.
SAS (b) Use tape to keep the door closed.
SAS (c) Do not permit the applicable seat or lavatory which has the unit that does not operate to be used.
SAS 1) Put a placard 'NOT TO BE OCCUPIED' on the applicable seat or lavatory.

TASK 35-00-00-869-019

5. DDG 35-21-1 Restoration - Passenger Oxygen System Inoperative

A. General

(1) This task puts the airplane back to its usual condition after the inoperative the automatic deploy system and/or passenger service unit(s) are serviceable.

B. Access

(1) Location Zones

200	Upper Half of Fuselage
211/212	Control Cabin

C. Procedure

S 819-020

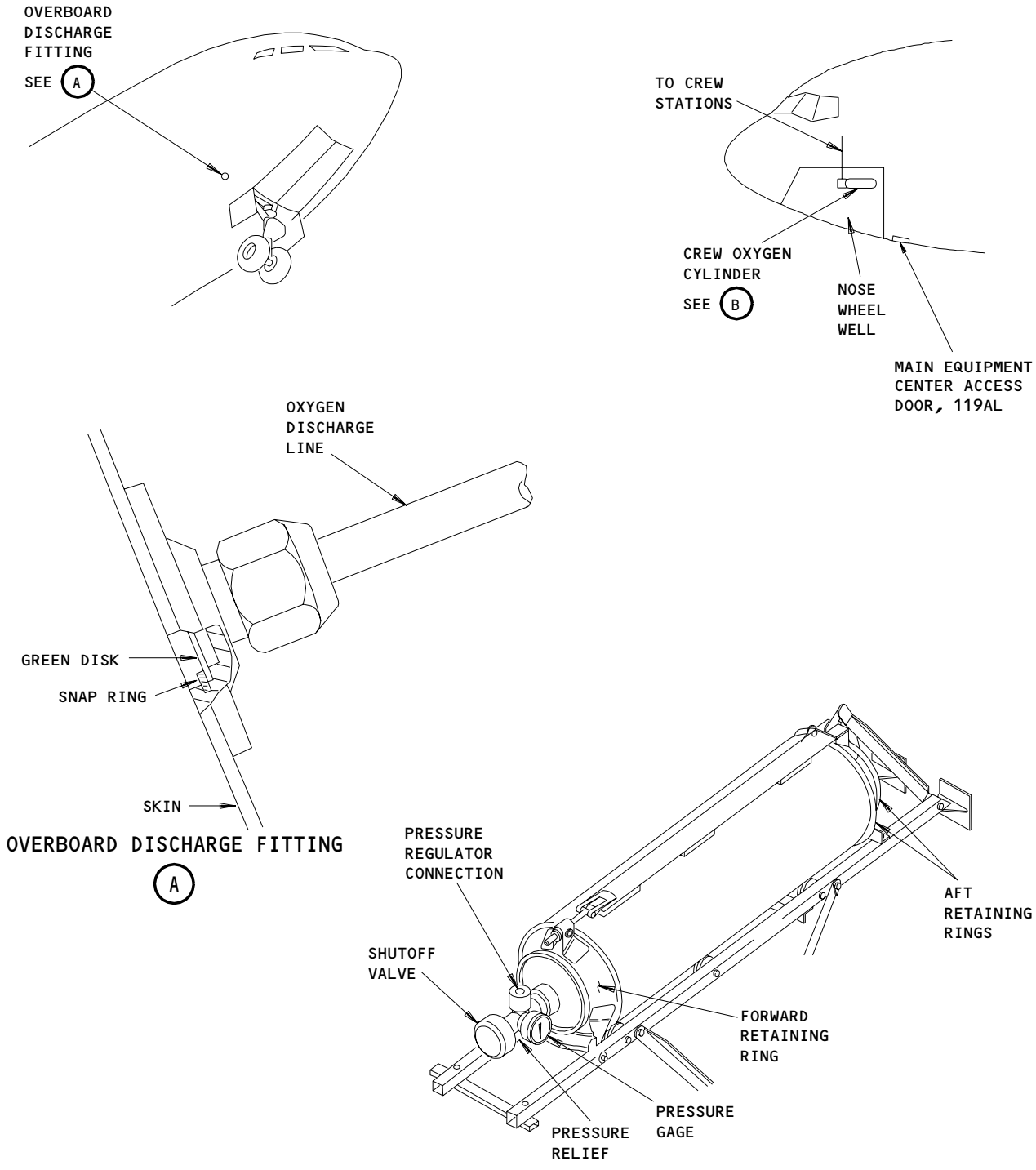
(1) Do the applicable chapter 35 FIM procedure to troubleshoot the automatic deploy system and/or passenger service unit(s).

S 039-022

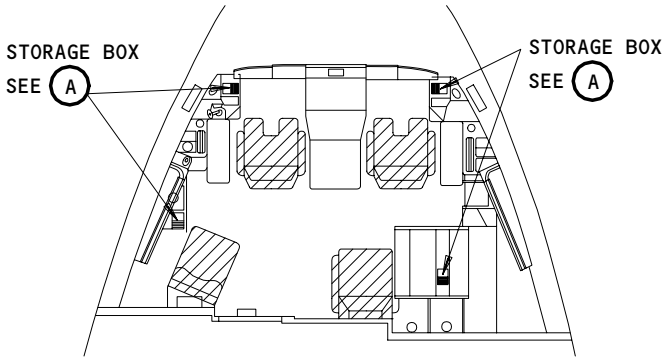
(2) Do the steps that follow to remove the applicable placard:
(a) If the Automatic Deploy System is operational, remove the 'PASS OXY - AUTO MODE INOP' placard near the top EICAS screen.
(b) If the Passenger Service Unit is operational, remove the 'NOT TO BE OCCUPIED' placard from the applicable seat or lavatory.

CREW OXYGEN SYSTEM - DESCRIPTION AND OPERATION

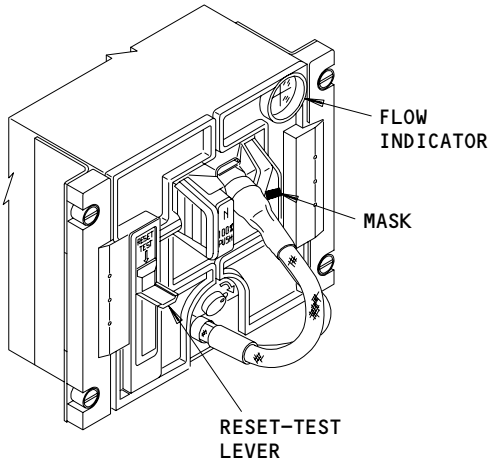
1. General
   A. The crew system supplies each crew member with oxygen. The crew masks receive oxygen from a pressurized cylinder. Each mask has controls for adjustment by each crew member.
   B. The crew system includes: a cylinder, a pressure regulator, a pressure transducer, a shutoff valve, pressure indication, crew masks with diluter-demand regulators, and supply, and discharge lines. The cylinder stores high pressure oxygen for the crew. A pressure regulator reduces oxygen pressure to the crew masks. A diluter-demand regulator in each mask further reduces the pressure as it flows from the mask. Pressure indication within the system shows cylinder pressure. Cylinders with low pressure are replaced with full cylinders during servicing.
   C. For more details on the Oxygen system, refer to these wiring diagrams and functional schematics:
      SSM 35-11-01: Crew Oxygen
2. Oxygen Cylinder (Fig. 1)
   A. The cylinder is installed horizontally on the right side of the electrical/electronic compartment. The cylinder has a volume of 114 cubic feet and is normally pressurized to 1800 ± 50 psi at 70°F (21°C). The cylinder neck has a shutoff valve, a pressure gage, a pressure regulator connection, and a pressure relief valve. The shutoff valve controls flow in and out of the cylinder, while the pressure gage gives a direct reading of cylinder pressure. The pressure relief valve opens when cylinder pressure reaches 2850 ± 150 psi and discharges the oxygen overboard.
3. Overboard Discharge (Fig. 1)
   A. If the crew cylinder becomes overpressurized, the thermal relief valve, on the cylinder neck, opens. The high pressure oxygen routes through an overboard discharge line to the overboard discharge port. When pressure in the overboard discharge line reaches 500 psi a green disk in the overboard discharge port pops out and lets the oxygen escape. The disk is held in its position by a snap-ring. The overboard discharge port is adjacent to the nose wheel well on the lower right side of the fuselage. The green disk is easily seen during pre-flight check.
4. Crew Oxygen Masks (Fig. 2)
   A. A mask is kept in a storage box at each flight compartment crew station. Each mask connects to a pneumatic harness which inflates when the mask is pulled from the storage box. Each mask has a regulator which reduces oxygen pressure from 70 psi to 0-5 psi. There are three modes of oxygen available to each crew member. In the normal mode, an air/oxygen mixture is supplied as demanded. In the 100 percent oxygen mode, pure oxygen is supplied as demanded. In the emergency oxygen mode, a constant supply of pure oxygen flows through the mask.



Crew Oxygen Components
Figure 1

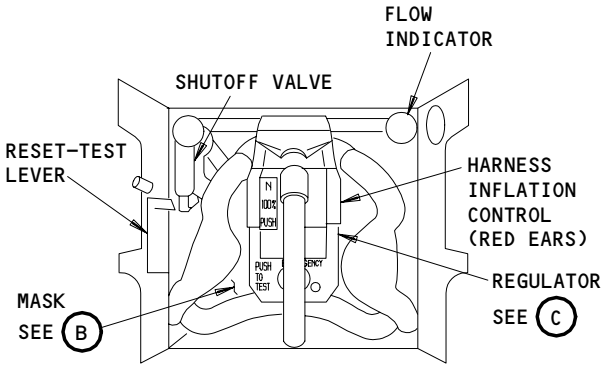


FLIGHT COMPARTMENT



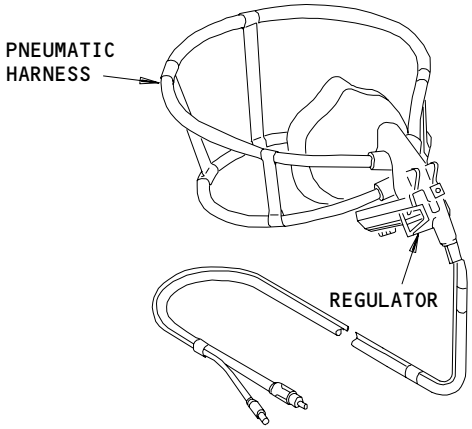
STORAGE BOX WITH DOORS CLOSED

A



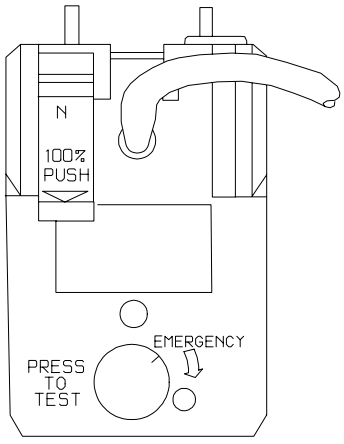
STORAGE BOX WITH DOORS OPEN

A



MASK (SHOWN INFLATED)

B



REGULATOR

C

Crew Oxygen Masks
Figure 2

5. Pressure Regulator (Fig. 3)
   A. The pressure regulator attaches to the oxygen cylinder neck. The inlet port receives high pressure oxygen from the cylinder. The valve stem is spring-loaded open, but closes when downstream pressure reaches 70 psi. The valve stem opens and closes to maintain 70 psi of oxygen to the outlet port. The outlet port supplies oxygen to the crew masks. The regulator has a relief valve which begins to open at 120 psi, and opens fully at 160 psi in case the valve stem malfunctions.
   B. A pressure transducer is attached to the pressure regulator. It sends an electrical signal to the EICAS computers to show cylinder pressure.
6. Operation (Fig. 3)
   A. Functional Description
      (1) High pressure oxygen flows from the crew cylinder to the pressure regulator. The pressure regulator reduces the pressure to about 70 psi. When this low pressure oxygen reaches the crew masks, diluter-demand regulators further reduce the pressure to 0-5 psi. A pressure transducer sends an electrical signal to the EICAS computers to show crew cylinder pressure.
      (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 provides a constant flow of oxygen through the mask.
   B. Control
      (1) Oxygen flow, from the cylinder, is controlled by a shutoff valve on the cylinder neck. Oxygen flow, from each mask, is controlled by a switch and a knob on each regulator. For normal operation, put the selector switch to NORMAL and the emergency knob OFF. For 100 percent oxygen mode, put the selector switch to 100% and the emergency knob OFF. For emergency oxygen mode, put the selector switch to 100% and the emergency knob ON.

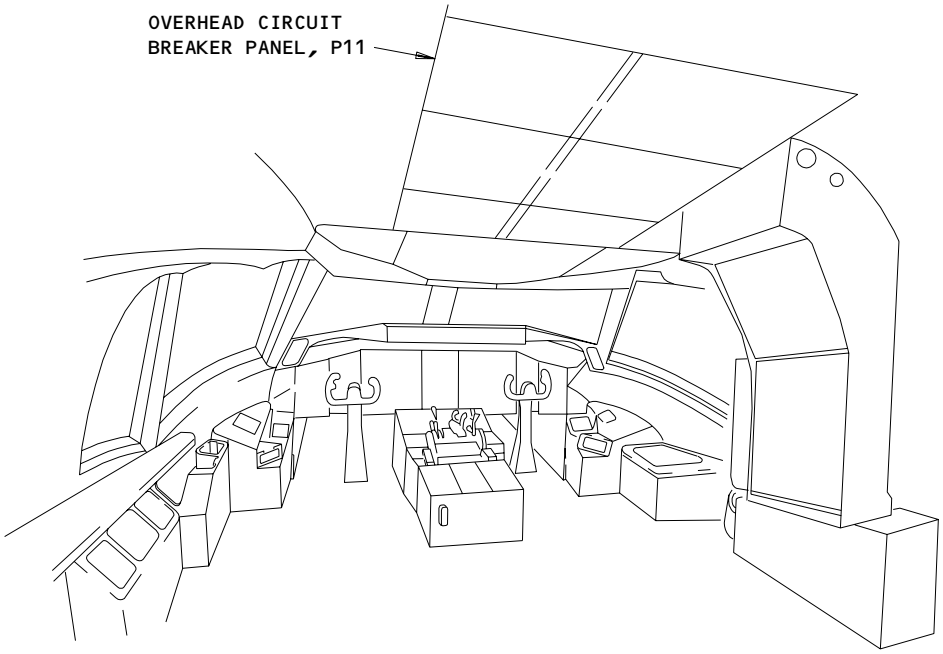
CREW OXYGEN

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER – OXYGEN PRESSURE, C1320	1	1	FLIGHT COMPARTMENT, P11 PANEL 11U29	*
CYLINDER – OXYGEN	3	1	119AL, RIGHT SIDE OF THE FORWARD MAIN EQUIP CTR	35-11-00
INDICATOR – OXYGEN PRESSURE	3	1	119AL, RIGHT SIDE OF THE FORWARD MAIN EQUIP CTR	35-11-00
MASK/REGULATOR – OXYGEN	2	4	FLIGHT COMPARTMENT	35-11-00
REGULATOR – OXYGEN PRESSURE	3	1	119AL, RIGHT SIDE OF THE FORWARD MAIN EQUIP CTR	35-11-03
TRANSDUCER – OXYGEN PRESSURE, TS120	3	1	119AL, RIGHT SIDE OF THE FORWARD MAIN EQUIP CTR	35-11-03

* SEE THE WDM EQUIPMENT LIST

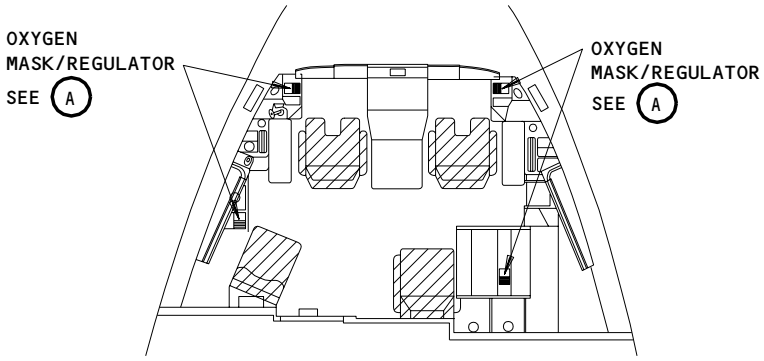
Crew Oxygen – Component Index
Figure 101

33993

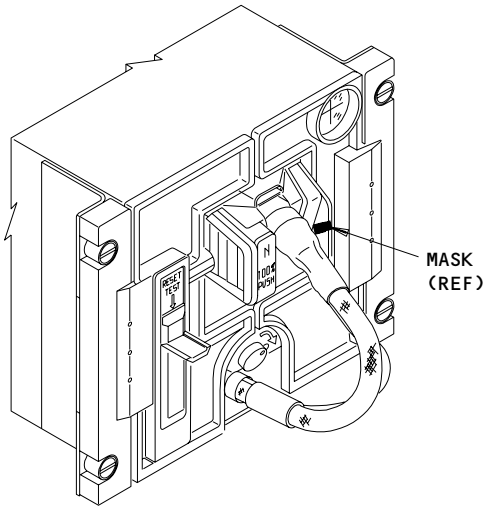


FLIGHT COMPARTMENT

Crew Oxygen - Component Location
Figure 102 (Sheet 1)

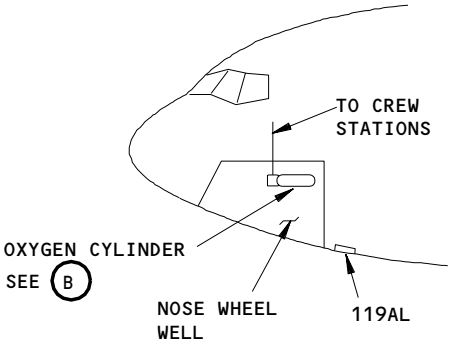


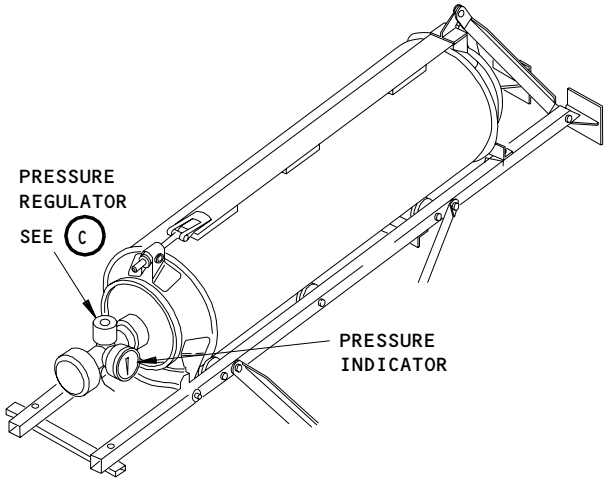
FLIGHT COMPARTMENT
(EXAMPLE)



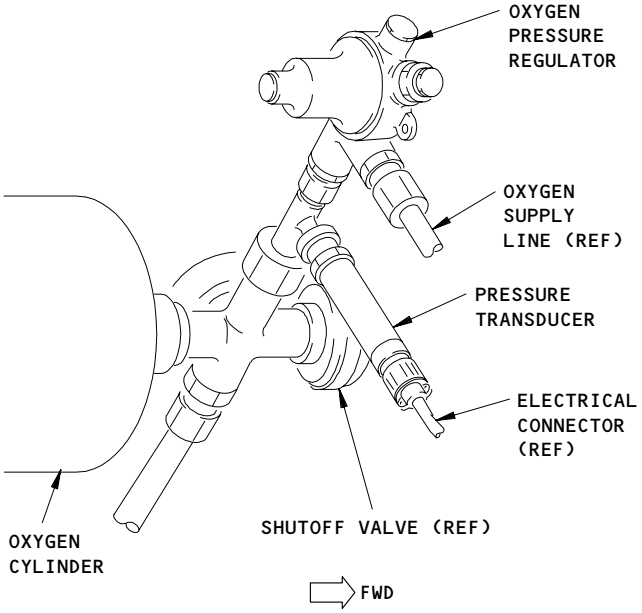
OXYGEN MASK/REGULATOR
(SHOWN IN THE STORAGE BOX WITH THE DOORS CLOSED)
A

Crew Oxygen – Component Location
Figure 102 (Sheet 2)





OXYGEN CYLINDER
(B)



PRESSURE REGULATOR
(C)

Crew Oxygen - Component Location
Figure 102 (Sheet 3)

CREW OXYGEN SYSTEM - ADJUSTMENT/TEST

1. General
   A. This procedure includes these tasks:
      (1) Crew oxygen system pressure indication test
      (2) Crew oxygen high pressure leakage test
      (3) Crew oxygen stowage box test
      (4) Crew oxygen mask/regulator test
      (5) Crew oxygen low pressure line test.
   B. The procedure gives an operational test of the crew oxygen system. You must do the operational test with a fully assembled oxygen system. Do the test at each flight crew station. Also given is a high pressure leakage test for the high pressure line, and a test of the low pressure line. The leak test of the crew oxygen system is done with a portable test cylinder.

TASK 35-11-00-705-043

2. Crew Oxygen System Pressure Indication Test (Fig. 501)
   A. Consumable Materials
      (1) G00092 Leak Detection Compound - Sherlock CG, Type I - MIL-L-25567
   B. References
      (1) AMM 24-22-00/201, Electrical Power - Control
   C. Access
      (1) Location Zones
          211/212 Control Cabin

   D. Procedure - Pressure Indication Test

      S 865-046

      CAUTION: DO NOT USE GREASE OR OIL, OR A COMPOUND OR FLUID THAT CONTAINS HYDROCARBONS WHEN YOU DO THIS TEST. THESE PRODUCTS CAN IGNITE OR EXPLODE WHEN THEY MIX WITH OXYGEN.

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

S 865-040
(2) Make sure the six EICAS circuit breakers on the overhead circuit breaker panel, P11, are closed.

S 865-038
(3) Put the EICAS COMPUTER select switch on the select panel for the EICAS display in the L position.

NOTE: The switch is on the forward aisle stand.

S 225-037
(4) Make sure the difference between the oxygen pressure shown on the EICAS and on the crew oxygen cylinder is less than 100 psi.

S 865-036
(5) Put the select switch EICAS COMPUTER to the R position.

S 225-035
(6) Make sure the difference between the oxygen pressure shown on the EICAS and on the crew oxygen cylinder is less than 100 psi.

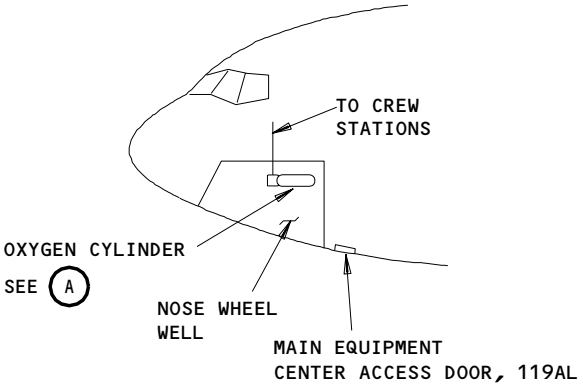
E. Put the Airplane Back to its Usual Condition

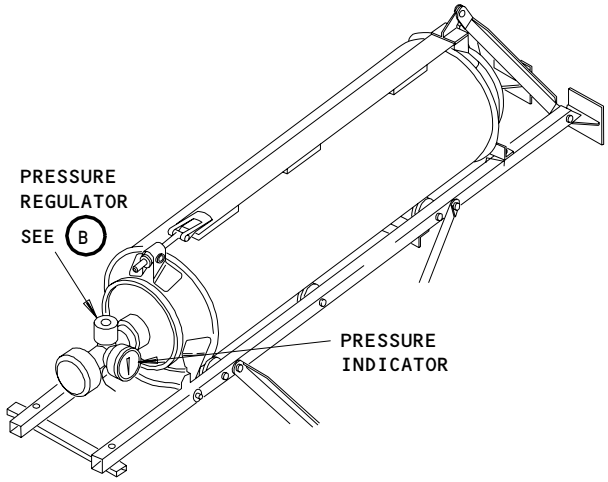
S 865-107
(1) Remove the electrical power if it is not necessary (AMM 24-22-00/201).

TASK 35-11-00-795-106

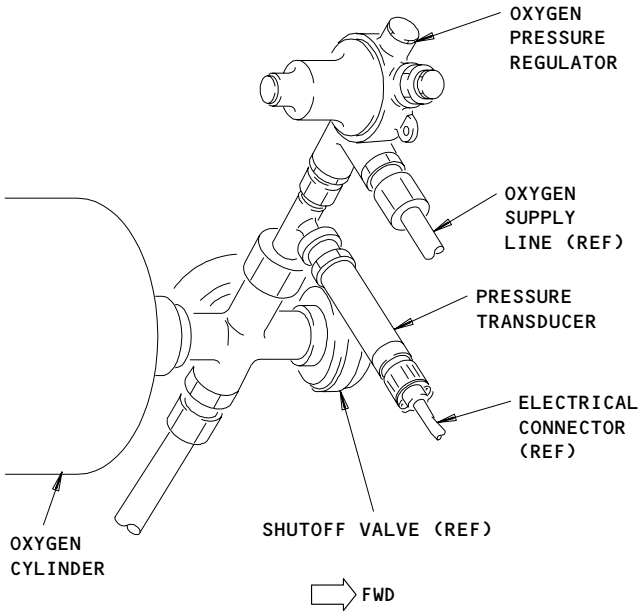
3. Crew Oxygen High Pressure Leakage Test (Fig. 501)

A. Equipment
(1) Portable Test Cylinder 0-1850 psi Scott Aviation 255 Erie Street, Lancaster N,Y, (if applicable).
(2) Low Pressure Gage - 0 to 150 psig, for low pressure testing.





OXYGEN CYLINDER
A



PRESSURE REGULATOR
B

Crew Oxygen System Components
Figure 501

(3) High Pressure Gage - 0 to 2000 psig, 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 Tee-Fittings (as applicable).
(6) Clean flexiable high pressure hoses.

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.
(4) G00091 Compound - Oxygen System Leak Detection (MIL-L-25567).
(5) G00713 Cloth - Clean, Dry, Lint-Free, White Cotton
(6) G02479 Inspection Wire, 0.020 cad/copper - MS20995CY20

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

D. Procedure

S 865-069
(1) Close the crew oxygen cylinder shutoff valve.

S 035-323

WARNING: USE ONLY OXYGEN CLEAN COMPONENTS IN THE OXYGEN SYSTEM. IF YOU DO NOT USE OXYGEN CLEAN COMPONENTS, THIS CAN CAUSE A FIRE OR AN OR AN EXPLOSION WHEN NEAR PRESSURIZED OXYGEN WHICH CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.
(2) Disconnect the supply line tubing from the pressure regulator.

S 865-311
(3) Put a cap on the pressure regulator outlet to prevent contamination of the system. (AMM 35-00-00/201)

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 485-075
(4) Connect the portable test cylinder and test gage to the supply line.

E. Pressurization and Leak Check

S 785-330

WARNING: SLOWLY OPEN THE SHUTOFF VALVE. IF YOU OPEN THE VALVE QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR AN EXPLOSION, WHICH CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

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

S 785-331
(2) After the system has become stable, close the control valve on the portable test cylinder.

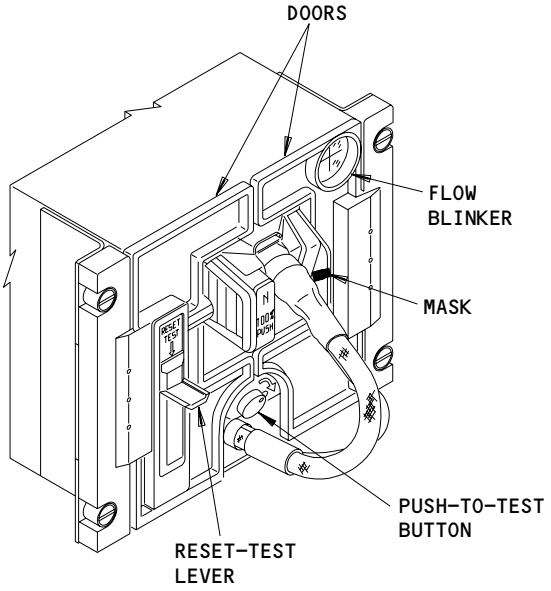
S 795-079
(3) The pressure drop must not be more than a rate of 15 psig per hour.

S 215-092
(4) Monitor the leakage rate for a minimum of 30 minutes.

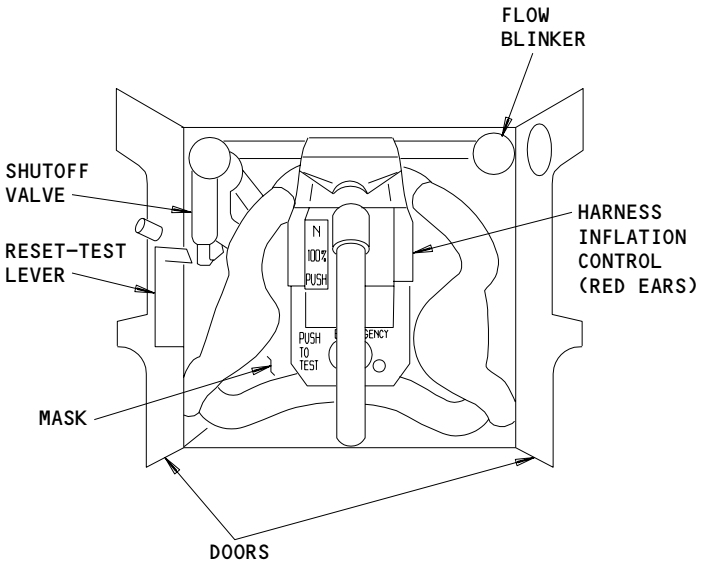
S 795-080
(5) If there is leakage, find and repair the source of leakage.

S 795-093
(6) Do the "Pressurization and Leak Check" procedure again until no leakage is found.

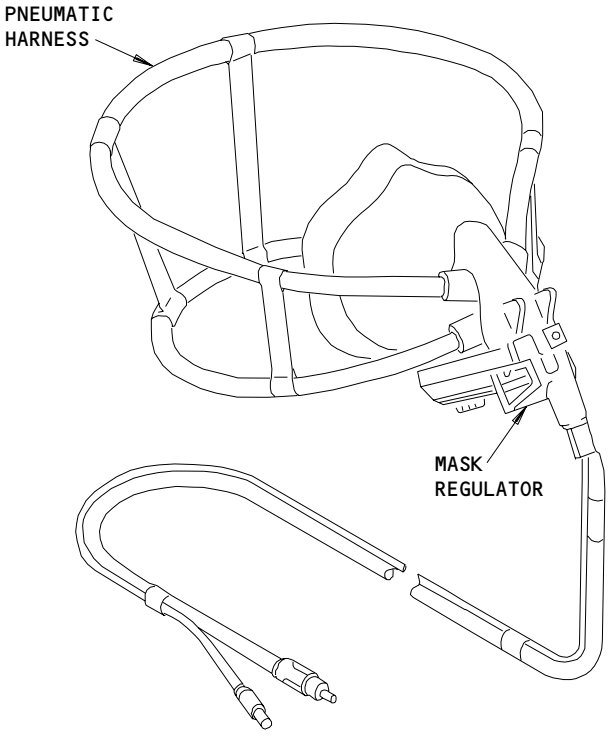
NOTE: Leakage is not permitted.



CREW OXYGEN MASK (SHOWN IN THE STORAGE BOX WITH THE DOORS CLOSED)



CREW OXYGEN MASK (SHOWN IN THE STORAGE BOX WITH THE DOORS OPEN)



CREW OXYGEN MASK (SHOWN INFLATED)

Crew Oxygen Masks
Figure 502

F. Put the Airplane Back to Its Usual Condition

S 085-082
(1) Close the control valve on the portable test cylinder.

S 085-083
(2) Disconnect the portable test cylinder and test gage from the supply line.

S 435-095
(3) Connect the supply line tubing to the pressure regulator.

S 865-189

WARNING: SLOWLY OPEN THE SHUTOFF VALVE. IF YOU OPEN THE VALVE QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR AN EXPLOSION, WHICH CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Slowly open the crew oxygen cylinder shutoff valve to full open. Then turn the shutoff valve 1/4 turn in the opposite direction.
(a) Install an Inspection Wire on the valve (AMM 20-10-23/401).

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

TASK 35-11-00-715-050

4. Crew Oxygen Stowage Box Test (Fig. 502)
A. References
(1) AMM 24-22-00/201, Electrical Power - Control
(2) AMM 35-00-00/201, 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 35-00-00/201).

S 865-055
(1) Supply electrical power (AMM 24-22-00/201).

S 755-034
(2) Push fully and hold the RESET-TEST lever at the captain's station in the TEST position.

NOTE: The mask regulator will be pressurized from an unpressurized state.

S 755-033
(3) 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 755-031
(4) Push the PUSH-TO-TEST button on the mask regulator for approximately one second and then release it.

S 755-064
(5) Make sure the flow indicator comes on and then goes off when you release the PUSH-TO-TEST button.

S 755-065
(6) Make sure the oxygen flow can be heard while the regulator PUSH-TO-TEST button is pushed.

S 865-309
(7) Release the RESET-TEST lever and make sure it goes back to the original position.

S 865-310
(8) Push the N-100% control lever on the mask regulator to make sure that it moves correctly between one setting to the other.

S 865-025
(9) Set the N-100% control lever to the original position (N or 100%) as required by flight operations.

S 755-023
(10) Do the tasks "Crew Oxygen Stowage Box Test" at all the other flight crew stations.

D. Put the Airplane Back to its Usual Condition

S 865-057
(1) Remove the electrical power if it is not necessary (AMM 24-22-00/201).

TASK 35-11-00-725-051

5. Crew Oxygen Mask/Regulator Test (Fig. 502)

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

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

C. Procedure

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

S 865-058
(1) Supply electrical power (AMM 24-22-00/201).

S 015-022
(2) 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 215-303
(3) 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 715-305
(4) 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 715-299
(5) Release the red harness inflation button.
(a) Make sure that the pneumatic harness deflates smoothly.

S 755-019
(6) Put the mask/regulator to your face.

S 715-306
(7) 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 755-017
(8) 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 865-308

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.

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

S 715-295
(10) Do the "Oxygen Mask Microphone Test" (AMM 23-51-00/501).

S 865-301
(11) Set the N-100% control lever to the original position (N or 100%) as required by flight operations.

S 165-300
(12) Wipe the mask clean of any oily residue.

S 415-015
(13) Put the oxygen mask/regulator in its stowage box (AMM 35-11-51/201).

S 725-062
(14) Repeat this test for other crew mask stowage box, if necessary.

D. Put the Airplane Back to its Usual Condition

S 865-053
(1) Remove the electrical power if it is not necessary (AMM 24-22-00/201).

TASK 35-11-00-785-052

6. Crew Oxygen Low Pressure Line Test

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

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 35-00-00/201).

S 865-061
(1) Supply electrical power (AMM 24-22-00/201).

S 755-014
(2) Pull one of the crew station oxygen masks from its stowage box. Apply pressure with your fingers on the harness inflation ears.

S 755-013
(3) Make sure the mask harness quickly inflates.

S 415-012
(4) Put the oxygen mask back in its stowage box (AMM 35-11-51/201).

D. Put the Airplane Back to its Usual Condition

S 865-001
(1) Remove the electrical power if it is not necessary (AMM 24-22-00/201).

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 35-11-00-206-228

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
          113 Area Forward of the NLG Wheel Well (Right)
          211 Control Cabin (Left)
          212 Control Cabin (Right)

      (2) Access Panel
          113AL Forward Access Door

   D. Procedure

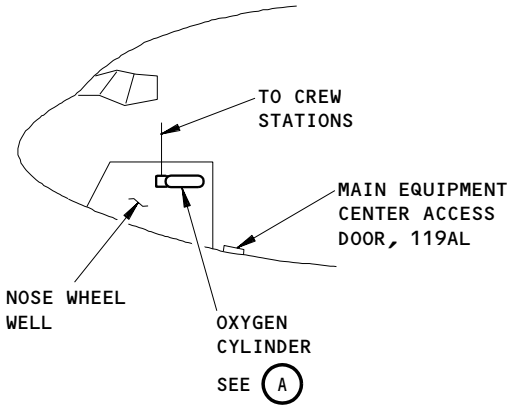
      S 916-229
      (1) Read and obey the safety precautions and general instructions for the oxygen system before you do the maintenance, (Ref 35-11-00/201).

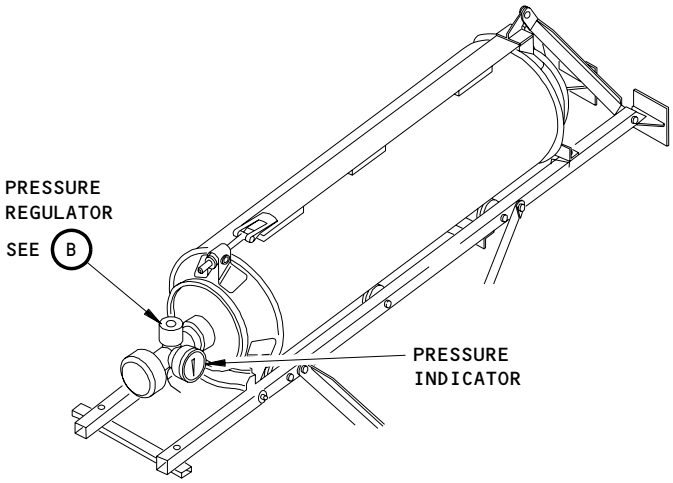
      S 016-230
      (2) Open the access door to the crew oxygen cylinder.

      S 216-231
      (3) Do a check of the pressure gage on the crew oxygen cylinder.

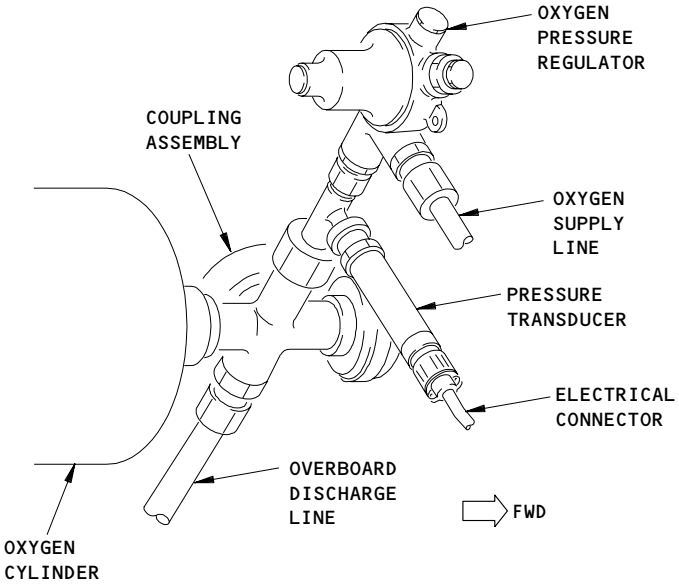
          NOTE: Make sure the pressure is above the minimum necessary for dispatch.

      S 796-232
      (4) Apply the leak detection compound, G50306 to all the fittings and connections.
          (a) Look for bubbles to find all leaks.





OXYGEN CYLINDER
(EXAMPLE)
A



PRESSURE REGULATOR
(EXAMPLE)
B

Crew Oxygen Cylinder Inspection
Figure 601

(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.

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 35-11-00-206-233

3. Oxygen Cylinder Correct Installation and Condition Check

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

B. Access
(1) Location Zones
113 Area Forward of the NLG Wheel Well (Right)
211 Control Cabin (Left)
212 Control Cabin (Right)

(2) Acces Panel
113AL Forward Access Door

C. Procedure

S 916-234
(1) Read and obey the safety precautions and general instructions for the oxygen system before you do the maintenance, (Ref 35-11-00/201).

S 016-235
(2) Open the access door to the crew oxygen cylinder.

S 216-236
(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.
(b) Make sure the coupling assembly is installed correctly to the crew oxygen cylinder.
(c) Make sure the electrical connector is installed correctly.

(d) Make sure the oxygen supply and overboard-discharge lines are installed correctly.

S 216-237

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

S 216-238

(5) Do a check of the crew oxygen cylinder to make sure it is in the satisfactory condition:

(a) Do this task to check the crew oxygen cylinder for leaks: Oxygen Cylinder Pressure and Leak Check, TASK 35-11-00-206-228

(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.

OXYGEN PRESSURE REGULATOR - REMOVAL/INSTALLATION

1. General
   A. This procedure contains two tasks.
      (1) The first task is to remove the oxygen pressure regulator from the crew oxygen system.
      (2) The second task is to install the oxygen pressure regulator for the crew oxygen system.

TASK 35-11-03-004-003

2. Remove the Oxygen Pressure Regulator (Fig. 401)
   A. References
      (1) AMM 35-00-00/201, Oxygen
   B. Access
      (1) Location Zone
          113 Area Forward of the NLG Wheel Well (Right)

      (2) Access Panel
          113AL Forward Access Door

   C. Procedure

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

      S 864-005
      (1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
          (a) 11U29, OXYGEN PRESS

      S 014-039
      (2) Get access to the crew oxygen cylinder through the forward access door.

      S 864-091

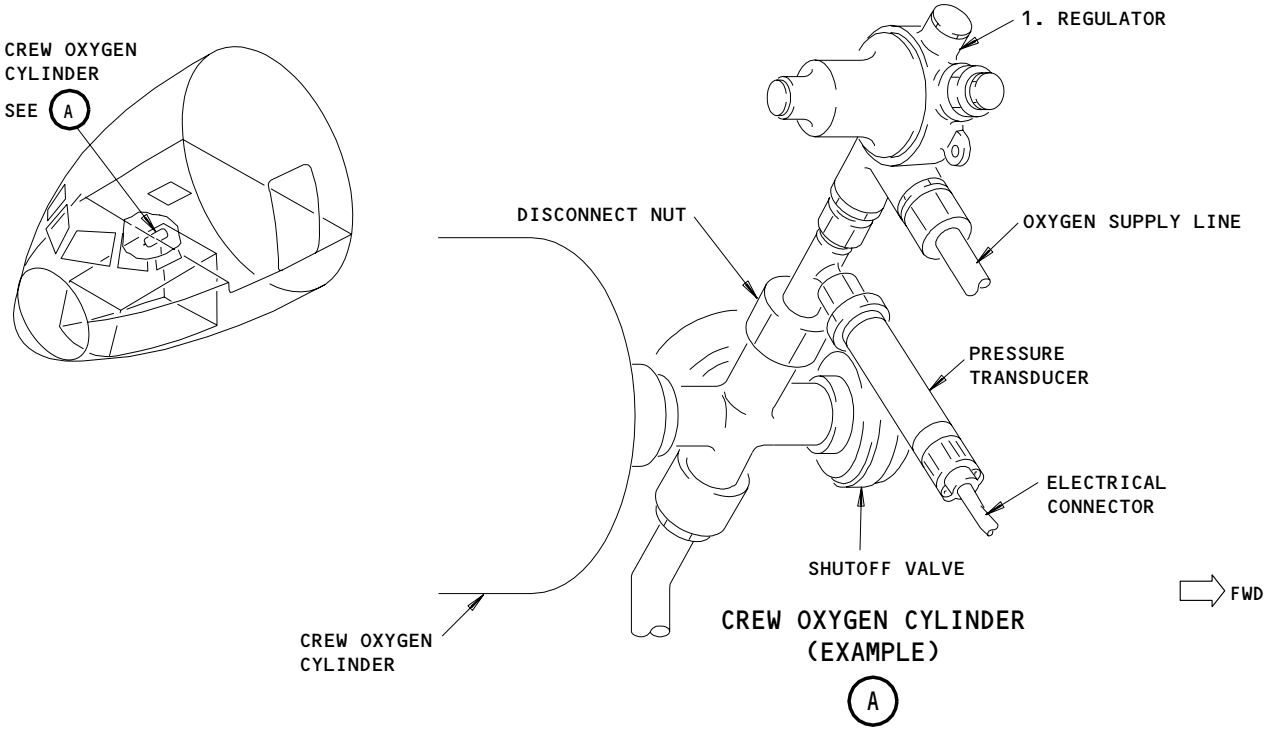
      CAUTION: DO NOT APPLY TOO MUCH TORQUE. IF YOU APPLY TOO MUCH TORQUE, DAMAGE TO THE VALVE CAN OCCUR.

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

S 914-008
(4) Set a crew oxygen mask to 100% emergency oxygen.

S 914-009
(5) Move the test lever on a crew oxygen mask stowage box as many times as it is necessary to bleed the oxygen lines.

S 034-010
(6) Disconnect the electrical connector from the transducer.



Pressure Regulator Installation
Figure 401

S 024-089

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.

(7) Disconnect the oxygen line from the regulator (1).

S 034-016

(8) Disconnect the regulator (1) from the oxygen cylinder.

S 024-017

(9) Remove the regulator (1).

S 434-018

(10) Install a cap or a plug into the open lines and fittings. (AMM 35-00-00/201).

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 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 35-11-03-404-038

3. Install the Oxygen Pressure Regulator (Fig. 401)

A. Consumable Materials

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

(2) GO2479 Lockwire - Copper (0.020 inch Diameter) (NASM20995CY20)

B. References

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

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

C. Access

(1) Location Zone

113 Area Forward of the NLG Wheel Well (Right)

(2) Access Panel

113AL Forward Access Door

D. Procedure

S 914-019

(1) Put the crew oxygen mask back to its usual condition.

S 034-020

(2) Remove the caps from the oxygen lines and the fittings.

S 214-087

(3) Examine the threads on the fittings to make sure they are clean.

S 414-088

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

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 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 434-023

(5) Connect the oxygen line to the regulator (1).

S 434-027

(6) Connect the electrical connector to the transducer.

S 864-028
(7) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11U29, OXYGEN PRESS

S 864-029
(8) Supply electrical power (AMM 24-22-00/201).

S 864-001

WARNING: SLOWLY OPEN THE SHUTOFF VALVE. IF YOU OPEN THE VALVE QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR EXPLOSION, WHICH CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(9) Slowly open the shutoff valve to full open. Then turn the shutoff valve 1/4 turn in the opposite direction.

S 434-030
(10) Install a lockwire, G02479, on the valve (AMM 20-10-23/401).

S 214-034
(11) Make sure the difference between the oxygen pressure shown on the status page of the EICAS and on the oxygen cylinder is less than 100 psi.

S 214-035
(12) Examine the regulator connections for leaks with the leak detection compound.

S 034-002
(13) Remove the leak detection compound with a clean cloth immediately after you examine the regulator connections.

S 914-036
(14) Close the access to the crew oxygen cylinder.

S 864-037
(15) 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.
      (1) The first task is to remove the pressure transducer from the crew oxygen system.
      (2) The second task is to install the pressure transducer for the crew oxygen system.

TASK 35-11-04-004-001

2. Remove the Pressure Transducer (Fig. 401)
   A. References
      (1) AMM 35-00-00/201, Oxygen
   B. Access
      (1) Location Zone
          113 Area Forward of the NLG Wheel Well (Right)

      (2) Access Panel
          113AL Forward Access Door

   C. Procedure

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

      S 864-003
      (1) Open this circuit breaker and attach a DO-NOT-CLOSE tag:
          (a) On the overhead circuit breaker panel, P11:
              1) 11U29, OXYGEN PRESS

      S 014-004
      (2) Get access to the crew oxygen cylinder through the forward access door.

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

      S 914-006
      (4) Set a crew oxygen mask to 100% emergency oxygen.

      S 914-007
      (5) Move the test lever on a crew oxygen mask box until the oxygen lines are completely bled.

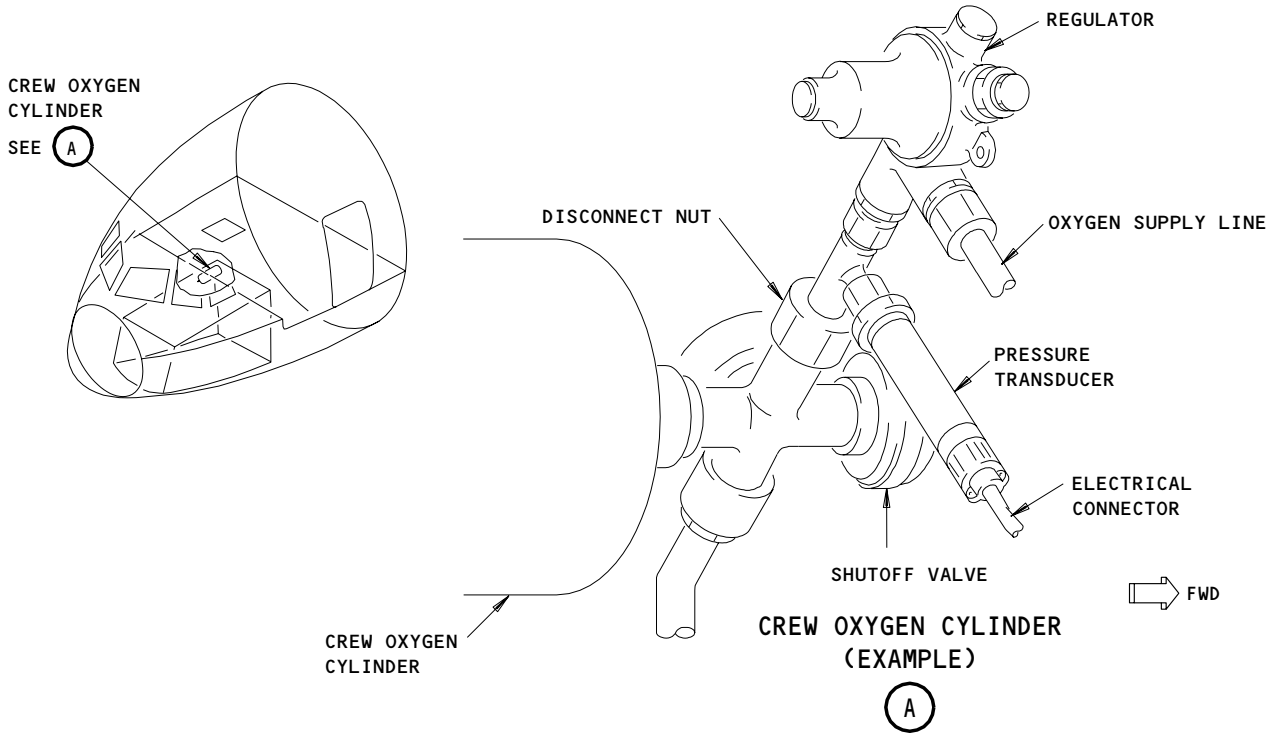
      S 034-008
      (6) Disconnect the electrical connector from the transducer.

S 024-076

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.

CAUTION: DO NOT USE THE TRANSDUCER BODY OR THE COUPLING BODY AS A LEVER. USE A WRENCH ON THE TRANSDUCER SQUARE BOSS AND ON THE COUPLING HEX NUT, OR DAMAGE TO COMPONENTS CAN OCCUR.

(7) Remove the pressure transducer from the cylinder coupling.



Pressure Transducer Installation
Figure 401

S 034-011
(8) To prevent contamination of the system components, seal ports and lines with plugs or caps (AMM 35-00-00/201).

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 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 35-11-04-404-019

3. Install the Pressure Transducer (Fig. 401)
   A. General
      (1) Read and obey the safety precautions and general maintenance instructions before you do the maintenance (AMM 35-00-00/201).
   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, Lockwire
      (2) AMM 24-22-00/201, Electrical Power - Control
   D. Access
      (1) Location Zone
          113 Area Forward of the NLG Wheel Well (Right)

      (2) Access Panel
          113AL Forward Access Door

   E. Procedure

      S 914-020
      (1) Put the crew oxygen mask back to its usual condition.

      S 034-021
      (2) Remove the caps from the oxygen lines and the fittings.

      S 214-073
      (3) Examine the threads on the fittings to make sure they are clean.

S 414-075

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) Position the pressure transducer on the cylinder coupling.

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 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 424-045

CAUTION: DO NOT USE THE TRANSDUCER BODY OR THE COUPLING BODY AS A LEVER. USE A WRENCH ON THE TRANSDUCER SQUARE BOSS AND ON THE COUPLING HEX NUT, OR DAMAGE TO COMPONENTS CAN OCCUR.

(5) Tighten the pressure transducer on the cylinder coupling to 170 pound-inches.

S 434-030

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

S 864-031

(7) Remove the DO-NOT-CLOSE tag and close this circuit breaker:
(a) On the overhead circuit breaker panel, P11:
1) 11U29, OXYGEN PRESS

S 864-032

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

S 864-033

WARNING: SLOWLY OPEN THE SHUTOFF VALVE. IF YOU OPEN THE VALVE QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR EXPLOSION, WHICH CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(9) Slowly open the shutoff valve on the crew oxygen cylinder to full open. Then turn the shutoff valve 1/4 turn in the opposite direction.

S 434-034
(10) Install the lockwire, GO2479, on each shutoff valve (AMM 20-10-23/401).

S 214-040
(11) Make sure the pressure on the status page of the EICAS and on the oxygen cylinder agree within 100 psi.

S 214-041
(12) Examine the connections between the pressure transducer and the cylinder coupling for leaks with the leak detection compound.

S 214-047
(13) If there is leakage, bleed the pressure of the crew oxygen system.

S 424-048

CAUTION: DO NOT USE THE TRANSDUCER BODY OR THE COUPLING BODY AS A LEVER. USE A WRENCH ON THE TRANSDUCER SQUARE BOSS AND ON THE COUPLING HEX NUT, OR DAMAGE TO COMPONENTS CAN OCCUR.

(14) Tighten the pressure transducer on the cylinder coupling to 220 pound-inches.

S 794-049
(15) Do a check for leakage at the transducer connection with the leak detection compound.

S 034-042
(16) Remove the leak detection compound with a clean cloth immediately after you examine the transducer connections.

S 914-043
(17) Close the access to the crew oxygen cylinder.

S 864-044
(18) Remove electrical power if it is not necessary (AMM 24-22-00/201).

CREW OXYGEN MASK - MAINTENANCE PRACTICES

1. General
   A. This procedure has one task. The task is instructions to put the crew oxygen mask back in the stowage box.
   B. It is necessary for safety to keep the crew oxygen masks in the correct position and location.
   C. Only approved persons can put the crew oxygen masks in the correct position and location.

   TASK 35-11-51-402-007

2. Put the Crew Oxygen Mask Back in the Stowage Box (Fig. 201)
   A. References
      (1) AMM 35-11-00/501, Crew Oxygen System
   B. Access
      (1) Location Zones
          211/212 Control Cabin

   C. Procedure

      S 212-040

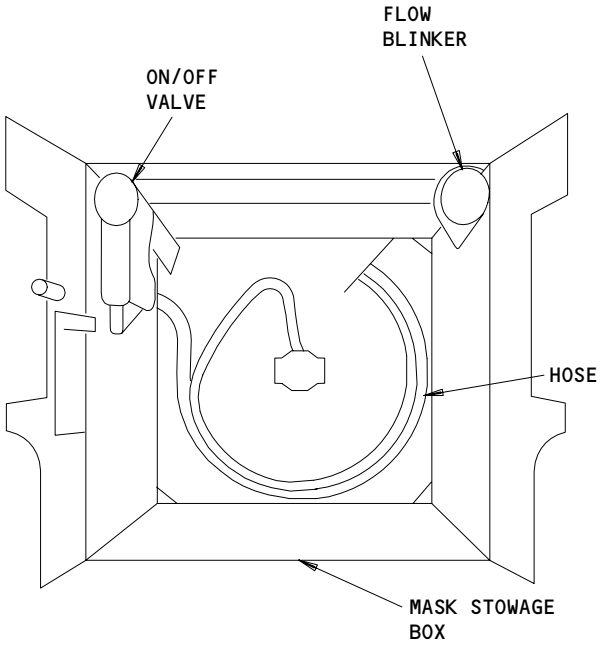
      CAUTION: DO NOT LET FOREIGN OBJECTS OR DEBRIS TO MAKE CONTACT WITH THE LENS. IF FOREIGN OBJECTS COME IN CONTACT WITH LENS THEY CAN CAUSE SCRATCHING OR DAMAGE.

      (1) Make sure the oxygen mask harness and the oxygen supply hose are not twisted.

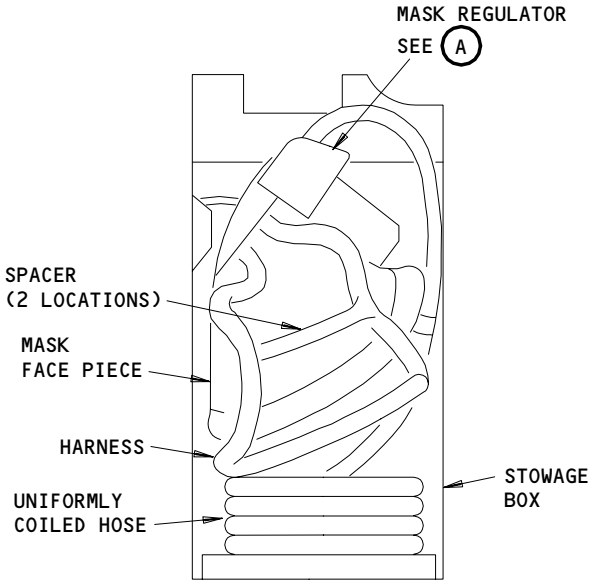
      S 212-009
      (2) Make sure the oxygen supply hose is tight in the clips at the bottom of the mask stowage box.

      S 432-010
      (3) While you hold the mask, wind the hose into coils in the stowage box.

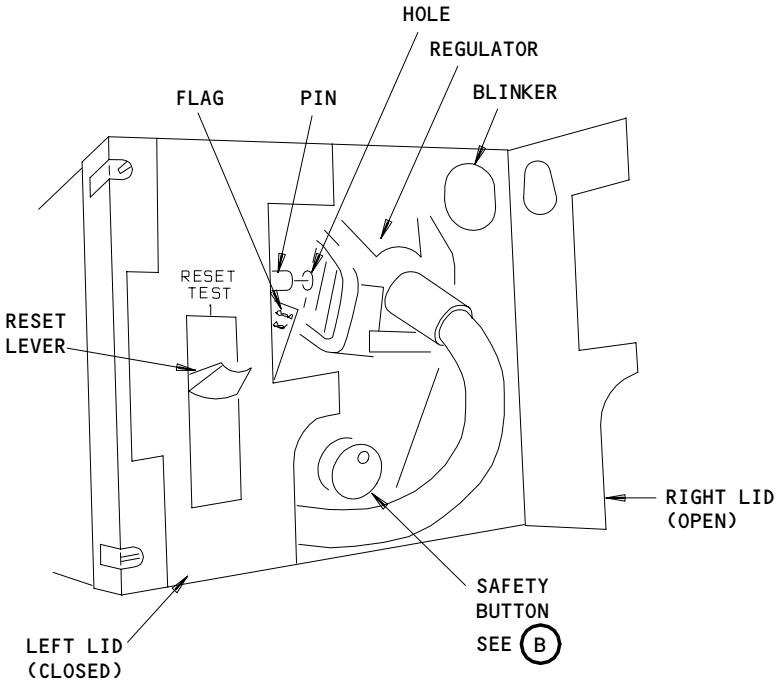
      NOTE: Carefully push the hose down to get coils of constant and equal shape.



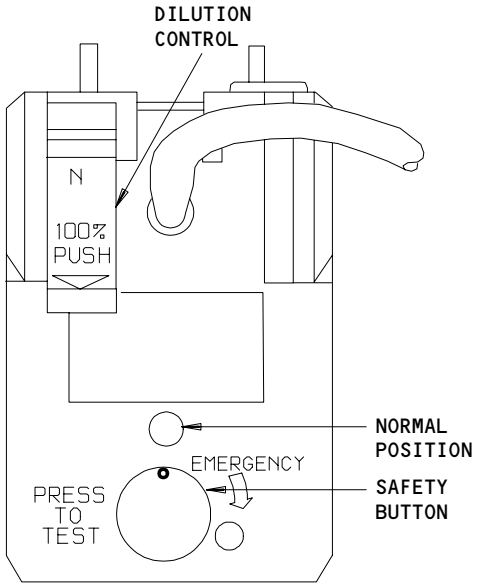
TOP VIEW



SIDE VIEW



MASK REGULATOR
A



SAFETY BUTTON
B

Crew Oxygen Mask Repacking Procedure
Figure 201

S 212-043

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

NOTE: An opaque protective sheet may be installed on the face mask goggle by the manufacturer, 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 no remove the protective strip if installed. It is intended to remove ice or condensation from the goggle lenses during rapid decompression.

S 212-041

(5) Make sure all vents on smoke goggles are closed.

S 212-042

(6) Make sure that the cross straps are placed over the manufactures location marks.

S 432-011

(7) When most of the supply hose is wound into coils, carefully push the two large spacers down onto the coils.

S 422-012

(8) Put the mask harness into the stowage box, while you move the mask forward at an angle.

S 212-001

(9) Make sure the harness is on top of the supply hose that you put into coils.

S 212-044

WARNING: DO NOT PUT HARNESS CROSS BETWEEN LENS AND NOSE BRIDGE OF MASK. IF YOU PUT HARNESS CROSS BETWEEN LENS AND NOSE BRIDGE IT COULD PREVENT PROPER INFLATION.

(10) Make sure the tab on the front of the mask is on the horizontal plastic ledge in the stowage box.

NOTE: There are two styles of stops.
If boxes have the "bar stop", rest the tabs of the mask on the bar.

If masks have the "clip stop", insert the tabs of the mask between the clips until the tabs "click" into place.

S 212-003
(11) Make sure the first two harness spacers are on top of the mask face piece.

S 212-021
(12) Make sure the harness will not touch the ON-OFF valve or the flow blinker when the stowage box lid is closed.

S 432-005
(13) Put the supply hose at the center of the bottom of the box.

S 432-006
(14) Push the supply hose in until the supply hose connectionss do not touch the mask face seal.

S 212-013
(15) Make sure the dilution control is at the 100% position.

S 212-014
(16) Make sure the safety pressure button is in the normal position.

S 412-015
(17) Close the left lid of the stowage box.

S 412-016
(18) Move the RESET lever on the left lid.

S 212-017
(19) Make sure you can not see the flag.

S 432-018
(20) Engage the pin on the left lid in the hole on the left side of the mask regulator.

S 412-022
(21) Close the right lid of the stowage box.

S 212-020
(22) Do the Crew Oxygen Stowage Box Test (AMM 35-11-00/501).

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.
      (2) The second task is instructions to install the stowage box.
      (3) The third task is instructions to remove the mask/regulator.
      (4) The fourth task is instructions to install the mask/regulator.
      (5) The fifth task is instructions to remove the mask face cone.
      (6) The sixth task is instructions to install the mask face cone.
   B. You can install and remove the mask stowage box as a unit.
   C. You can remove or install the stowage box, mask/regulator, and mask face cone one at a time.
   D. Read and obey the safety precautions and the general instructions before you do the maintenance (AMM 35-00-00/201).

TASK 35-11-51-004-002

2. Remove the Stowage Box (Fig. 401)
   A. Access
      (1) Location Zones
          211/212 Control Cabin

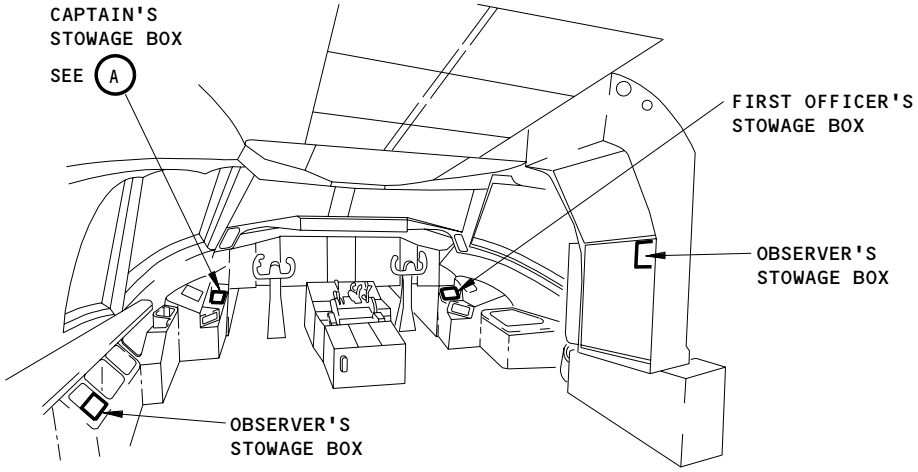
   B. Procedure

      S 864-076
      (1) Close the shutoff valve at the oxygen cylinder.

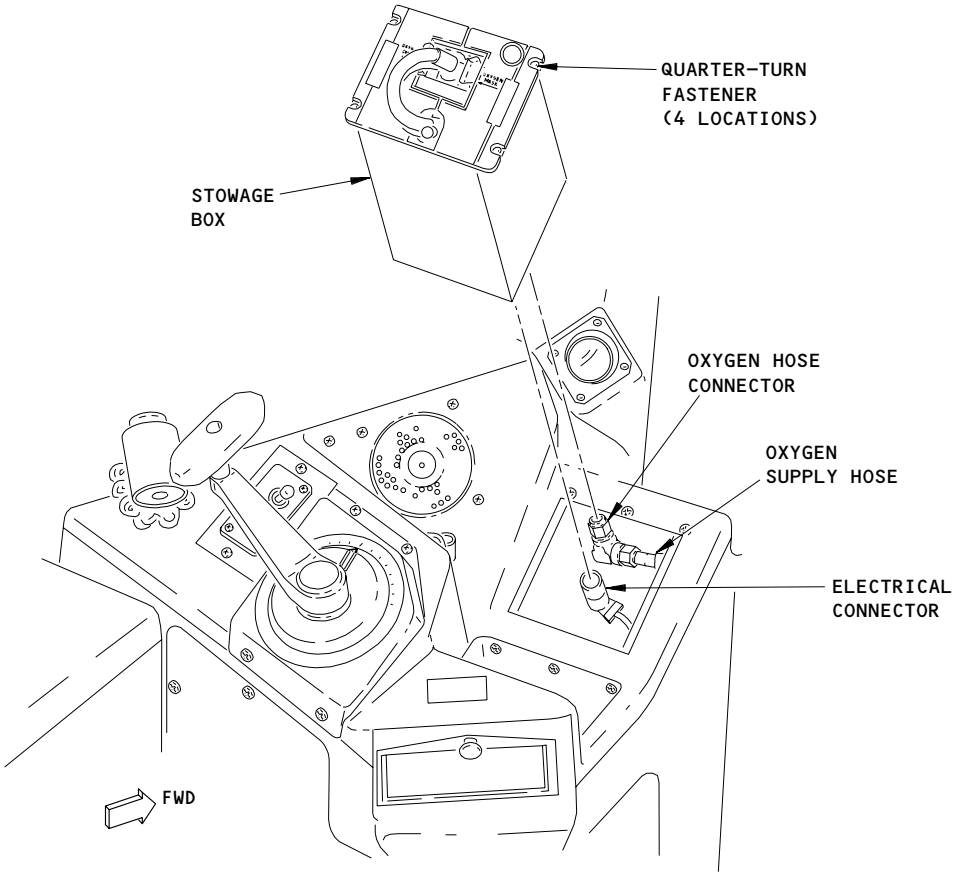
      S 874-006
      (2) Release the pressure in the oxygen system through a flight compartment mask.

      S 034-005
      (3) Loosen the fasteners that hold the stowage box to the console structure.

      S 024-001
      (4) Remove the stowage box from its position in the console.



FLIGHT COMPARTMENT



CAPTAIN'S STOWAGE BOX
(OTHER CREW MEMBER'S STOWAGE BOXES ARE EQUIVALENT)

A 1

1 2ND OBSERVER STOWAGE BOX DOES NOT HAVE A MICROPHONE CONNECTOR

Crew Oxygen Mask Stowage Box Installation
Figure 401

K47283

S 034-007

WARNING: BE CAREFUL WHEN YOU LOOSEN THE CONNECTIONS ON THE OXYGEN SYSTEM. A SUDDEN RELEASE OF THE REMAINING PRESSURE CAN CAUSE A FIRE OR AN EXPLOSION. THIS CAN CAUSE INJURY TO PERSONS OR DAMAGE TO THE EQUIPMENT.

(5) Disconnect the oxygen supply and the microphone connectors from the stowage box.

NOTE: Loosen the fitting connections slowly. Use a backup wrench to prevent damage to the fitting.

NOTE: The 2nd Observer stowage box does not have a microphone connector.

S 034-099

(6) Disconnect the ground strap from the stowage box.

S 434-087

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.

(7) Install the clean caps or plugs immediately into the open fittings and ports (35-00-00/201).

NOTE: Use metal caps if the cap will engage with the threads. Use plastic caps if the cap does not engage with the threads.

NOTE: Oxygen clean fittings comre 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 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 connections.

S 024-056

(8) Remove the stowage box.

TASK 35-11-51-404-009

3. Install the Stowage Box (Fig. 401)

A. References

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

(2) AMM 35-11-00/501, Crew Oxygen System

B. Access

(1) Location Zones

211/212 Control Cabin

C. Procedure

S 434-010

(1) Connect the oxygen supply and the microphone connectors to the stowage box as follows:

NOTE: The 2nd Observer stowage box does not have a microphone connector.

(a) Start the connectors with your hand to engage at least two full fitting threads.

(b) Tighten the fittings with a backup wrench to prevent damage to the fittings.

S 434-100

(2) Connect the ground strap to the stowage box.

S 434-055

CAUTION: VERIFY THAT 1/2 INCH OF PHYSICAL SEPARATION BETWEEN WIRING AND THE OXYGEN STOWAGE BOX IS MAINTAINED.

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

S 424-012

(4) Install the fasteners that hold the stowage box to the console structure.

S 434-013

(5) If not installed, install the mask/regulator in the stowage box.

S 864-078

WARNING: SLOWLY OPEN THE SHUTOFF VALVE. IF YOU OPEN THE VALVE QUICKLY, THE TEMPERATURE OF THE OXYGEN CAN INCREASE. THIS CAN CAUSE A FIRE OR AN EXPLOSION, WHICH CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(6) Open the shutoff valve on the oxygen cylinder to full open. Then turn the valve 1/4 turn in the opposite direction.

S 434-052
(7) Install a lockwire, G02479, on the oxygen cylinder shutoff valve (AMM 20-10-23/401)

NOTE: Use G02479 Lockwire - Copper (0.020 inch diameter) (NASM20995CY20).

S 714-016
(8) Do the operational test of the crew oxygen system (AMM 35-11-00/501).

TASK 35-11-51-004-018
4. Remove the Mask/Regulator
A. Access
(1) Location Zones
211/212 Control Cabin

B. Procedure

S 024-020
(1) Remove the mask from the stowage box.

S 034-021
(2) Close the left lid of the stowage box.

S 914-022
(3) Move the RESET lever on the left lid.

S 214-023
(4) Make sure you can not see the flag.

S 034-024
(5) Disconnect the stowage box oxygen supply and the microphone connectors from the mask/regulator at the quick-disconnect fittings.

S 434-088

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) Install the clean caps or plugs immediately into the open fittings and ports (35-00-00/201).

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 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 connections.

TASK 35-11-51-404-027

5. Install the Mask/Regulator

A. References

(1) AMM 23-51-00/501, System Test - Flight Interphone System

(2) AMM 35-11-51/201, Crew Oxygen Mask

B. Access

(1) Location Zones

211/212 Control Cabin

C. Procedure

S 434-028

(1) Connect the stowage box microphone and the oxygen supply connectors to the mask/regulator at the quick-disconnect fittings.

S 714-098

(2) Do this task: System Test - Flight Interphone System AMM 23-51-00-5).

S 864-030

(3) Open the left lid of the stowage box.

S 424-031

(4) Install the mask in the box (AMM 35-11-51/201).

TASK 35-11-51-004-033

6. Remove the Mask Face Cone

A. Access

(1) Location Zones

211/212 Control Cabin

B. Procedure

S 034-034

(1) Remove the mask from the stowage box.

S 414-035
(2) Close the left lid of the stowage box.

S 914-036
(3) Move the RESET lever on the left lid.

S 214-037
(4) Make sure you can not see the flag.

S 034-038
(5) Loosen the lock screw on the mask where the mask attaches to the regulator.

S 034-039
(6) Push the mask lock to the rear.

S 024-040
(7) Remove the mask from the regulator.

TASK 35-11-51-404-041

7. Install the Mask Face Cone

A. References
(1) AMM 23-51-00/501, Flight Interphone System
(2) AMM 35-11-51/201, Crew Oxygen Mask

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

C. Procedure

S 434-042
(1) Put the mask in position on the regulator.

S 424-043
(2) Move the mask lock forward to attach the mask to the regulator.

S 434-044
(3) Tighten the lock screw.

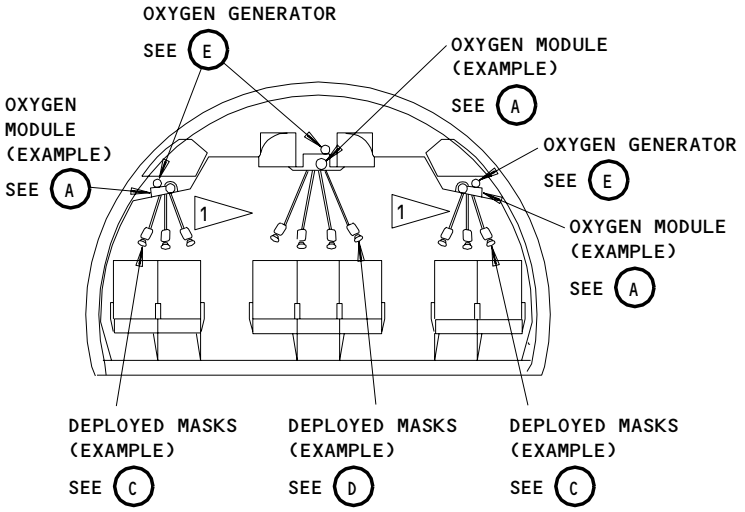
S 014-045
(4) Open the left lid of the stowage box.

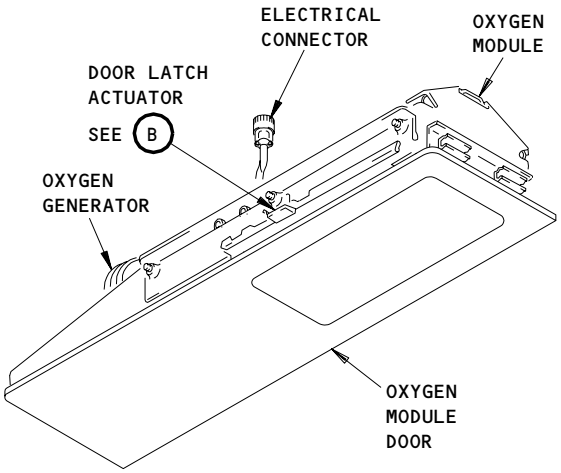
S 434-046
(5) Install the mask in the stowage box (AMM 35-11-51/201).

S 714-048
(6) Make sure the captain's boom microphone operates correctly (AMM 23-51-00/501).

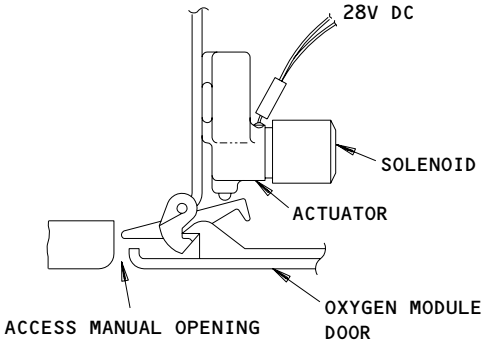
PASSENGER OXYGEN SYSTEM - DESCRIPTION AND OPERATION

1. General (Fig. 1)
   A. SAS 150-161;
      The passenger system supplies oxygen to the passengers in case of emergency. The system has chemical oxygen generators, two latch actuation switches, and passenger masks. A manual switch and/or an aneroid switch control the door latches. Close either switch to release the latch mechanism. This lets the oxygen module doors drop open. With the oxygen module doors open, the masks drop into reach of the passengers. Pull the mask down to activate the chemical oxygen generator. Used generators must be replaced.
   B. SAS 050-149, 162-999; MTH ALL;
      The passenger system supplies oxygen to the passengers, flight attendants and crew rest areas in case of emergency. The system has chemical oxygen generators, two latch actuation switches, and passenger masks. A manual switch and/or an aneroid switch control the door latches. Close either switch to release the latch mechanism. This lets the oxygen module doors drop open. With the oxygen module doors open, the masks drop into the reach of the passengers. Pull the masks down to activate the chemical oxygen generator. Used generators must be replaced.
   C. The mask is a constant flow unit which connects to the generator with flexible tubing. A lanyard, attached to each mask, connects to the release pin of the generator that supplies oxygen to that set of masks. Pull any mask to release the firing pin that activates that generator.
   D. For more details on the Passenger Oxygen system, refer to these wiring diagrams and functional schematics:
      WDM 35-21-11: OXYGEN MASK DOOR CONTROL
      WDM 35-21-12: OXYGEN MASK DEPLOYMENT LEFT
      WDM 35-21-13: OXYGEN MASK DEPLOYMENT RIGHT
      WDM 35-21-14: OXYGEN MASK DEPLOYMENT CENTER
      WDM 35-21-15: VIDEO DISPLACED OSYGEN MODULES
      SSM 35-21-01: PASSENGER OXYGEN
2. Passenger System Latch Mechanism (Fig. 1)
   A. The latch mechanism causes the oxygen module doors to open or close. A solenoid operates the latch by either an automatic aneroid switch or a manual switch in the flight compartment. Power is supplied by 28 volt dc from the overhead circuit breaker panel, P11. The latch can be tripped to open the door manually.
3. Chemical Oxygen Generator (Fig. 1)
   A. The chemical oxygen generators provide gaseous oxygen to the passengers by rapid thermal decomposition of sodium chlorate and iron into salt, iron oxide, and oxygen. Each generator has a firing pin which is held in place by a release pin. The lanyard attaches to each mask and the release pin.
      (1) A tug on the mask pulls the release pin which frees the firing pin. The firing pin strikes the primer which starts the ignition process. A charcoal filter, inside the generator, filters out contaminants and allows only oxygen to pass through the manifold to the masks.

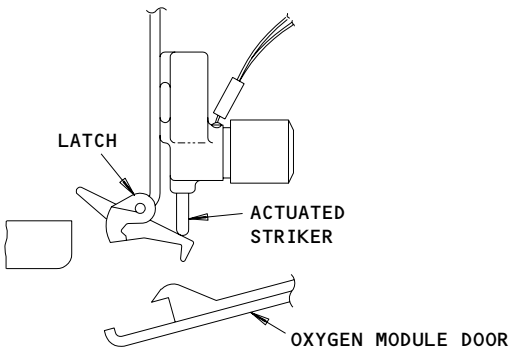




OXYGEN MODULE (EXAMPLE)
A

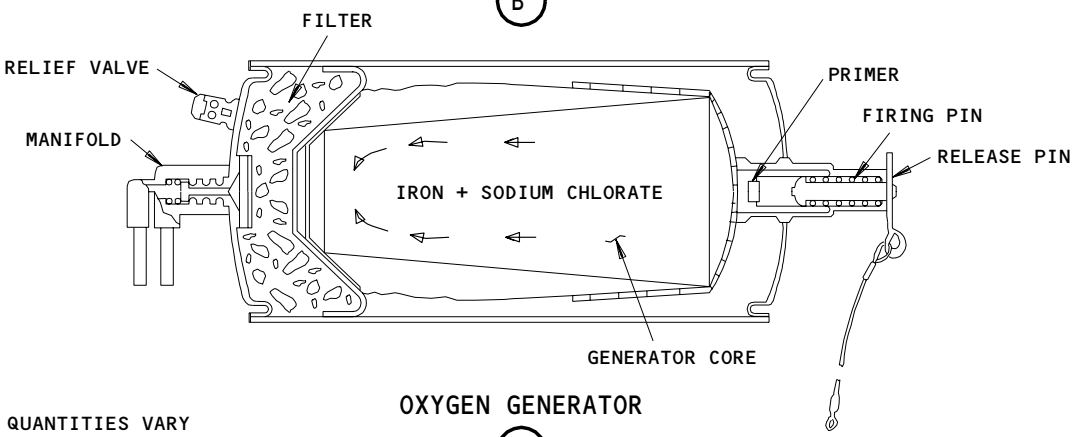


DOOR CLOSED



DOOR OPEN

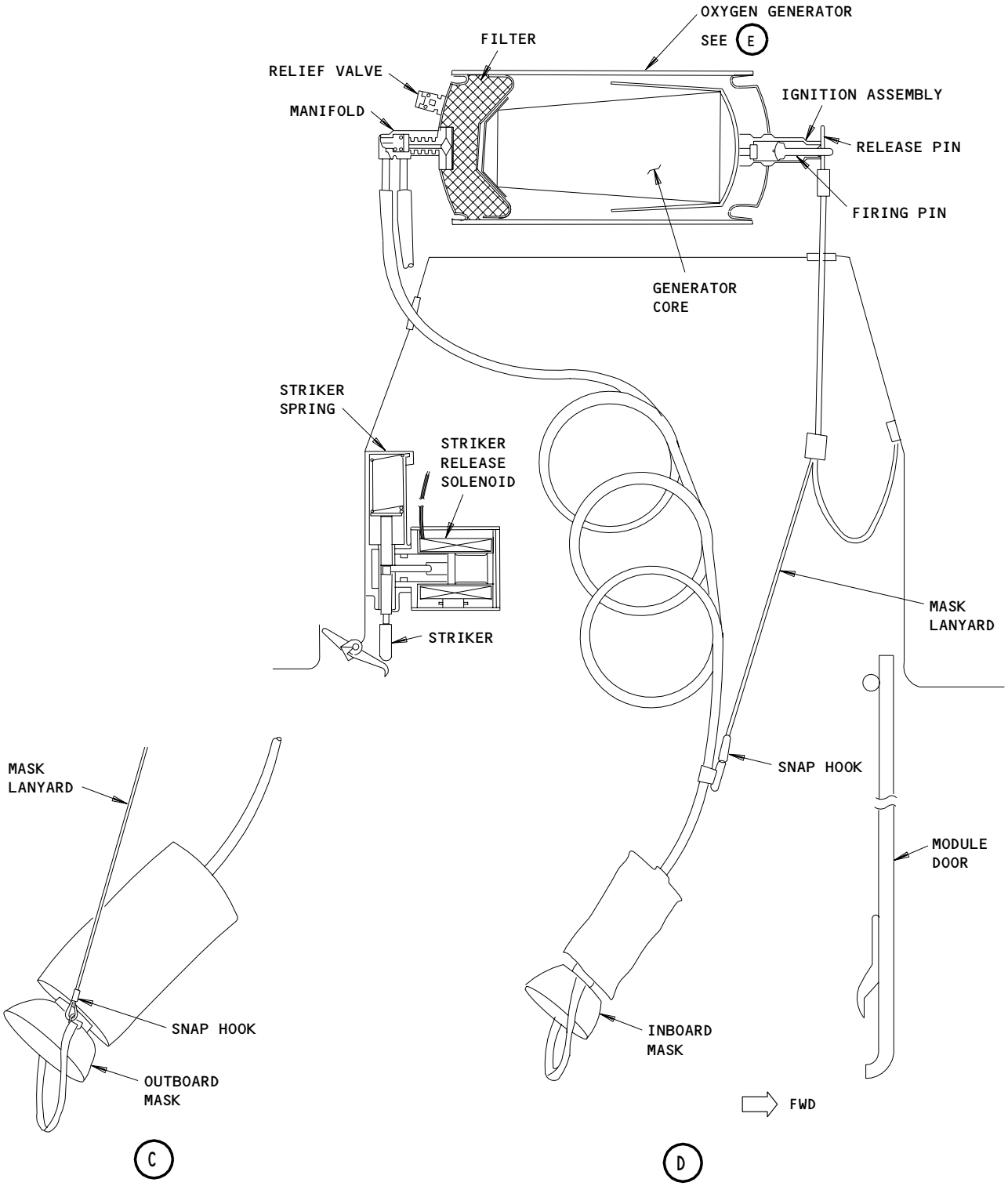
DOOR LATCH ACTUATOR (EXAMPLE)
B



OXYGEN GENERATOR
E

1 MASK QUANTITIES VARY BY LOCATION

Passenger Oxygen System
Figure 1 (Sheet 1)



Passenger Oxygen System
Figure 1 (Sheet 2)

(2) SAS 275-999; MTH ALL;
Ten seconds after ignition of the generator, full oxygen flow is achieved. Oxygen flow starts at 3.6 liters per minute and decreases to 0 after 12 minutes. The generator has a pressure relief valve which opens at 50 psi.

(3) SAS 050-167;
Ten seconds after ignition of the generator, full oxygen flow is achieved. Oxygen flow starts at 3.6 liters per minute and decreases to 0 after 22 minutes. The generator has a pressure relief valve which opens at 50 psi.

(4) SAS 150-161;
The process which releases oxygen is irreversible and extremely hot. Surface temperature of the generator is limited to 450°F. The band surrounding each generator will change from white to black when oxygen has been generated. A black band is an indication that the generator is used and must be replaced. Oxygen generators are in each passenger service unit (PSU), lavatory and attendant's station.

(5) SAS 050-149, 162-999; MTH ALL;
The process which releases oxygen is irreversible and extremely hot. Surface temperature of the generator is limited to 450°F. The band surrounding each generator will change from white to black when oxygen has been generated. A black band is an indication that the generator is used and must be replaced. Oxygen generators are in each passenger service unit (PSU), lavatory and attendant's station and crew rest.

4. Operation

A. Functional Description (Fig. 2)

(1) SAS 150-161;
The passenger system supplies oxygen at low pressure to each passenger, attendant and lavatory. The system is activated automatically when cabin pressure reaches an equivalent of 14,000 feet altitude. The system can also be activated by a manual switch on the P5 panel if the aneroid switch fails.

(2) SAS 050-149, 162-999; MTH ALL;
the passenger system supplies oxygen at low pressure to each passenger, attendant, lavatory and crew rest. The system is activated automatically when cabin pressure reaches an equivalent of 14,000 feet altitude. The system can also be activated by a manual switch on the P5 panel if the aneroid switch fails.

(3) When either the aneroid switch or the manual switch is closed, 28 volt dc power goes to the latch actuators on the oxygen module doors. The module doors open and the masks fall into reach of the passengers. After 5 ±1 seconds, a time delay relay cuts power to the module door latch actuators.

(4) When the passenger pulls the mask to his face, the firing pin is released and strikes the primer. This starts the ignition process inside the generator. Ten seconds later full oxygen flow occurs to each mask connected to that particular generator.

B. Control (Fig. 2)

(1) Deployment of the passenger oxygen masks is controlled by the aneroid switch on the P19 panel and a manual switch on the P5 panel. The aneroid switch closes automatically to deploy the passenger masks. The passenger masks may be deployed at any time if a crew member presses the PASS OXY switch on the P5 panel.

PASSENGER OXYGEN

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ACTUATOR – DOOR LATCH IN THE OXYGEN MODULE	2	1	EACH OXYGEN MODULE	4
CIRCUIT BREAKERS			FLT COMPT, P11	
PASSENGER OXYGEN C, C1324	--	1	11A22	*
PASSENGER OXYGEN CONT, C1323	--	1	11A24	*
PASSENGER OXYGEN L, C1321	--	1	11A21	*
PASSENGER OXYGEN MANUAL DEPLOY, C1325	--	1	11A25	*
PASSENGER OXYGEN R, C1322	--	1	11A23	*
GENERATOR – OXYGEN	2	1	EACH OXYGEN MODULE	35-21-04
LIGHT/SWITCH – PASSENGER OXYGEN ON, S2	1	1	P5, CONT PANEL FOR EMER LIGHTS IN THE FLT DECK	35-21-00
MASK – OXYGEN	2	2	EACH OXYGEN MODULE	4
MODULE – OXYGEN	2	3	PASSENGER CABIN, PSU RAIL LAVATORY, LOWERED CEILING, ATTENDANT SEAT, FLIGHT CREW REST	4
PANEL – (FIM 33-51-00/101)			P19, ABOVE CABIN CEILING	
EMERGENCY LIGHTS CONT, M43				
RELAYS – (FIM 31-01-19/101)				
MANUAL DEPLOY OXY CONT, K7				
OXY CONT, K4				
OXY CONT MANUAL DEPLOY TIME DELAY, K466				
OXY CONT TIME DELAY, K455				
OXY DEPLOYED IND, K8				
OXY MANUAL DEPLOYED IND, K42				
SWITCH – ALTITUDE PRESSURE, S119	1	1	SIDE OF P19 PANEL, ABOVE CABIN CEILING	35-21-00

* SEE THE WDM EQUIPMENT LIST

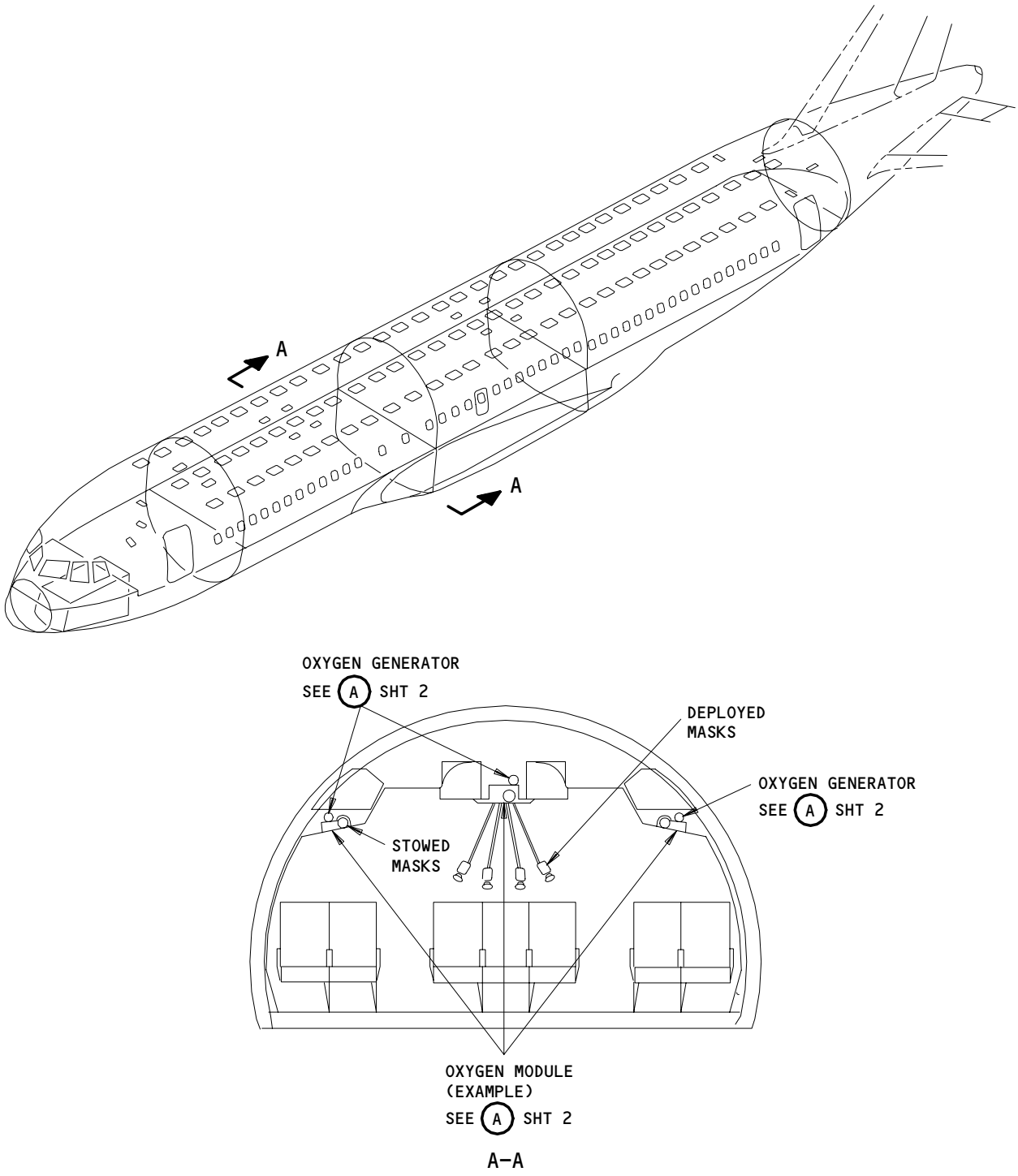
1 1 OR 2

2 MASK QUANTITIES VARY BY LOCATION

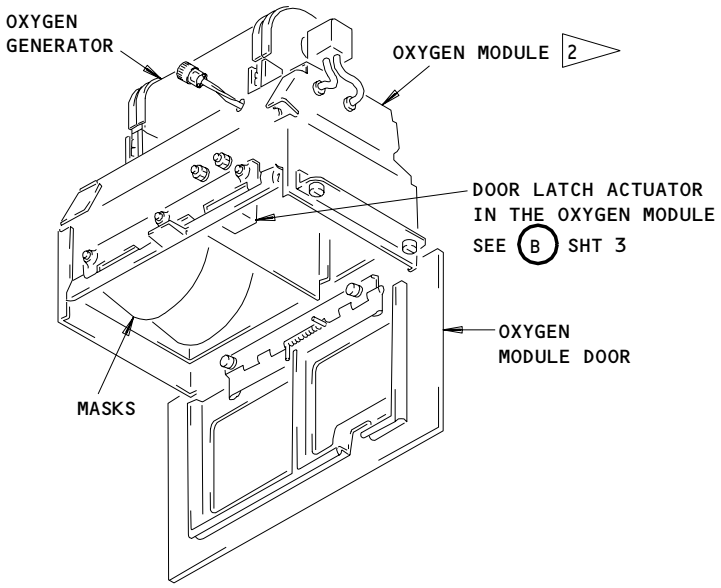
3 VARIABLE BY AIRPLANE

4 SEE AMM 35-21-10 FOR AFT CEILING MOUNTED ATTENDANT OXYGEN MODULE;
AMM 35-21-11 FOR WALL MOUNTED ATTENDANT OXYGEN MODULE;
AMM 35-21-12 FOR FORWARD/MID CEILING MOUNTED ATTENDANT OXYGEN MODULE;
AMM 35-21-13 FOR LAVATORY OXYGEN MODULE;
AMM 35-21-14 FOR OUTBOARD PASSENGER OXYGEN MODULE;
AMM 35-21-15 FOR CENTER PASSENGER OXYGEN MODULE;
AMM 35-21-16 FOR FLIGHT CREW REST OXYGEN MODULE.

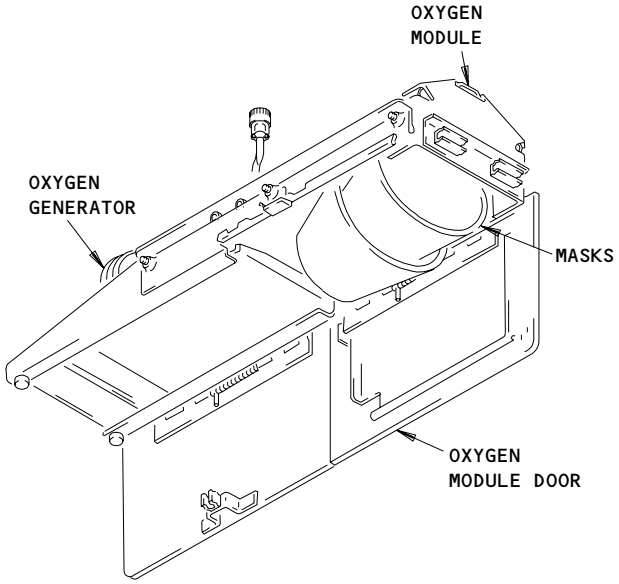
Passenger Oxygen – Component Index
Figure 101



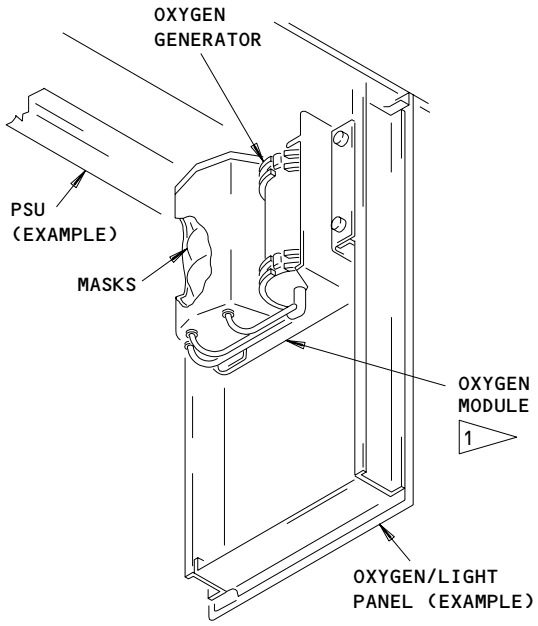
Passenger Oxygen - Component Location
Figure 102 (Sheet 1)



OXYGEN MODULE FOR THE FLIGHT ATTENDANT IN THE NO. 1 LOCATION



OXYGEN MODULE FOR THE FLIGHT ATTENDANT IN THE NO. 2 LOCATION OR IN THE CREW REST IN THE FLIGHT COMPARTMENT



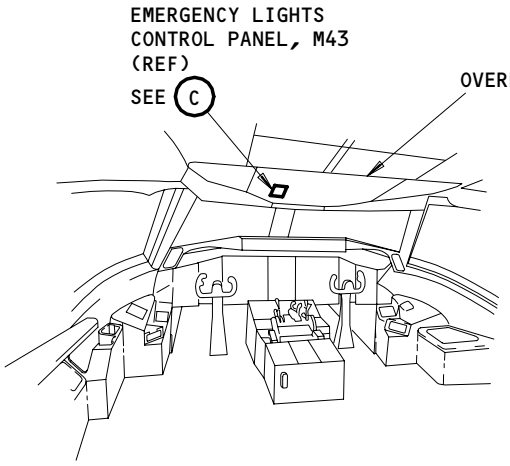
PASSENGER OXYGEN MODULE

A

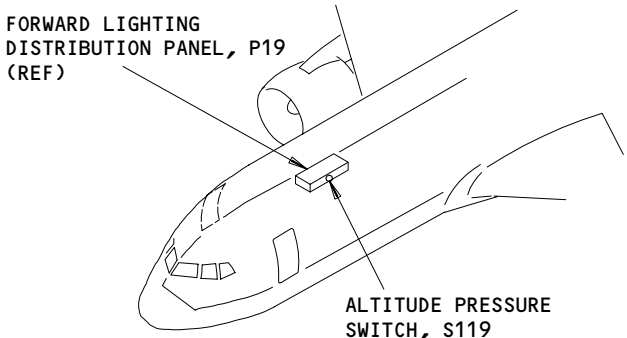
1 THE OXYGEN MODULE FOR THE OUTBOARD AND THE FWD/AFT CREW REST IS SHOWN – THE CENTER OXYGEN MODULE IS EQUIVALENT

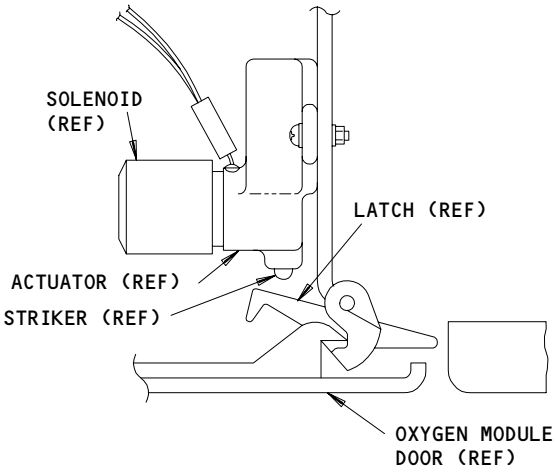
2 THE OXYGEN MODULE FOR THE FLIGHT ATTENDANT IN THE NO. 1 LOCATION IS SHOWN – THE LAVATORY AND VIDEO OXYGEN MODULES ARE EQUIVALENT

Passenger Oxygen – Component Location
Figure 102 (Sheet 2)



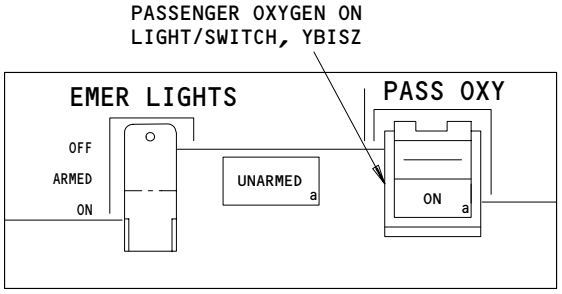
FLIGHT COMPARTMENT





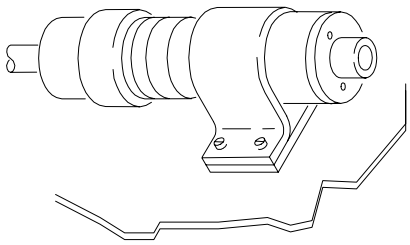
DOOR LATCH ACTUATOR FOR THE OXYGEN MODULE

B FROM SHT 2



EMERGENCY LIGHTS CONTROL PANEL, M43 (REF)

C



ALTITUDE PRESSURE SWITCH, S119

D

Passenger Oxygen - Component Location
Figure 102 (Sheet 3)

PASSENGER OXYGEN SYSTEM - ADJUSTMENT/TEST

1. General
   A. This procedure has two tasks. The first task is instructions for the operational test of the Passenger Oxygen System. The second task is instructions to adjust the Passenger Oxygen Door.
   B. The operational test is for the passenger oxygen masks. The operational test also gives instructions for the calibration of the altitude pressure switch.
   C. Do the operational test of the passenger oxygen masks before you do the calibration of the altitude pressure switch.

TASK 35-21-00-705-054

2. Operational Test - Passenger Oxygen System
   A. Equipment
      (1) Adapter - Consolidated Controls Corporation (15 Durant Avenue, Bethel, CT 06801) P/N JLA321C
      (2) Portable Pressure - Vacuum Pump, Barfield (4101 NW 29th Street, Miami, FL 33142) Model 2510-F
      (3) 2545B-01 Pump-Vacuum, Portable, 115Volts, 60 Hertz, Standard Duty Welch Vacuum Technology Inc. (Vender Code 0NCC5) 7300 N. Linder Ave., Skokie, Il. 60076-0183 or
      (4) 2545C-02 Pump-Vacuum, Portable, 240 Volts, 50 Hertz, Standard Duty Welch Vacuum Technology Inc. (Vender Code 0NCC5) 7300 N. Linder Ave., Skokie Il. 60076-0183
      (5) PSU oxygen door retainer - A35002-7 (CLASSIC INTERIOR)
   B. Consumable Materials
      (1) G00270 Masking tape
   C. References
      (1) AMM 24-22-00/201, Electrical Power
   D. Access
      (1) Location Zones
          200 Upper Half of Fuselage

   E. Procedure - Manual Deployment Test of Passenger Oxygen Masks

      S 495-055

      CAUTION: INSTALL THE RETAINERS OR APPLY MASKING TAPE TO ALL THE PASSENGER OXYGEN SERVICE UNIT DOORS. IF A DOOR OPENS FULLY YOU MUST DO THE OXYGEN MASK REPACK PROCEDURE.

      (1) SAS 150-161;
      Install the retainers or apply masking tape to all the passenger oxygen service unit doors. Apply masking tape to all the lavatory oxygen module doors and all the flight attendant oxygen module doors.

S 495-004
(2) SAS 050-149, 162-999;
Install the retainers or apply masking tape to all the passenger oxygen service unit doors. Apply masking tape to all the lavatory, flight attendant and crew rest oxygen module doors.

S 865-005
(3) Supply electrical power (AMM 24-22-00/201).

S 865-006
(4) Push the PASS OXY switch on the Emergency Lights module of the pilots' overhead panel, P5.

S 215-009
(5) Make sure the oxygen module doors are open.

S 215-010
(6) Make sure the amber switch-light PASS OXY on the panel P5 is on.

S 215-011
(7) Make sure the EICAS message PASS OXYGEN ON is on when the EICAS switch is in the LEFT or RIGHT positions.

S 865-012
(8) Open this circuit breaker on the overhead circuit breaker panel, P11:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 215-013
(9) Make sure the amber switch-light PASS OXY is not on.

S 215-014
(10) Make sure the EICAS message PASS OXYGEN ON is not shown.

S 865-015
(11) Close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 945-016
(12) Close all the oxygen module doors, but, do not remove the retainers or the masking tape.

NOTE: The retainers and masking tape are necessary during the calibration procedure of the altitude pressure switch.

S 865-017
(13) Put the EICAS switch in the LEFT and the RIGHT position.

S 215-018
(14) Make sure the PASS OXY switch on P5 panel is in the off position.

S 215-019
(15) Make sure the EICAS message PASS OXYGEN ON is not shown.

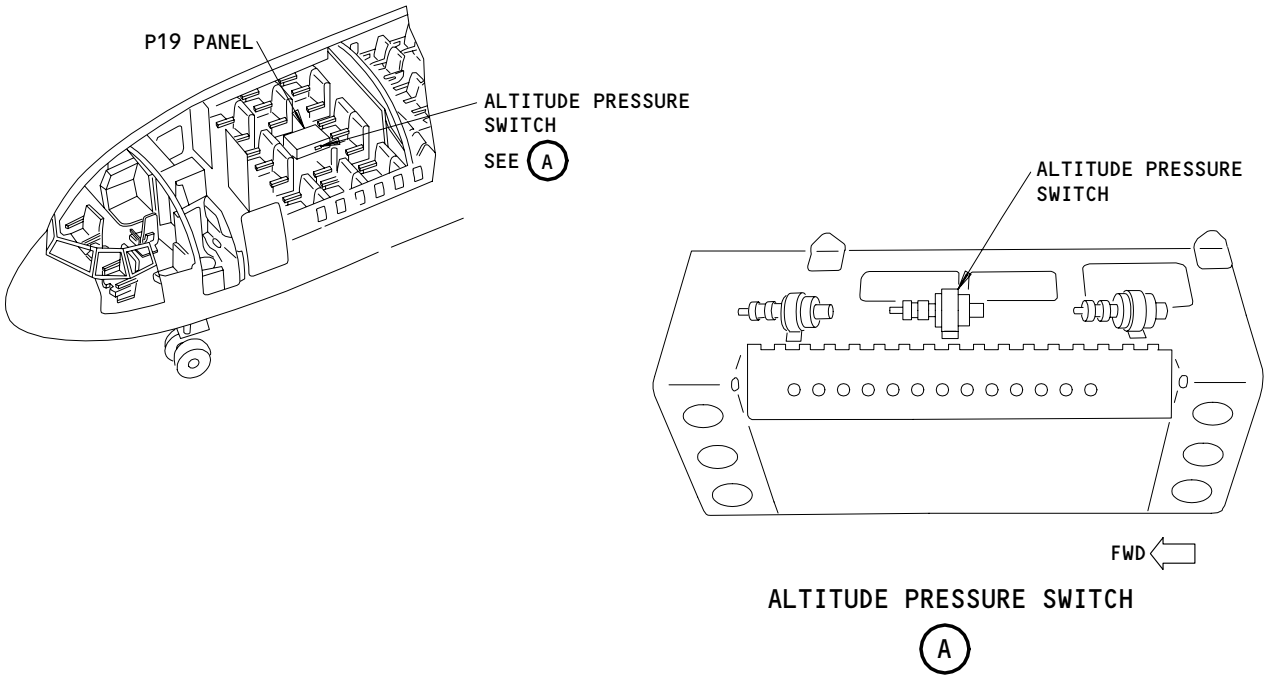
F. Procedure - Calibration of the Altitude Pressure Switch (Fig. 501)

S 495-056

CAUTION: INSTALL THE RETAINERS OR APPLY MASKING TAPE TO ALL THE PASSENGER OXYGEN SERVICE UNIT DOORS. IF A DOOR OPENS FULLY, YOU MUST DO THE OXYGEN MASK REPACK PROCEDURE.

(1) Make sure the retainers or masking tape is installed at all the service unit doors.

NOTE: The retainers and masking tape must stop the doors before they open fully and let the oxygen masks out.



Altitude Pressure Switch Test
Figure 501

S 485-021
(2) Install the adapter on the altitude pressure switch.

S 825-096
(3) Record the part number off of the altitude pressure switch.

NOTE: Altitude pressure switches with part number 214C40-1-75 are set to activate at 14,000 ±350 feet. Altitude pressure switches with part number 214C40-1-113 are set to activate at 14,650 ±350 feet.

S 485-022
(4) Connect the vacuum source to the altitude pressure switch.

S 825-097
(5) ON AIRPLANES WITH ALTITUDE PRESSURE SWITCH PART NUMBER 214C40-1-75;

Do the step that follows:
(a) Apply a vacuum equal to an absolute pressure of 8.6 ±0.1 psia at a rate not more than 2 psi/min.

NOTE: The 8.6 ±0.1 psia (-6.1 ±0.1 psig) pressure is equivalent to an altitude of 14,000 ±350 feet.

S 825-098
(6) ON AIRPLANES WITH ALTITUDE PRESSURE SWITCH PART NUMBER 214C40-1-113;

Do the step that follows:
(a) Apply a vacuum equal to an absolute pressure of 8.4 ±0.1 psia at a rate not more than 2 psi/min.

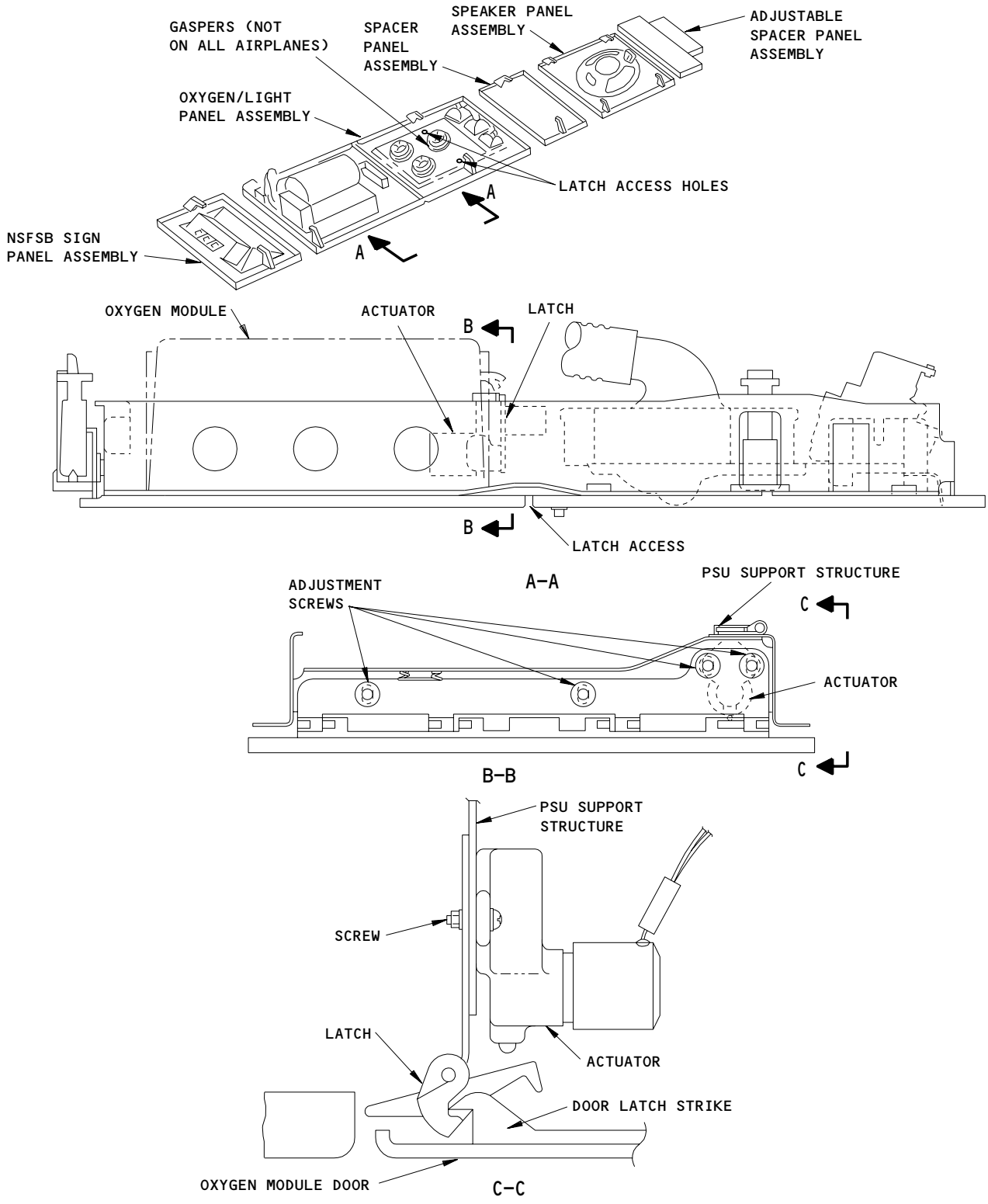
NOTE: The 8.4 ±0.1 psia (-6.3 psig) pressure is equivalent to an altitude of 14,650 ±350 feet.

S 755-024
(7) Make sure you can hear the pre-recorded emergency message.

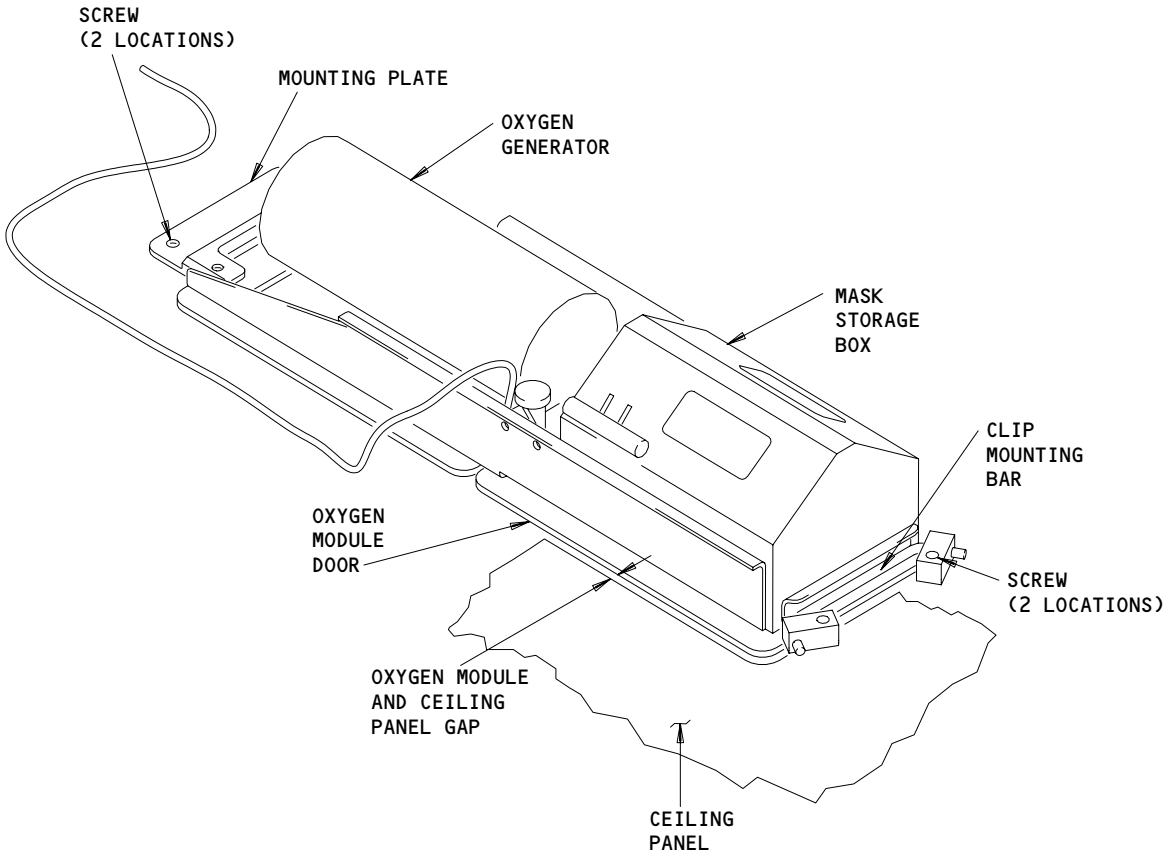
S 215-027
(8) Make sure all the oxygen module doors are open.

S 215-028
(9) Make sure the amber switch-light PASS OXY on the P5 panel is on.

S 215-029
(10) Make sure the EICAS message PASS OXYGEN ON is shown when the EICAS switch is put in the LEFT or the RIGHT positions.



Oxygen Module Door Latch Adjustment
Figure 502



Flight Crew Rest Oxygen Module
Figure 503

S 865-030
(11) Open this circuit breaker on the overhead circuit breaker panel, P11:
(a) 11A24, PASSENGER OXYGEN CONT

S 215-031
(12) Make sure the amber switch-light PASS OXY is not on.

S 215-032
(13) Make sure the EICAS message PASS OXYGEN ON is not shown.

S 945-033
(14) Decrease the vacuum at a rate that is not more than 2.0 psi/min.

S 945-035
(15) Disconnect the vacuum source from the altitude pressure switch.

S 865-036
(16) Close this circuit breaker on the P11 panel:
(a) 11A24, PASSENGER OXYGEN CONT

S 415-037
(17) Close all the oxygen module doors.

S 215-038
(18) Make sure the amber switch-light PASS OXY on the P5 panel is off.

S 215-039
(19) Make sure the EICAS message PASS OXYGEN ON is not shown.

S 015-040
(20) Remove all the retainers.

S 015-041
(21) Remove and discard the masking tape.

S 035-042
(22) Remove the electrical power if it is not necessary (AMM 24-22-00/201).

TASK 35-21-00-825-084

3. Adjustment - Passenger Oxygen Door (Fig. 502 and 503)

A. Equipment
(1) Latch Release Rod - Make from 0.125-inch diameter by 6-inch long rod.

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

C. Procedure - Adjust the PSU Oxygen Door

S 945-043
(1) Put the latch release rod in the access holes to open the PSU.

S 035-044
(2) Loosen the screws that hold the latch mount to the actuator.

S 825-045
(3) Adjust the latches on the PSU support structure until the oxygen door panel makes a smooth continuous surface with the adjacent panels.

S 825-046
(4) SAS 050-149, 162-999;
Adjust the latches on the PSU support structure until the oxygen door panel makes a continuous surface +/- 0.02 inch with the adjacent panels.

S 825-047
(5) SAS 050-149, 162-999;
For the flight crew rest, make sure the clearance between the oxygen module door and the ceiling panel is equal +/- 0.02 inch (Fig. 503).

S 825-048
(6) SAS 050-149, 162-999;
To adjust the clearance, loosen the screws that hold the mounting plate and the clip mounting bar to the ceiling panel.

S 825-049
(7) SAS 050-149, 162-999;
Adjust the oxygen module for the flight crew rest to make the clearance for the opposite sides equal +/- 0.02 inch.

S 435-050
(8) Tighten the screws.

S 435-051
(9) Latch the door latches.

S 215-052
(10) Make sure the latches fully touch the door latch strike.

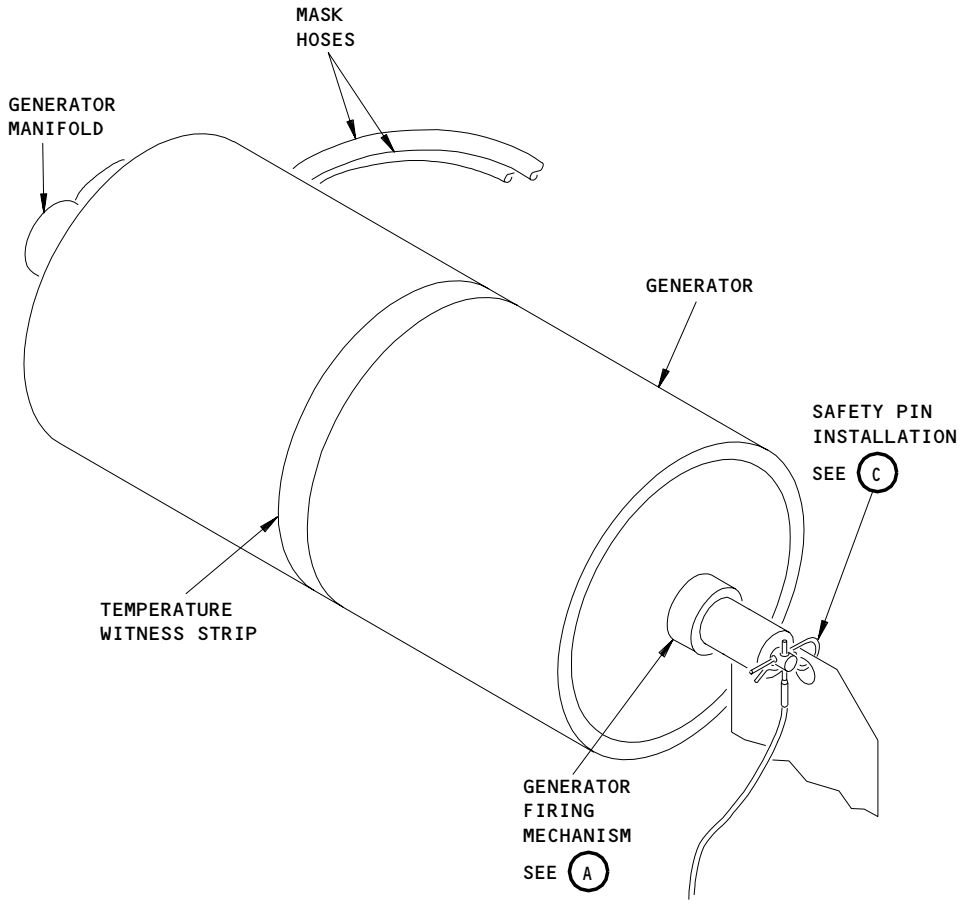
S 415-053
(11) Close the PSU.

OXYGEN GENERATOR - MAINTENANCE PRACTICES

1. General
   A. This procedure has these tasks:
      (1) Oxygen Generator Deactivation
      (2) Oxygen Generator Activation.
   B. FOR SAS 150-161;
      All the spare oxygen generators, passenger service units, attendant's mask boxes, and lavatory mask boxes 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. You can safely touch the generator when the safety pin is installed.
   C. FOR SAS 050-149, 162-999;
      All the spare oxygen generators, passenger service units, attendant's mask boxes, lavatory mask boxes and crew rest mask boxes 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. You can safely touch the generator when the safety pin is installed.
   D. 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.
   E. You must install the safety pin when you remove a generator, service unit, or oxygen module from the airplane.
   F. After you install a generator, service unit, or an oxygen module, you must remove the safety pin before flight.
   G. The retraction equipment shown in the Equipment paragraph contains a pliers and the safety pins for the oxygen generator deactivation. When you activate a generator, keep the safety pin with the retraction equipment for subsequent use.

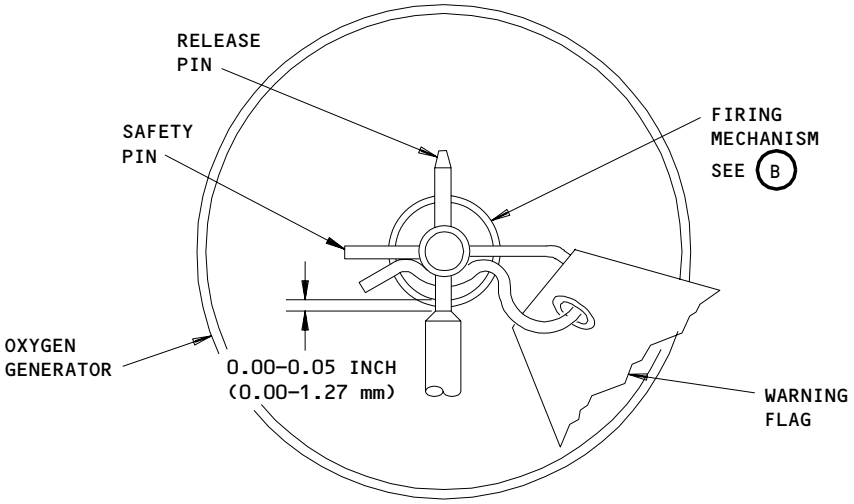
TASK 35-21-04-042-015

2. Oxygen Generator - Deactivation (Fig. 201)
   A. Equipment
      (1) Firing Pin Oxygen System Retraction Equipment,
          Oxygen System - C35003-1 (Active).
          Oxygen system - A35001-10 (Replaced).
          Used on V16822 B/E Aerospace oxygen generators.



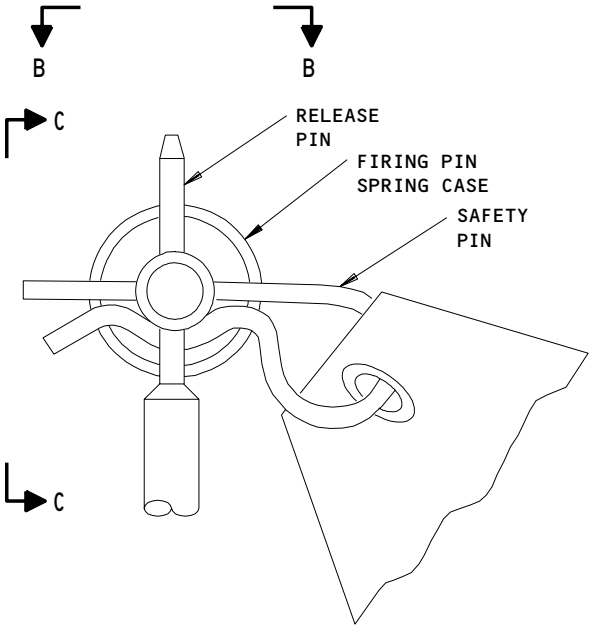
OXYGEN GENERATOR
(EXAMPLE)

Oxygen Generator Activation/Deactivation
Figure 201 (Sheet 1)



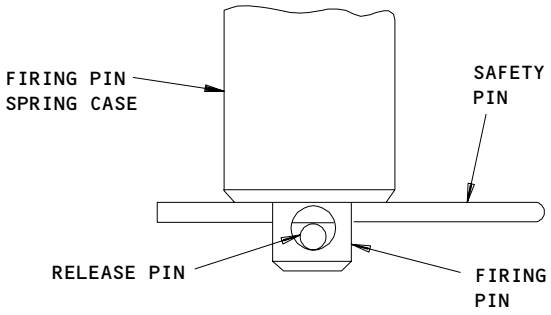
OXYGEN GENERATOR FIRING MECHANISM

A

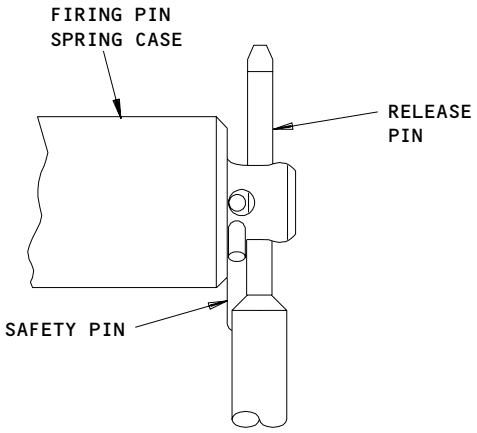


FIRING MECHANISM

B

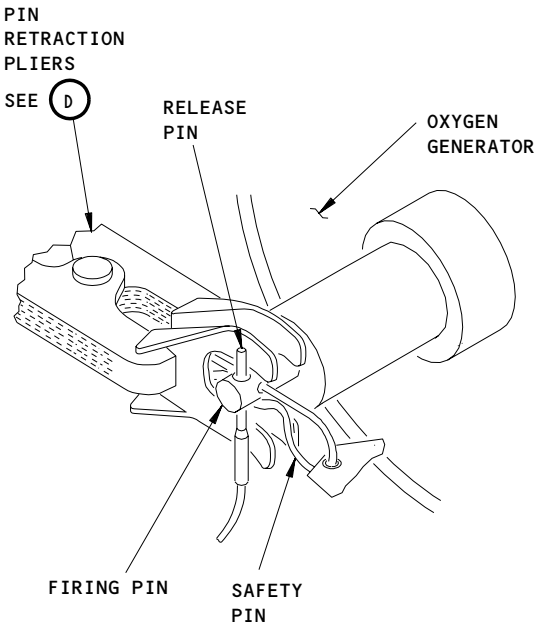


B–B



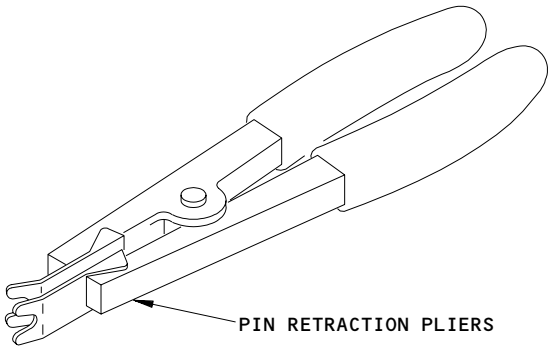
C–C

Oxygen Generator Activation/Deactivation
Figure 201 (Sheet 2)



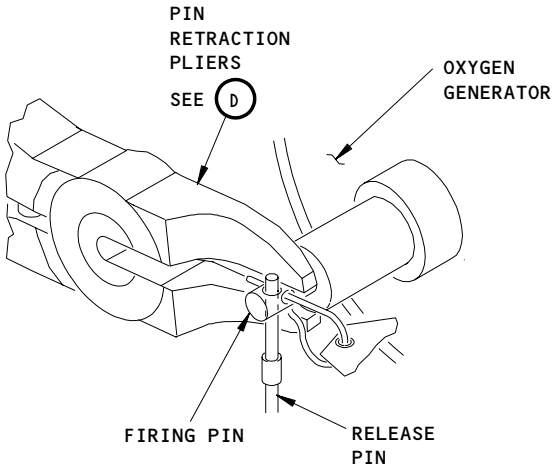
SAFETY PIN INSTALLATION

C 1



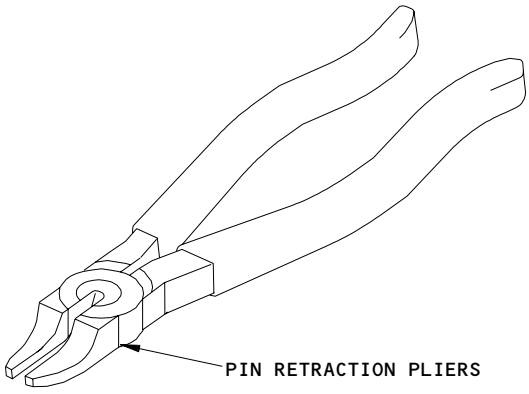
PIN RETRACTION PLIERS

D 1



SAFETY PIN INSTALLATION

C 2



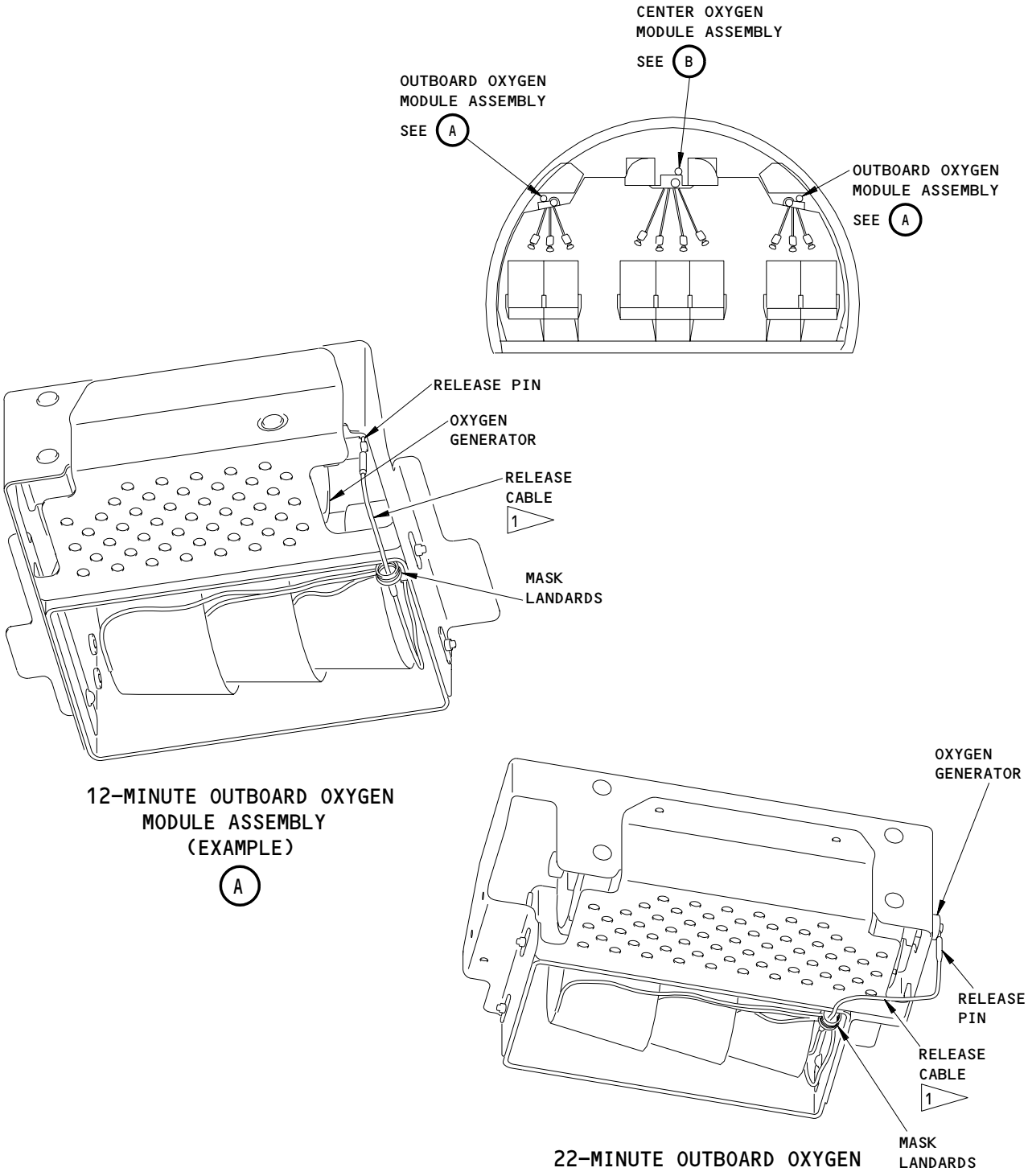
PIN RETRACTION PLIERS

D 2

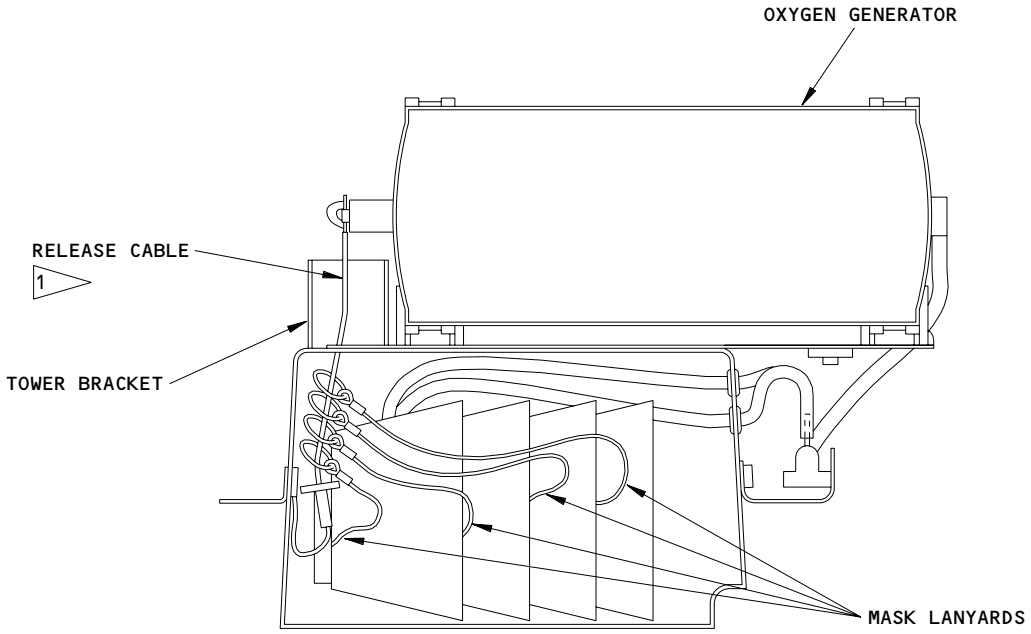
1 PURITAN BENNETT/B.E. AEROSPACE OXYGEN GENERATORS

2 DRAEGER OXYGEN GENERATORS

Oxygen Generator Activation/Deactivation
Figure 201 (Sheet 3)



Oxygen Generator Release Cable
Figure 202 (Sheet 1)



CENTER OXYGEN MODULE ASSEMBLY
(EXAMPLE)

B

Oxygen Generator Release Cable
Figure 202 (Sheet 2)

(2) Draeger Firing Pin Oxygen System Retraction Pliers, Oxygen System - E71516-00.
Used on VD1379 Draegerwerk AG oxygen generators.

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

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

D. Procedure

S 212-037

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

CAUTION: YOU MUST BE VERY 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 CANNOT BE ASSEMBLED AGAIN.

(1) Get access to the oxygen generator.

S 212-033
(2) Make sure the release pin is installed in the oxygen generator.

S 212-028
(3) Do these checks to find if the generator fired:
(a) If the temperature sensitive tape (amber color band) on the oxygen generator is black, the oxygen generator has fired.
1) Do the Oxygen Generator Removal/Installation procedure (AMM 35-21-04/401).
(b) If you cannot see the firing pin in the fired position (the release pin cannot be installed), the oxygen generator has fired.
1) Do the Oxygen Generator Removal/Installation procedure (AMM 35-21-04/401).
(c) If none of the conditions indicated above are true, the oxygen generator has not fired, continue on to the next step.

S 042-005

(4) Do the steps that follow to deactivate the oxygen generator:

(a) Engage the retraction pliers between the release pin and the generator firing mechanism. Carefully retract the firing pin from the mechanism to expose the safety pin hole. Do not release the pliers.

(b) Install the safety pin into the firing pin's safety pin hole.

(c) Carefully release and remove the pliers.

TASK 35-21-04-442-001

3. Oxygen Generator - Activation (Fig. 201)

A. Equipment

(1) Firing Pin Oxygen System Retraction Equipment,
Oxygen System - A35001-10
Used on V16822 B/E Aerospace oxygen generators.

(2) Draeger Firing Pin Oxygen System Retraction Pliers,
Oxygen System - E71516-00
Used on VD1379 Draegerwerk AG.

B. References

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

C. Access

(1) Location Zone
200 Upper Half of the Fuselage

D. Procedure

S 212-038

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

CAUTION: YOU MUST BE VERY 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 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 CORRECTLY ACTIVATING WHEN OXYGEN MASKS DEPLOY.

(1) Get access to the oxygen generator.

S 212-034

(2) Make sure that the oxygen generator has not fired:
  (a) If the temperature sensitive tape (amber color band) on the oxygen generator is black, the oxygen generator has fired.
    1) Do the Oxygen Generator Removal/Installation procedure (AMM 35-21-04/401).
  (b) If you cannot see the firing pin, then it is in the fired position (the release pin cannot be installed), and the oxygen generator has fired.
    1) Do the Oxygen Generator Removal/Installation procedure (AMM 35-21-04/401).
  (c) If none of the conditions indicated above are true, the oxygen generator has not fired, continue on to the next step.

S 442-030

(3) Do the steps that follow to activate the oxygen generator:
  (a) Engage the firing pin retraction pliers to release the pressure on the safety pin.

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 CORRECTLY ACTIVATING WHEN OXYGEN MASKS DEPLOY.

(b) 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.

(c) Inspect the release pin for defects.
1) Remove and replace the release pin, if it is gauled, bent or corroded.

WARNING: MAKE SURE THE RELEASE CABLE IS CAPABLE OF FREE TRAVEL. THE RELEASE CABLE MUST PULL THE RELEASE PIN WHEN THE MASKS ARE PULLED AFTER DEPLOYMENT. INCORRECT ROUTING OF THE RELEASE CABLE CAN CAUSE A FAILURE IN THE OXYGEN DISTRIBUTION SYSTEM. THIS CAN CAUSE INJURY TO PASSENGERS.

(d) Make sure the release cable is routed so that it is capable of free travel and does not bind on the PSU.

CAUTION: MAKE SURE THAT THE RELEASE PIN IS INSTALLED IN THE LARGER OF 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 CORRECTLY ACTIVATING WHEN OXYGEN MASKS DEPLOY.

(e) Make sure the release pin is installed through the larger of the two holes in the oxygen generator firing pin.
(f) If the release pin is not installed through the generator firing pin, put the release pin in the larger of the two holes in the firing pin.

NOTE: Make sure the safety pin is between the release pin the firing pin spring case.

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

OXYGEN GENERATOR - REMOVAL/INSTALLATION

1. General
   A. This procedure has these tasks:
      (1) Oxygen Generator Removal
      (2) Oxygen Generator Installation.

   TASK 35-21-04-004-034

2. Oxygen Generator Removal
   A. Equipment
      (1) Firing Pin Oxygen System Retraction Equipment,
          Oxygen System - A35001-10
          Used on V16822 B/E Aerospace oxygen generators.
      (2) Draeger Firing Pin Oxygen System Retraction Pliers,
          Oxygen System - E71516-00
          Used on VD1379 Draegerwerk AG.
   B. References
      (1) AMM 35-21-04/201, Oxygen Generator
      (2) AMM 35-21-10/201, Aft Ceiling-Mounted Attendant Oxygen Module
      (3) AMM 35-21-11/201, Wall-Mounted Attendant Oxygen Module
      (4) AMM 35-21-12/201, Forward/Mid Ceiling-Mounted Attendant Oxygen Module
      (5) AMM 35-21-13/201, Lavatory Oxygen Module
      (6) AMM 35-21-14/201, Outboard Passenger Oxygen Module
      (7) AMM 35-21-15/201, Center Passenger Oxygen Module
      (8) AMM 35-21-16/201, Flight Crew Rest Oxygen Module
   C. Access
      (1) Location Zone
          200 Upper Half of the Fuselage

   D. Procedure

      S 024-044
      (1) Do the applicable oxygen generator removal task in accordance to the oxygen module type:
          (a) Aft Ceiling-Mounted Attendant Oxygen Module (AMM 35-21-10/201).
          (b) Wall-Mounted Attendant Oxygen Module (AMM 35-21-11/201).
          (c) Forward/Mid Ceiling-Mounted Attendant Oxygen Module (AMM 35-21-12/201).
          (d) Lavatory Oxygen Module (AMM 35-21-13/201).
          (e) Outboard Passenger Oxygen Module (AMM 35-21-14/201).
          (f) Center Passenger Oxygen Module (AMM 35-21-15/201).
          (g) Flight Crew Rest Oxygen Module (AMM 35-21-16/201).

S 024-036

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 FIRE THE GENERATORS AND MAKE SURE THE OXIDIZER CORE HAS ACTIVATED. THIS MUST BE DONE BEFORE YOU PREPARE THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT FIRED AND EMPTY, THEY CAN ACCIDENTALLY FIRE DURING TRANSPORT AND CAUSE HEAT AND IGNITION. THIS CAN CAUSE DEATH OR INJURY TO PERSONS AND DAMAGE TO THE AIRCRAFT.

(2) Observe all approved procedures and regulations for the transport and disposal of oxygen generators.

TASK 35-21-04-404-037

3. Oxygen Generator Installation

A. Equipment

(1) Firing Pin Oxygen System Retraction Equipment,
Oxygen System - A35001-10
Used on V16822 B/E Aerospace oxygen generators.

(2) Draeger Firing Pin Oxygen System Retraction Pliers,
Oxygen System - E71516-00
Used on VD1379 Draegerwerk AG.

B. References

(1) AMM 35-21-04/201, Oxygen Generator
(2) AMM 35-21-10/201, Aft Ceiling-Mounted Attendant Oxygen Module
(3) AMM 35-21-11/201, Wall-Mounted Attendant Oxygen Module
(4) AMM 35-21-12/201, Forward/Mid-Ceiling Mounted Attendant Oxygen Module
(5) AMM 35-21-13/201, Lavatory Oxygen Module
(6) AMM 35-21-14/201, Outboard Passenger Oxygen Module
(7) AMM 35-21-15/201, Center Passenger Oxygen Module
(8) AMM 35-21-16/201, Flight Crew Rest Oxygen Module

C. Access

(1) Location Zone
200 Upper Half of the Fuselage

D. Procedure

S 424-043

(1) Do the applicable oxygen generator installation task in accordance to the oxygen module type:
(a) Aft Ceiling-Mounted Attendant Oxygen Module (AMM 35-21-10/201).
(b) Wall-Mounted Attendant Oxygen Module (AMM 35-21-11/201).
(c) Forward/Mid Ceiling-Mounted Attendant Oxygen Module (AMM 35-21-12/201).
(d) Lavatory Oxygen Module (AMM 35-21-13/201).
(e) Outboard Passenger Oxygen Module (AMM 35-21-14/201).
(f) Center Passenger Oxygen Module (AMM 35-21-15/201).

(g) Flight Crew Rest Oxygen Module (AMM 35-21-16/201).

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 35-21-05-206-002

2. Passenger Oxygen Mask Facepiece - Inspection and Check
   A. Equipment
      (1) Latch release tool - make from a 1/16 inch (2 mm) diameter rod
   B. References
      (1) AMM 35-00-00/201, Oxygen
   C. Access
      (1) Location Zone
          200 Upper Half Fuselage

   D. Procedure

      S 916-003
      (1) Read and obey the safety precautions and general instructions before you do the maintenance (AMM 35-00-00/201).

      S 036-018
      (2) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

      S 016-004
      (3) Manually open the mask door on the applicable oxygen module.
          (a) Push the latch release tool (1/16 inch (2 mm) 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 216-005
      (4) 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 026-006

(5) Replace the mask if it is not in a satisfactory condition.

S 866-007

(6) Put the mask back in the applicable oxygen module per mask repacking procedure.

TASK 35-21-05-206-008

3. Passenger Oxygen Mask Hose and Bag - Inspection and Check

A. Equipment
(1) Latch release tool - make from a 1/16 inch (2 mm) diameter rod

B. References
(1) AMM 35-00-00/201, Oxygen

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

D. Procedure

S 916-010

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

S 036-019

(2) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 016-011

(3) Manually open the mask door on the applicable oxygen module, next to the light panel.
(a) Push the latch release tool (1/16 inch (2 mm) 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 216-017
(4) 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.

S 216-012
(5) 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 cause to replace the hose.

However, severe kinking and pinching will discolor the mask hose and collapse the tube. If a hose has been pinched or kinked to the point of showing discoloration or crushing of the tube, that hose requires replacement.

S 906-013
(6) Replace the oxygen mask assembly, if it is not in satisfactory condition.

S 226-014
(7) Make sure the hose is correctly attached to the generator manifold.
(a) If the hose comes off when you pull on it, replace the mask assembly.

S 866-015
(8) Put the masks back in the applicable oxygen module per the mask repacking procedures.

PASSENGER OXYGEN MASKS - CLEANING/PAINTING

1. General
   A. This procedure contains one task. The task gives instructions to clean the passenger oxygen masks.
   B. You must clean and use a disinfectant on each oxygen mask after each use. If you use the detergent/disinfectants given below, you will clean and use a disinfectant in one operation.

TASK 35-21-05-107-005

2. Clean the Passenger Oxygen Masks Facepiece
   A. Equipment
      (1) Absorbent cheesecloth - (commercially available)
      (2) Sponge applicator - (optional) (commercially available)
   B. Consumable Material
      (1) Cleaners/Disinfectants

          NOTE: Use one of these:

          (a) G02198 Airwick Antimicrobial Topical Gel (Disinfectant)
          (b) G02197 West Wescodyne (Disinfectant)
          (c) G02199 Lysol Brand (Disinfectant)
          (d) B00130 Isopropyl alcohol (Disinfectant)
   C. References
      (1) AMM 35-21-10/201, Aft Ceiling-Mounted Attendant Oxygen Module
      (2) AMM 35-21-11/201, Wall-Mounted Attendant Oxygen Module
      (3) AMM 35-21-12/201, Forward/Mid-Ceiling Mounted Attendant Oxygen Module
      (4) AMM 35-21-13/201, Lavatory Oxygen Module
      (5) AMM 35-21-14/201, Outboard Passenger Oxygen Module
      (6) AMM 35-21-15/201, Center Passenger Oxygen Module
      (7) AMM 35-21-16/201, Flight Crew Rest Oxygen Module
   D. Access
      (1) Location Zone
          200 Upper Half of the Fuselage

   E. Procedure

          S 917-007
      (1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

          S 117-001
      (2) Mix a solution of detergent/disinfectant with warm water. Obey the instructions on the product label.

          S 117-002
      (3) Apply the solution to the facepiece with a cheesecloth or a sponge.

S 117-003

(4) Remove the detergent with water that is clean and warm.

S 407-004

(5) Put the passenger oxygen masks back per mask repacking procedures in the applicable oxygen modules:
   (a) Aft Ceiling-Mounted Attendant Oxygen Module (AMM 35-21-10/201).
   (b) Wall-Mounted Attendant Oxygen Module (AMM 35-21-11/201).
   (c) Forward/Mid Ceiling-Mounted Attendant Oxygen Module (AMM 35-21-12/201).
   (d) Lavatory Oxygen Module (AMM 35-21-13/201).
   (e) Outboard Passenger Oxygen Module (AMM 35-21-14/201).
   (f) Center Passenger Oxygen Module (AMM 35-21-15/201).
   (g) Flight Crew Rest Oxygen Module (AMM 35-21-16/201).

AFT CEILING-MOUNTED ATTENDANT OXYGEN MODULE - MAINTENANCE PRACTICES

1. General
   A. This procedure has these tasks:
      (1) Oxygen Module Removal
      (2) Oxygen Module Installation
      (3) Oxygen Generator Removal
      (4) Oxygen Generator Installation
      (5) Oxygen Mask Removal
      (6) Oxygen Mask Installation
      (7) Oxygen Mask Repacking
      (8) Door Latch Actuator Removal
      (9) Door Latch Actuator Installation

   TASK 35-21-10-002-017

2. Oxygen Module Removal (Fig. 201)
   A. References
      (1) AMM 35-21-04/201, Oxygen Generator
   B. Access
      (1) Location Zones
          200 Upper Half of Fuselage

   C. Procedure

      S 862-152
      (1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
          (a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

      S 012-020
      (2) Open the oxygen module door, but do not let the masks fall.

      S 022-021
      (3) Hold the masks in the module and turn the 1/4-turn fasteners. Lower the forward end of the oxygen module.

      S 032-023
      (4) Disconnect the electrical connector.

      S 042-135

      WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

      (5) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 022-022
(6) Pull the oxygen module from the spring clip mounting bracket. Lower the oxygen module approximately 12 inches.

S 022-025
(7) Remove the oxygen module.
(a) If the oxygen module is to be shipped, do the Oxygen Generator Removal procedure.

TASK 35-21-10-402-026
3. Oxygen Module Installation (Fig. 201)
A. References
(1) AMM 35-21-00/501, Passenger Oxygen System
(2) AMM 35-21-04/201, Oxygen Generator
B. Access
(1) Location Zones
200 Upper Half of Fuselage

C. Procedure

S 442-136

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(1) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

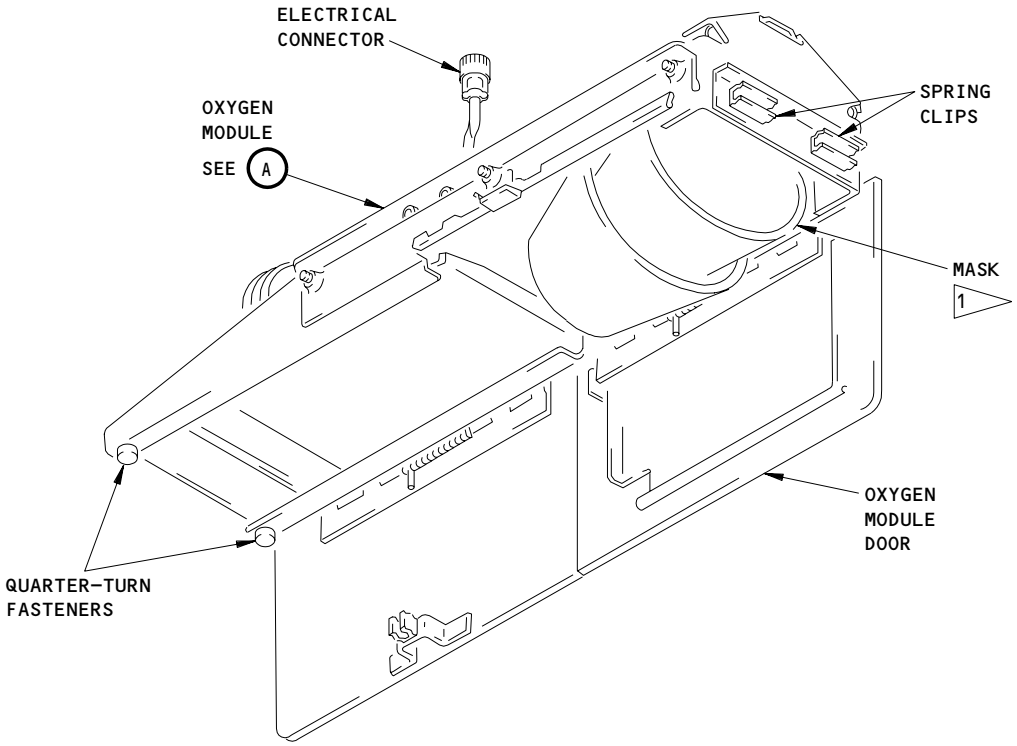
S 422-029
(2) Hold the masks in the oxygen module and put the module in position near to the cutout at the ceiling.

S 432-030
(3) Connect the electrical connector.

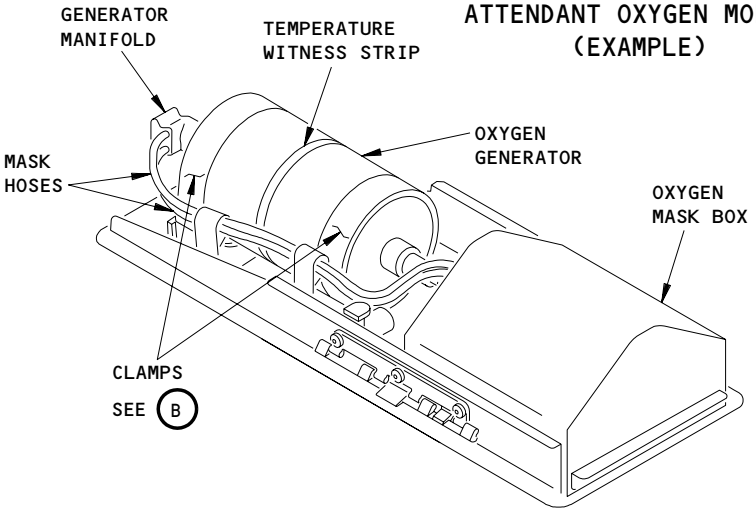
S 422-032
(4) Push the aft end of the oxygen module into the spring clip mounting bracket.

S 422-033
(5) Raise the forward end of the module and turn the 1/4-turn fasteners.

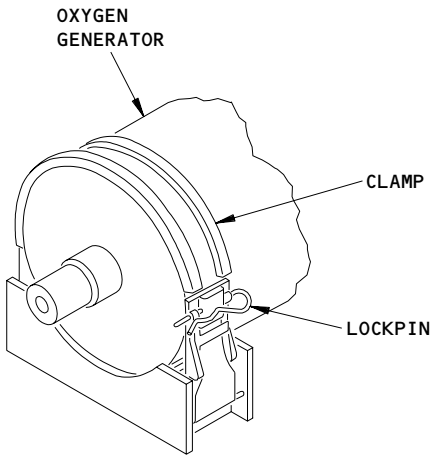
S 412-034
(6) Close the oxygen module door.



AFT CEILING-MOUNTED ATTENDANT OXYGEN MODULE (EXAMPLE)



OXYGEN MODULE
A



CLAMP (EXAMPLE)
B

1 THE WRAPPED MASKS CAN BE POSITIONED AS SHOWN OR 180 DEGREES FROM THAT POSITION.

Aft Ceiling-Mounted Attendant Oxygen Module Installation
Figure 201

S 862-153
(7) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 702-035
(8) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

TASK 35-21-10-002-066

4. Oxygen Generator Removal (Fig. 201)

A. Equipment
(1) Retraction Equipment - Firing Pin - C35003-1 (Active)
Retraction Equipment - Firing Pin - A35001-10 (Replaced)
(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References
(1) AMM 35-21-04/201, Oxygen Generator

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

D. Procedure

S 012-146
(1) Do the Oxygen Module Removal procedure to get access to the oxygen generator.

S 042-145

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(2) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 912-097
(3) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 032-098
(4) Remove the clamp from the hose which is connected to the oxygen generator with the Oetiker crimping tool or equivalent tool.
(a) Discard the clamp.

S 032-099
(5) Disconnect the hose from the oxygen generator.

S 022-100
(6) Remove the lock pins from the clamps.

S 022-140
(7) Release the clamps.

S 022-150
(8) Remove the oxygen generator.

S 022-101

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 FIRE THE GENERATORS AND MAKE SURE THE OXIDIZER CORE HAS ACTIVATED. THIS MUST BE DONE BEFORE YOU PREPARE THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT FIRED, THEY CAN ACCIDENTALLY FIRE DURING TRANSPORT AND CAUSE HEAT AND IGNITION. THIS CAN CAUSE DEATH OR INJURY TO PERSONS AND DAMAGE TO THE AIRCRAFT.

(9) Obey all approved procedures and regulations for the transport and disposal of oxygen generators.

TASK 35-21-10-402-102

5. Oxygen Generator Installation (Fig. 201)

A. Equipment

(1) Retraction Equipment - Firing Pin - C35003-1 (Active)
Retraction Equipment - Firing Pin - A35001-10 (Replaced)

(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References

(1) AMM 35-21-04/201, Oxygen Generator

C. Access

(1) Location Zones
200 Upper Half of the Fuselage

D. Procedure

S 492-185

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(1) Make sure the safety pin is installed on the oxygen generator.

S 212-104

(2) Make sure the oxygen generator did not fire as follows:
  (a) Look at the temperature sensitive tape on the oxygen generator.
    1) If the tape is black, the oxygen generator has fired.

      NOTE: Do not install this generator.

  (b) Look at the position of the firing pin.
    1) If you cannot see the firing pin (the release pin cannot be installed), it is in the fired position.

      NOTE: The oxygen generator has fired or the firing mechanism is bad. Do not install this generator.

S 422-105

(3) Put the new generator in position in the clamps and latch the generator clamps.

S 912-106

(4) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 422-107

(5) Slide the clamp over the hose.

S 432-108

(6) Connect the hose to the oxygen generator.

S 432-109

(7) Crimp the clamp with the Oetiker crimping tool or equivalent tool.

S 432-110

(8) Put the release cable through the mask assembly lanyard rings.

S 422-195

WARNING: MAKE SURE THE RELEASE CABLE IS ROUTED THROUGH THE CENTER OF THE BRACKET. IF THE CABLE IS NOT ROUTED CORRECTLY, IT CAN PREVENT THE FLOW OF OXYGEN.

(9) Make sure that the release cable is installed correctly through the center of the guide bracket (Fig. 201A).

S 442-143

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(10) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 432-112

(11) Repack the oxygen masks again, if it is necessary.

S 432-114

(12) Do the Oxygen Module Installation procedure.

TASK 35-21-10-002-001

6. Oxygen Mask Removal (Fig. 202)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

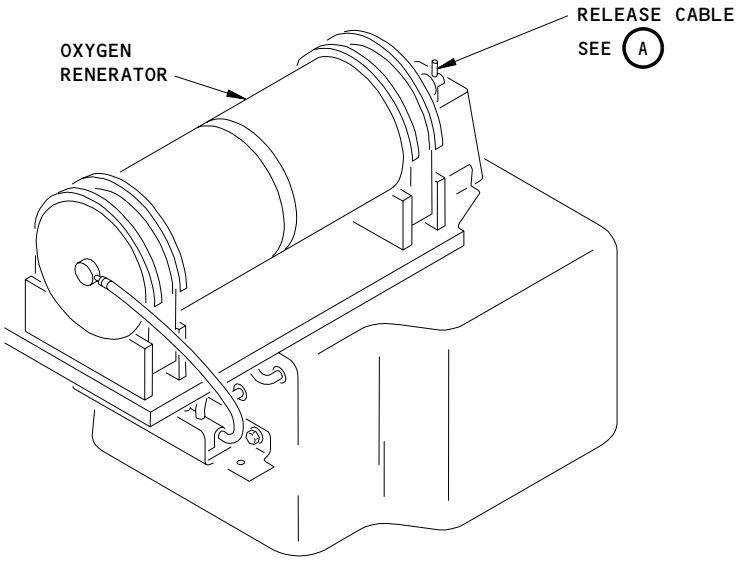
S 012-002

(1) Do the Oxygen Module Removal procedure.

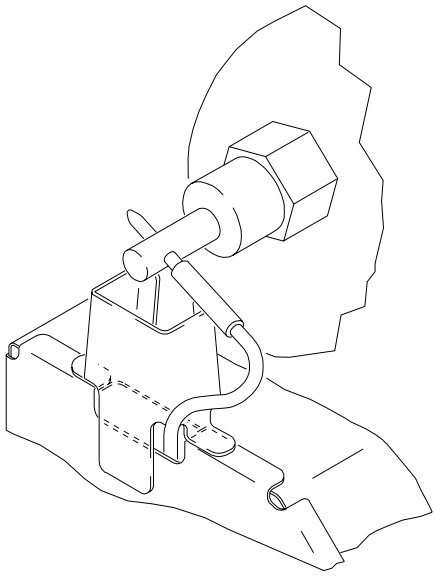
S 042-003

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(2) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

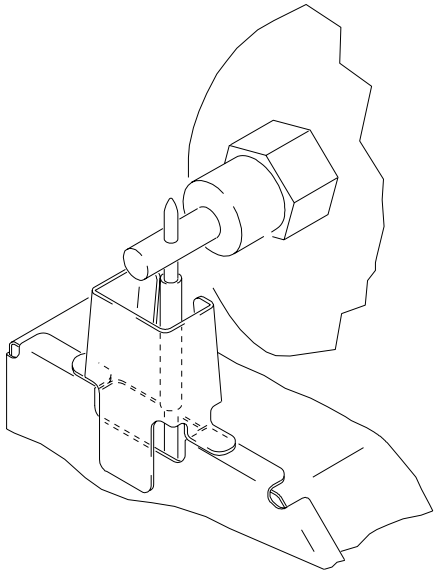


OXYGEN GENERATOR
(EXAMPLE)



RELEASE CABLE
(INCORRECT INSTALLATION)

A



RELEASE CABLE
(CORRECT INSTALLATION)

A

Release Cable Routing and Release Pin Installation
Figure 201A

S 022-141
(3) Carefully remove the release pin from the firing mechanism on the oxygen generator.

S 012-005
(4) Remove mask lanyards from the release cable.

S 022-007
(5) Disconnect the mask hoses from the generator manifold.

S 022-008
(6) Carefully pull the ends of the mask hoses through the grommets on the oxygen module.

S 022-009
(7) Remove the oxygen masks.

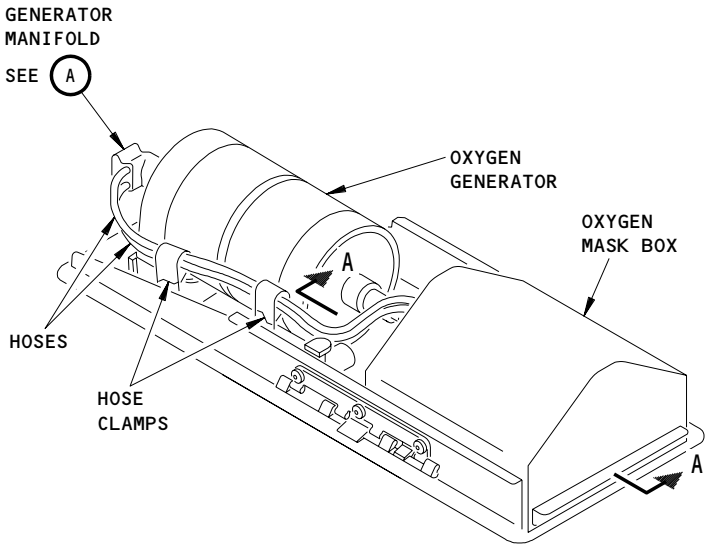
NOTE: To clean and keep all oxygen systems components that are supplied by vendor, refer to applicable vendor instructions (Vendor CMM).

TASK 35-21-10-402-010

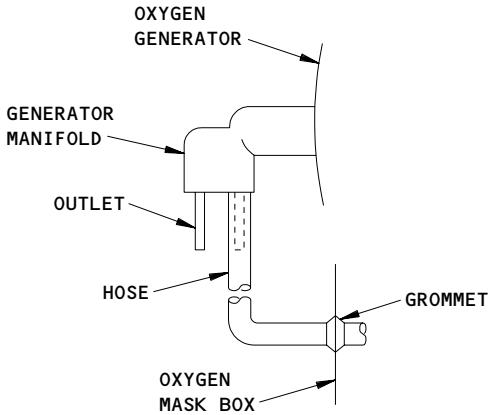
7. Oxygen Mask Installation (Fig. 202)
   A. References
      (1) AMM 35-21-04/201, Oxygen Generator
   B. Access
      (1) Location Zones
          200 Upper Half of the Fuselage

   C. Procedure

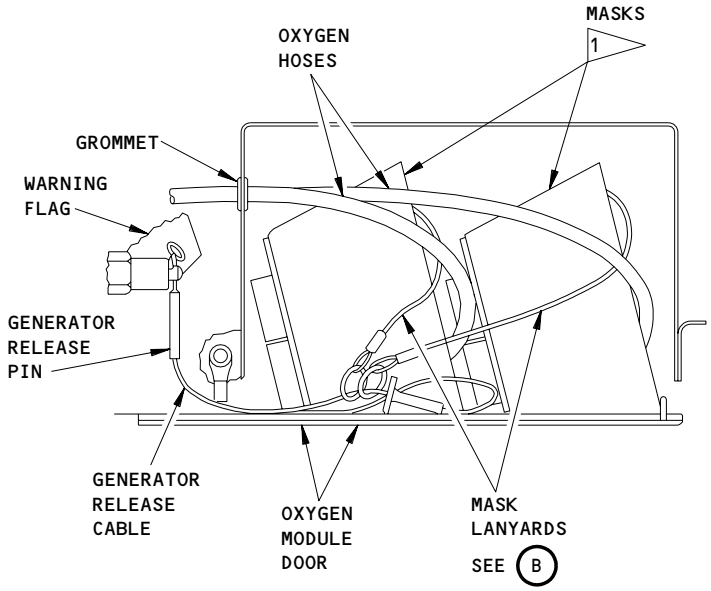
S 412-011
(1) Carefully push the ends of the mask hoses through the grommets on the oxygen module.



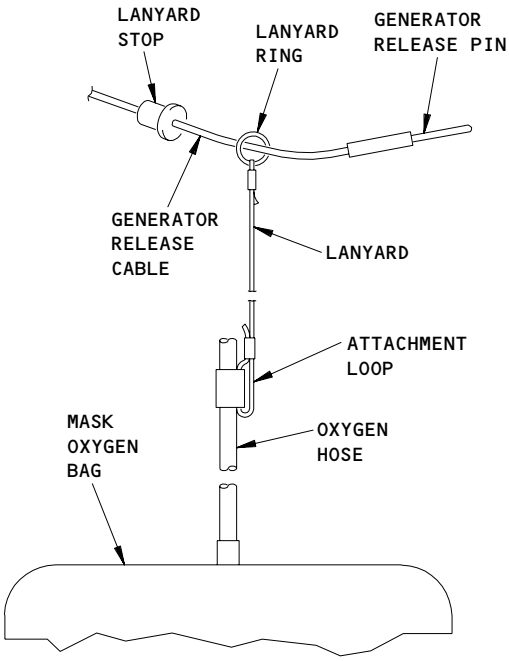
OXYGEN MODULE
(EXAMPLE)



GENERATOR MANIFOLD
A



A-A



MASK LANYARD
(EXAMPLE)
B

1 THE WRAPPED MASKS CAN BE POSITIONED AS SHOWN OR 180 DEGREES FROM THAT POSITION.

Oxygen Mask Installation
Figure 202

S 422-012
(2) Connect the mask hoses to the generator manifold.

S 422-151
(3) Push the release cable through all of the mask assembly lanyard rings.

NOTE: Make sure all of the masks are attached to the release cable by a lanyard.

S 422-196

WARNING: MAKE SURE THE RELEASE CABLE IS ROUTED THROUGH THE CENTER OF THE GUIDE BRACKET. IF THE CABLE IS NOT ROUTED CORRECTLY, IT CAN PREVENT THE FLOW OF OXYGEN.

(4) Make sure that the release cable is installed correctly through thef center of the guide bracket (Fig. 201A).

S 442-015

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

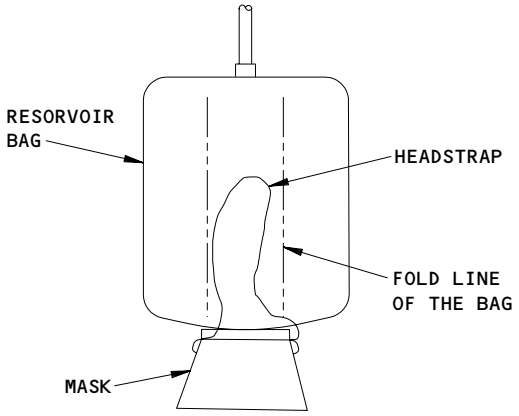
(5) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 432-179
(6) Do the Oxygen Module Installation procedure.

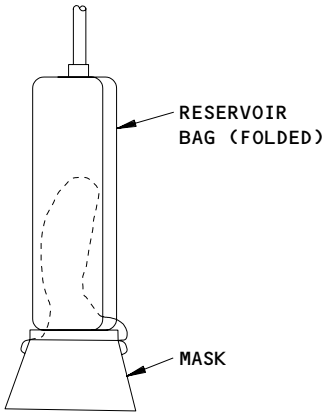
TASK 35-21-10-532-116
8. Oxygen Mask Repacking (Fig. 203)
A. References
(1) AMM 35-21-04/201, Oxygen Generator
B. Access
(1) Location Zones
200 Upper Half of the Fuselage

C. Procedure

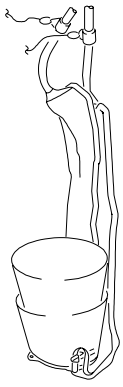
S 912-157
(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.



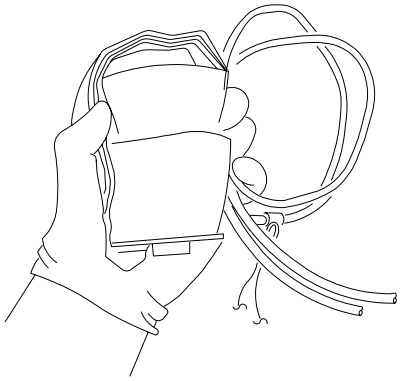
STEP 1



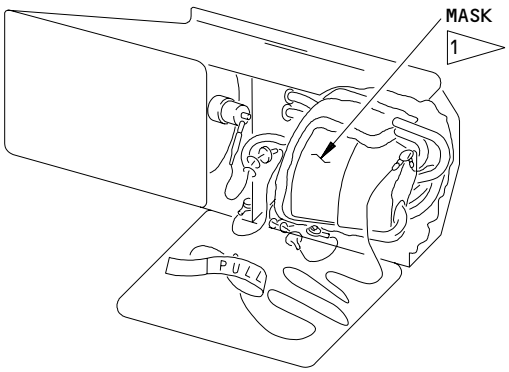
STEP 2



STEP 3



STEP 4



STEP 5

1 THE WRAPPED MASKS CAN BE POSITIONED AS SHOWN OR 180 DEGREES FROM THAT POSITION.

Oxygen Mask Repacking Procedure
Figure 203

S 492-187

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(2) Make sure the safety pin is installed in the oxygen generator, if it is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 862-118

(3) Examine the door latch actuator.
   (a) If it was tripped, push the latch reset striker until the actuator plunger engages.

S 212-159

(4) Examine the mask assembly for nicks, cuts, abrasions and chemical or heat damage.
   (a) If the mask assembly is damaged, replace the mask assembly.

S 212-156

(5) Make sure that a lanyard is attached to either the mask or the hose.
   (a) If the lanyard assembly is damage or missing, replace the lanyard assembly.

S 532-176

(6) Do the steps that follow to repack the masks:
   (a) Make sure that the reservoir bag is flat and put the headstrap on the reservoir bag (Step 1).

      NOTE: Make sure all the lanyards and hoses are separated (not tangled).

   (b) Fold the reservoir bag in thirds, lengthwise over the headstrap (Step 2).
   (c) Nest the masks loosely one inside the other (stacked together) in the same direction, with the reservoir bags on the same side (Step 3).
   (d) Wrap all the folded reservoir bags around the nested masks (Step 4).

      NOTE: While you hold the wrapped masks, make a large coil of the group of hoses. The coil must fit inside the oxygen module. Neatness of hose coil is not critical.

(e) Put all the masks, reservoir bags, hose coils and lanyards attached to the release cable, in the oxygen module (Step 5).

NOTE: The masks may be packed facing either way in the length of the box but must all face the same direction, with the hoses above the masks, not on the sides. Hoses and masks should be free to fall out of the module.

(f) Make sure that the release cable is threaded through the mask lanyard rings.

S 442-147

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(7) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).
(a) Put the streamer, if installed, on the door so it will be free to fall out.

S 412-177
(8) Carefully close the oxygen module door until the latch engages.

TASK 35-21-10-002-160

9. Door Latch Actuator Removal (Fig. 204)

A. References
(1) AMM 35-21-04/201, Oxygen Generator

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

C. Procedure

S 862-161
(1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 012-175
(2) Do the Oxygen Module Removal procedure to get access to the door latch actuator.

S 042-162

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 022-164

(4) Disconnect or cut the wires for the door latch actuator from the electrical connector.

S 022-165

(5) Remove the screws, washers and nuts.

S 022-166

(6) Remove the door latch actuator.

TASK 35-21-10-402-167

10. Door Latch Actuator Installation (Fig. 204)

A. References

(1) AMM 35-21-00/501, Passenger Oxygen System

(2) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

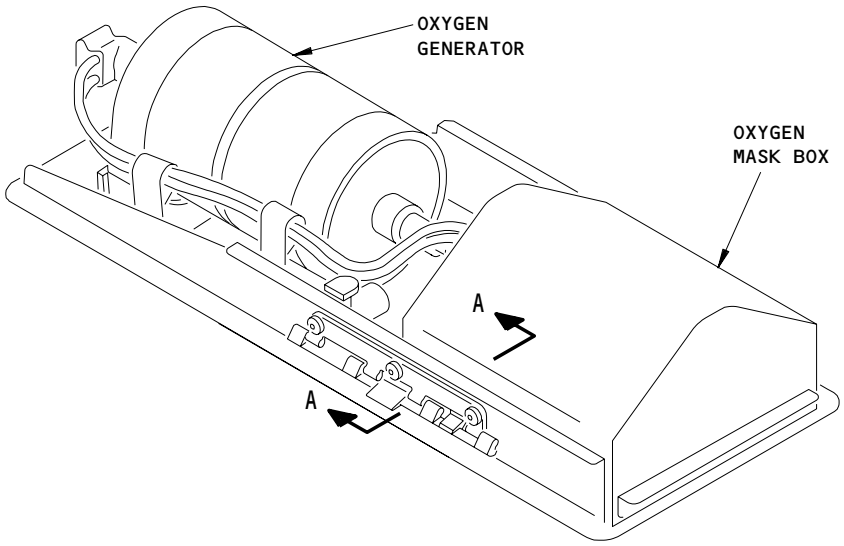
200 Upper Half of the Fuselage

C. Procedure

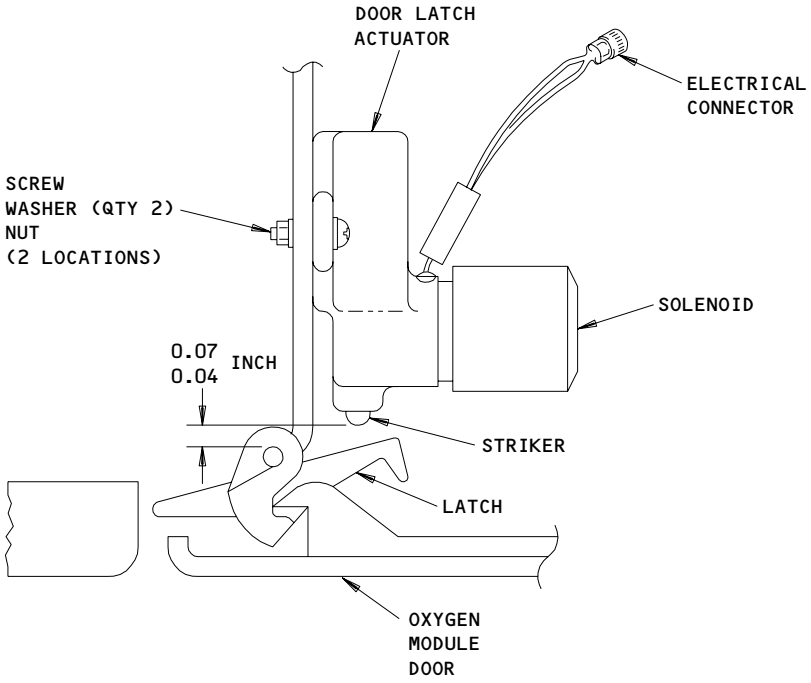
S 492-189

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(1) Make sure the safety pin is installed in the oxygen generator, if it is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).



OXYGEN MODULE
(EXAMPLE)



A-A

Door Latch Actuator Installation
Figure 204

S 422-169
(2) Hold the door latch actuator in position and install the screws, washers and nuts.

S 422-170
(3) Connect the wires from the door latch actuator to the electrical connector per the standard wiring practices.

S 412-171
(4) Install the oxygen module, if it was removed.

S 442-172

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(5) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 862-173
(6) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 722-174
(7) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

WALL-MOUNTED ATTENDANT OXYGEN MODULE - MAINTENANCE PRACTICES

1. General
   A. This procedure has these tasks:
      (1) Oxygen Module Removal
      (2) Oxygen Module Installation
      (3) Oxygen Generator Removal
      (4) Oxygen Generator Installation
      (5) Oxygen Mask Removal
      (6) Oxygen Mask Installation
      (7) Oxygen Mask Repacking
      (8) Door Latch Actuator Removal
      (9) Door Latch Actuator Installation

   TASK 35-21-11-002-086

2. Oxygen Module Removal (Fig. 201)
   A. References
      (1) AMM 35-21-04/201, Oxygen Generator
   B. Access
      (1) Location Zones
          200 Upper Half of Fuselage

   C. Procedure

      S 862-211
      (1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
          (a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

      S 012-089
      (2) Remove the headrest and backrest from the flight attendant's seat.

      S 032-092
      (3) Disconnect the electrical connectors.

      S 022-090
      (4) Release the two 1/4-turn fasteners and rotate the oxygen module and shroud assembly upward.

      S 042-141

      WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

      (5) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 032-142
(6) Release the hinge mechanism.

S 022-091
(7) Remove the wire clamp.

S 022-094
(8) Remove the oxygen module and shroud assembly.
(a) If the oxygen module is to be shipped, do the Oxygen Generator Removal procedure.

TASK 35-21-11-402-095

3. Oxygen Module Installation (Fig. 201)

A. References
(1) AMM 35-21-04/201, Oxygen Generator

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

C. Procedure

S 442-232

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(1) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 422-098
(2) Put the oxygen module and shroud assembly in position above the flight attendant's seat.

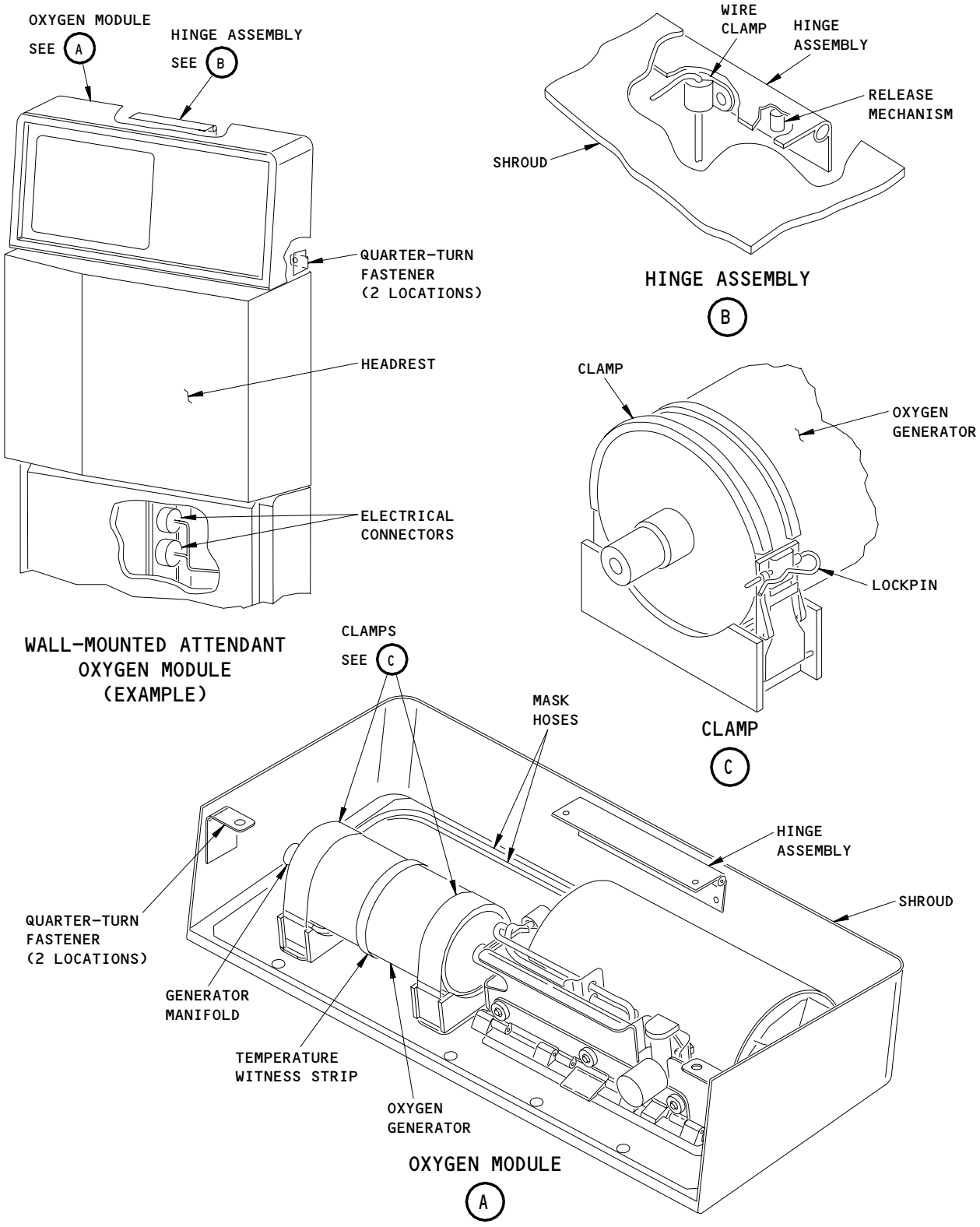
S 422-143
(3) Engage the two hinge halves.

S 422-101
(4) Fasten the wire clamp.

S 422-144
(5) Turn the oxygen module and shroud assembly down.

S 422-102
(6) Tighten the 1/4-turn fasteners to lock the module into place.

S 432-099
(7) Connect the electrical connectors.



Wall-Mounted Attendant Oxygen Module Installation
Figure 201

S 412-103
(8) Install the backrest and headrest in their correct positions.

S 862-212
(9) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 702-104
(10) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

TASK 35-21-11-002-160

4. Oxygen Generator Removal (Fig. 201)

A. Equipment
(1) Retraction Equipment - Firing Pin - C35003-1 (Active)
Retraction Equipment - Firing Pin - A35001-10 (Replaced)
(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References
(1) AMM 35-21-04/201, Oxygen Generator

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

D. Procedure

S 022-202
(1) Do the Oxygen Module Removal procedure to get access to the oxygen generator.

S 042-162

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(2) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 912-164
(3) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 032-165
(4) Remove the clamp from the hose which is connected to the oxygen generator with the Oetiker crimping tool or equivalent tool.
(a) Discard the clamp.

S 032-166
(5) Disconnect the hose from the oxygen generator.

S 022-167
(6) Remove the lock pins from the clamps.

S 022-168
(7) Release the clamps.

S 022-169
(8) Remove the oxygen generator.

S 022-170

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 FIRE THE GENERATORS AND MAKE SURE THE OXIDIZER CORE HAS ACTIVATED. THIS MUST BE DONE BEFORE YOU PREPARE THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT FIRED, THEY CAN ACCIDENTALLY FIRE DURING TRANSPORT AND CAUSE HEAT AND IGNITION. THIS CAN CAUSE DEATH OR INJURY TO PERSONS AND DAMAGE TO THE AIRCRAFT.

(9) Obey all approved procedures and regulations for the transport and disposal of oxygen generators.

TASK 35-21-11-402-171

5. Oxygen Generator Installation (Fig. 201)
A. Equipment
(1) Retraction Equipment - Firing Pin - C35003-1 (Active)
Retraction Equipment - Firing Pin - A35001-10 (Replaced)
(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621
B. References
(1) AMM 35-21-04/201, Oxygen Generator
C. Access
(1) Location Zones
200 Upper Half of the Fuselage

D. Procedure

S 492-238

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(1) Make sure the safety pin is installed on the oxygen generator.

S 212-173

(2) Make sure the oxygen generator did not fire as follows:
  (a) Look at the temperature sensitive tape on the oxygen generator.
    1) If the tape is black, the oxygen generator has fired.

      NOTE: Do not install this generator.

  (b) Look at the position of the firing pin.
    1) If you cannot see the firing pin (the release pin cannot be installed), it is in the fired position.

      NOTE: The oxygen generator has fired or the firing mechanism is bad. Do not install this generator.

S 422-174

(3) Put the new oxygen generator in position in the clamps and latch the generator clamps.

S 912-175

(4) Put on clean, nylon gloves that are lint-free during oxygen system maintenance.

S 422-176

(5) Slide the clamp over the hose.

S 432-177

(6) Connect the hose to the oxygen generator.

S 432-178

(7) Crimp the clamp with the Oetiker crimping tool or equivalent tool.

S 432-179

(8) Put the release cable through the lanyard rings.

S 432-180

WARNING: MAKE SURE THE RELEASE CABLE IS ROUTED CORRECTLY. IF THE RELEASE CABLE IS NOT ROUTED CORRECTLY, IT CAN PREVENT THE FLOW OF OXYGEN.

(9) Make sure that the release cable is installed correctly through the center of the guide bracket (Fig. 201A).

S 442-185

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(10) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 432-181

(11) Repack the oxygen masks again, if it is necessary.

S 422-203

(12) Do the Oxygen Module Installation procedure.

TASK 35-21-11-002-186

6. Oxygen Mask Removal (Fig. 202)

A. Equipment

(1) Latch release rod - make from a 0.125-inch (3 mm) diameter rod

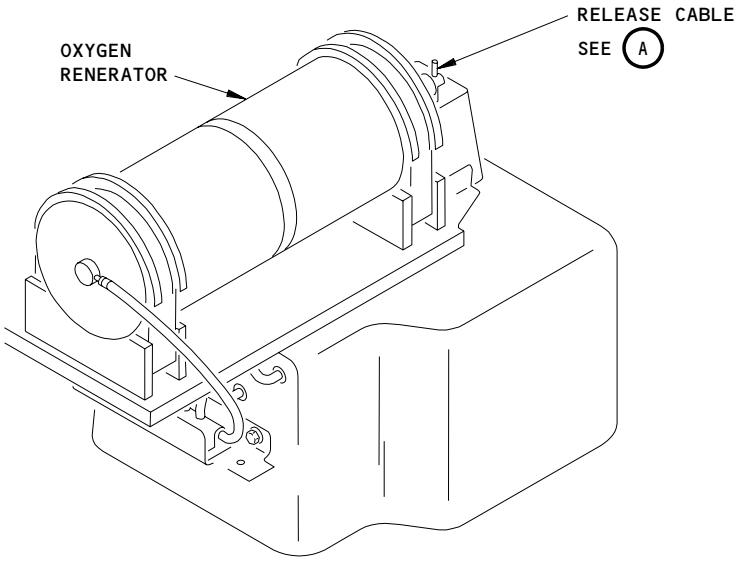
B. References

(1) AMM 35-21-04/201, Oxygen Generator

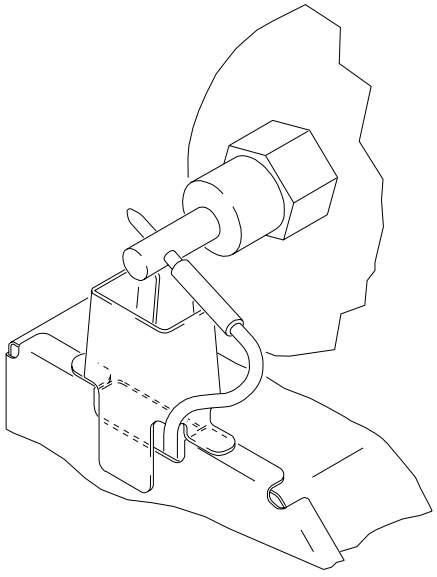
C. Access

(1) Location Zones

200 Upper Half of the Fuselage

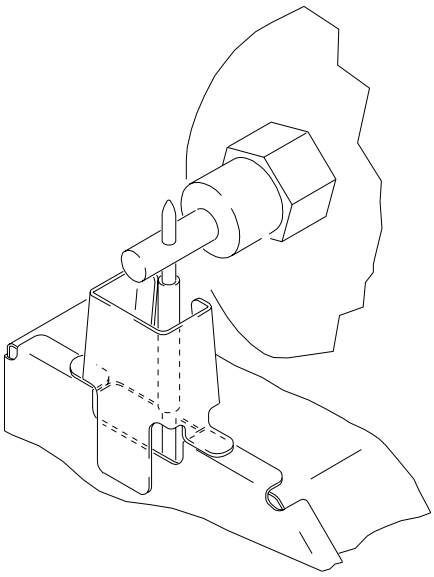


OXYGEN GENERATOR
(EXAMPLE)



RELEASE CABLE
(INCORRECT INSTALLATION)

A



RELEASE CABLE
(CORRECT INSTALLATION)

A

Release Cable Routing and Release Pin Installation
Figure 201A

D. Procedure

S 012-187
(1) Release the two 1/4-turn fasteners and rotate the oxygen module and shroud assembly upward.

S 042-188

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(2) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 012-190
(3) Remove lanyards from the release cable.

S 022-192
(4) Disconnect the mask hoses from the generator manifold.

S 022-193
(5) Carefully pull the ends of the mask hoses through the grommets on the oxygen module.

S 022-194
(6) Remove the oxygen masks.

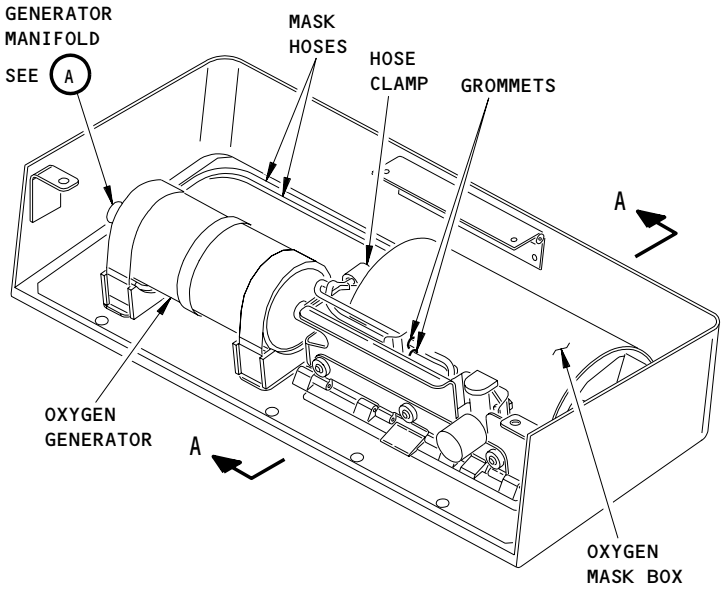
NOTE: To clean and keep all oxygen systems components that are supplied by vendor, refer to applicable vendor instructions (Vendor CMM).

TASK 35-21-11-402-195

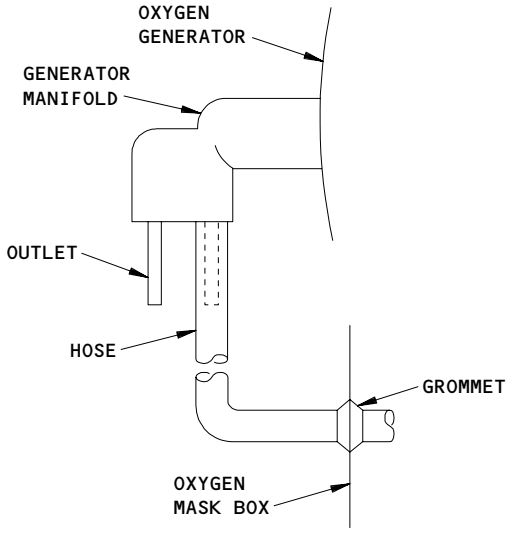
7. Oxygen Mask Installation (Fig. 202)

A. References

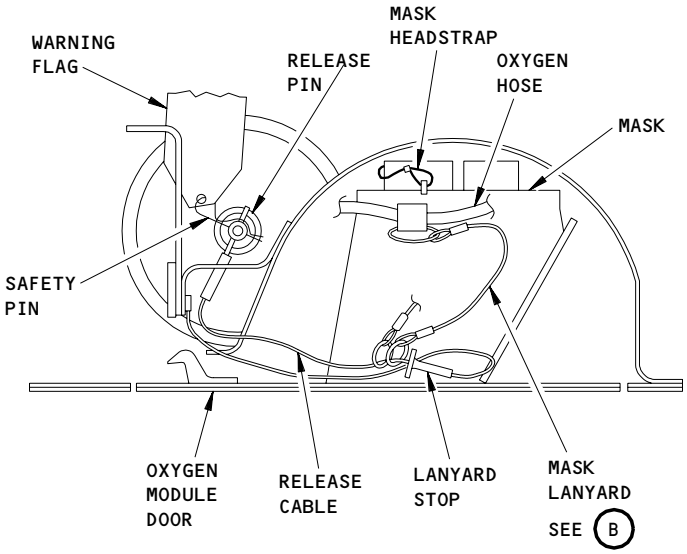
(1) AMM 35-21-04/201, Oxygen Generator



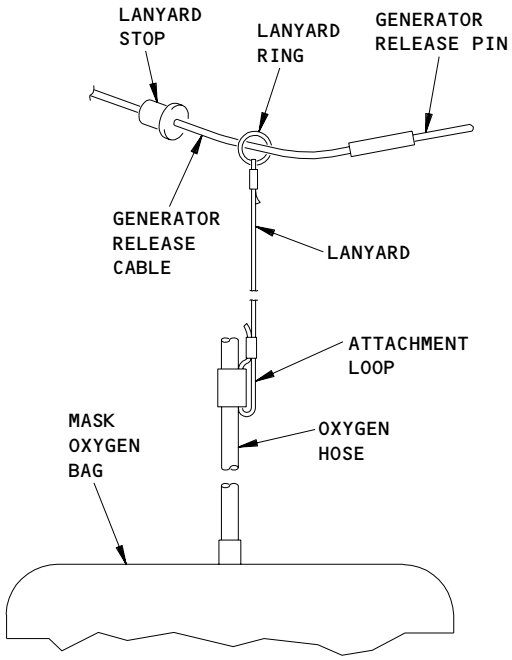
OXYGEN MODULE
(EXAMPLE)



GENERATOR MANIFOLD
A



A-A



MASK LANYARD
(EXAMPLE)
B

Oxygen Mask Installation
Figure 202

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

C. Procedure

S 912-255

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 212-256
(2) Make sure the safety pin is installed on the oxygen generator.

S 412-196
(3) Carefully push the ends of the mask hoses through the grommets on the oxygen module.

S 422-197
(4) Connect the mask hoses to the generator manifold.

S 412-205
(5) Push the release cable through all of the lanyard rings.

NOTE: Make sure all of the masks are attached to the release cable by a lanyard.

S 422-259

WARNING: MAKE SURE THE RELEASE CABLE IS ROUTED THROUGH THE CENTER OF THE GUIDE BRACKET. IF THE CABLE IS NOT ROUTED CORRECTLY, IT CAN PREVENT THE FLOW OF OXYGEN.

(6) Make sure that the release cable is installed correctly through the center of the guide bracket (Fig. 201A).

S 442-200

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(7) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 422-206

(8) Rotate the oxygen module and shroud assembly down.

S 432-207

(9) Tighten the 1/4-turn fasteners to lock the module into place.

TASK 35-21-11-532-127

8. Oxygen Mask Repacking (Fig. 203)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 912-257

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 022-258

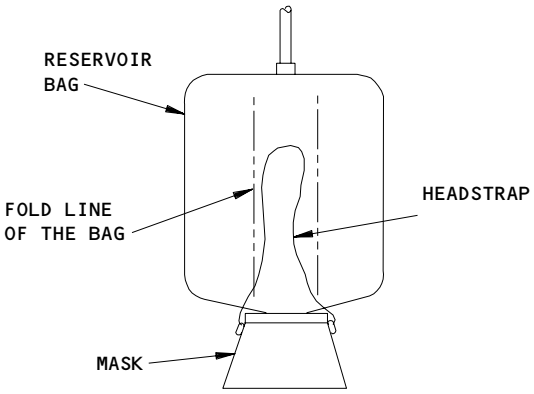
(2) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 012-208

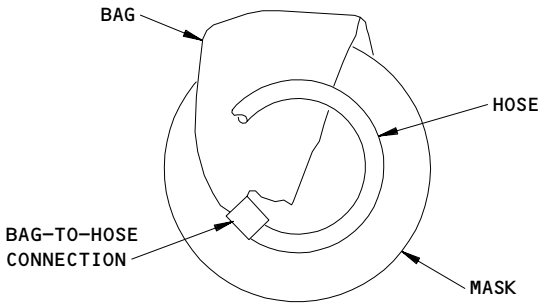
(3) If the door is closed, push on the manual latch release behind the panel.

S 862-129

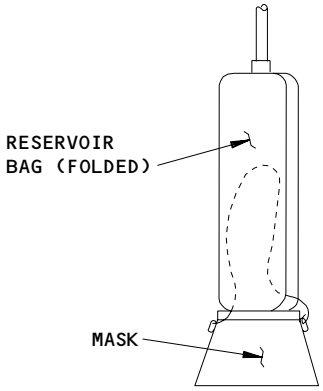
(4) If the door latch actuator has been tripped, push the latch striker pin to reset the door latch actuator.



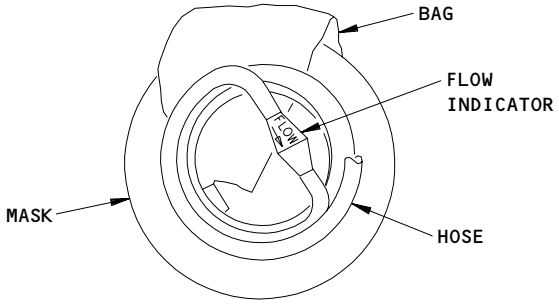
STEP 1



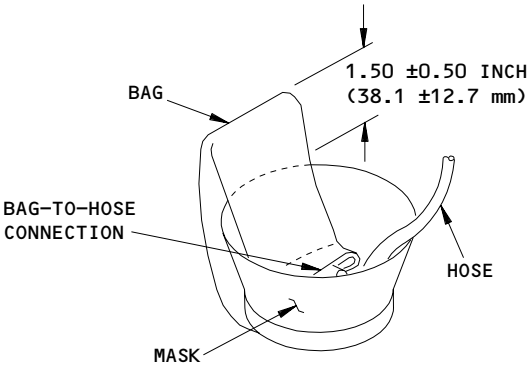
STEP 4



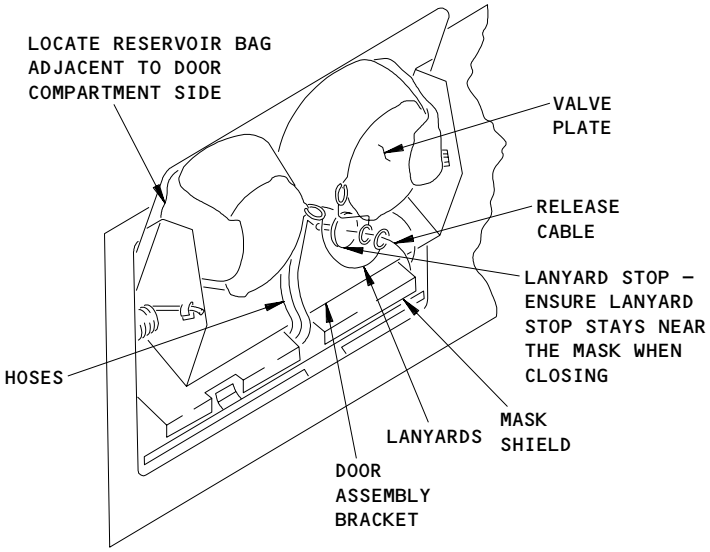
STEP 2



STEP 5



STEP 3



STEP 6

Oxygen Mask Repacking Procedure
Figure 203

S 532-210

(5) Do the steps that follow to repack the masks:

(a) Make sure that the reservoir bag is flat and put the headstrap on the reservoir bag (Step 1).

NOTE: Make sure all the lanyards and hoses are separated (not tangled).

(b) Fold the reservoir bag in thirds, lengthwise over the headstrap (Step 2).

(c) Put the folded reservoir bag up the side of the mask and put it in the mask (Step 3).

NOTE: Move the bag-to-hose connection to the center in the bottom of the mask, with the excess bag above the mask by 1.50 +/- 0.50 inches.

(d) Coil the hose from the bottom of the mask in a counterclockwise direction on top of the folded reservoir bag (Step 4).

NOTE: Allow slack between the hose coils and the mask so that the hose separates from the mask easily during mask deployment.

(e) Put the flow indicator in position and continue to wind the hose above the flow indicator until the mask is six inches from the oxygen module (Step 5).

(f) Put the mask cup flat against the door surface with the reservoir bags against the sides of the enclosure (Step 6).

1) Fold hoses back, route it between and behind the masks.

NOTE: Do not route the hoses in front of the masks.

2) Allow the hoses to have at least one-inch of slack or looseness between the masks and the notch (which the hoses goes through) before the door is closed.

NOTE: When the door is closed, the hoses are stretched and too much tension will not allow the door to fully open.

3) Remove any mask restraints.

(g) Make sure that the release cable is threaded through the lanyard rings.

S 442-233

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(6) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 442-135

CAUTION: MAKE SURE THE LANYARD STOP IS NOT BETWEEN THE VALVE PLATE AND THE MASK SHIELD. IF THE LANYARD STOP IS BETWEEN THE VALVE PLATE AND THE MASK SHIELD, THE DOOR WILL NOT MOVE FREELY.

(7) Put the release cable and lanyard next to the mask cups.

NOTE: The lanyard stop must stay near the door is closed. If the lanyard stop gets between the valve plate and the mask shield, the door will not close correctly.

S 212-138

(8) Make sure the masks and hoses are free to fall out of the oxygen module.

S 412-139

(9) Carefully close the oxygen module door until the latch fully engages.

NOTE: Make sure that all items stay in their correct positions and door closes freely.

TASK 35-21-11-002-216

9. Door Latch Actuator Removal (Fig. 204)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 862-217

(1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:

(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 012-231
(2) Do the Oxygen Module Removal procedure to get access to the door latch actuator.

S 042-218

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 012-219
(4) Remove the oxygen module, if it is necessary.

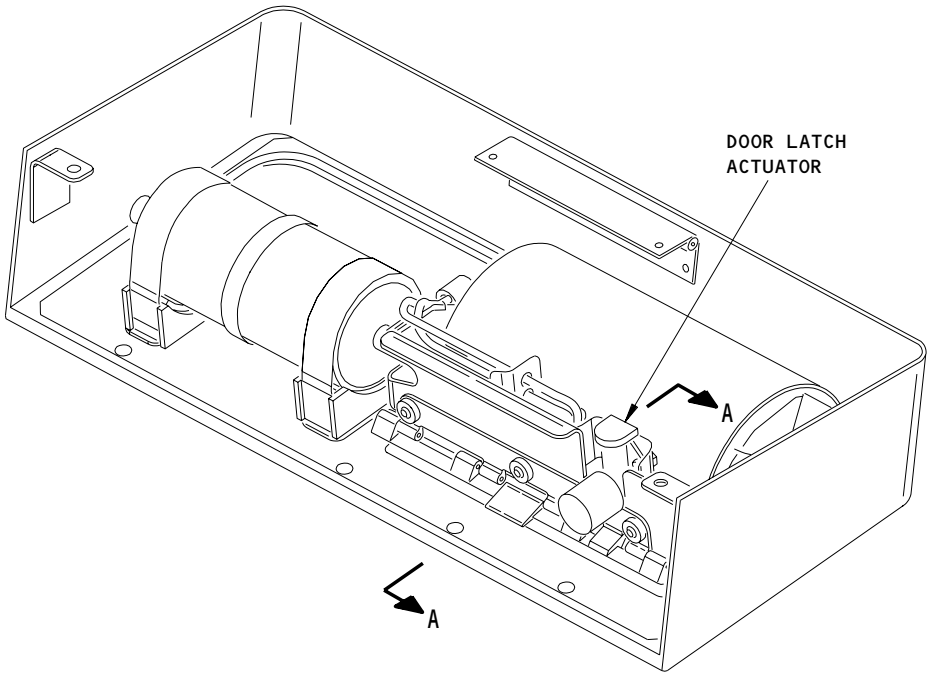
S 022-220
(5) Disconnect or cut the wires for the door latch actuator from the electrical connector.

S 022-221
(6) Remove the screws, washers and nuts.

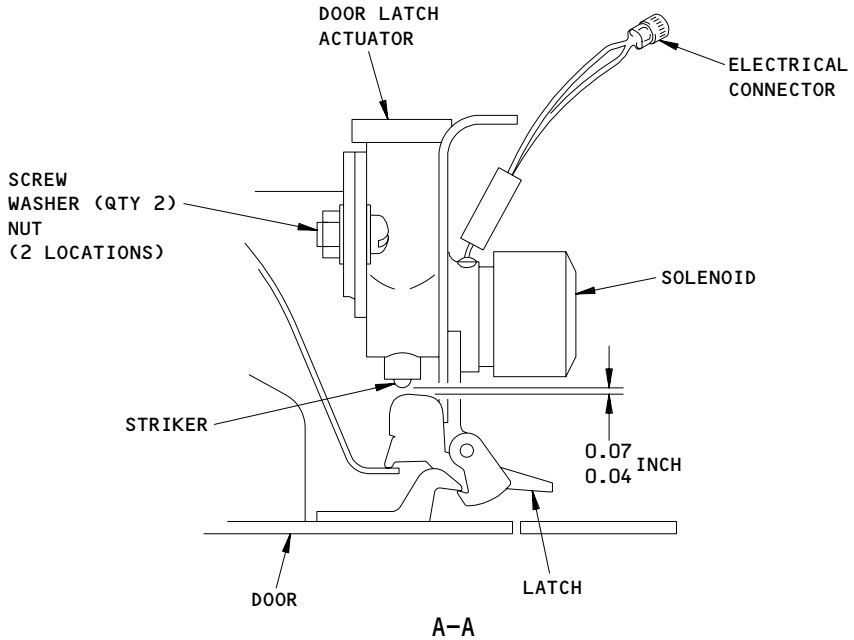
S 022-222
(7) Remove the door latch actuator.

TASK 35-21-11-402-223

10. Door Latch Actuator Installation (Fig. 204)
A. References
(1) AMM 35-21-00/501, Passenger Oxygen System
(2) AMM 35-21-04/201, Oxygen Generator
B. Access
(1) Location Zones
200 Upper Half of the Fuselage



OXYGEN MODULE
(EXAMPLE)



A-A

Door Latch Actuator Installation
Figure 204

C. Procedure

S 492-241

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(1) Make sure the safety pin is installed in the oxygen generator, if it is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 422-225

(2) Hold the door latch actuator in position and install the screws, washers and nuts.

S 422-226

(3) Connect the wires from the door latch actuator to the electrical connector per standard wiring practices.

S 412-227

(4) Install the oxygen module, if it was removed.

S 442-228

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(5) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 862-229

(6) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 722-230

(7) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

FORWARD/MID CEILING-MOUNTED ATTENDANT OXYGEN MODULE - MAINTENANCE PRACTICES

1. General
   A. This procedure has these tasks:
      (1) Oxygen Module Removal
      (2) Oxygen Module Installation
      (3) Oxygen Generator Removal
      (4) Oxygen Generator Installation
      (5) Oxygen Mask Removal
      (6) Oxygen Mask Installation
      (7) Oxygen Mask Repacking
      (8) Door Latch Actuator Removal
      (9) Door Latch Actuator Installation
   B. This section uses configurations to identify the difference between CLASSIC INTERIOR and SIGNATURE INTERIOR oxygen modules:
      (1) CONFIG 1 - CLASSIC INTERIOR
      (2) CONFIG 2 - SIGNATURE INTERIOR
   C. An operator will only receive a complete procedure for the applicable configuration(s) in their fleet. If a configuration is not applicable to an operator's fleet, that procedure will be limited to one page with the statement CONFIGURATION NOT USED.

TASK 35-21-12-002-087-001

2. Oxygen Module Removal (Fig. 201)
   A. References
      (1) AMM 35-21-04/201, Oxygen Generator
   B. Access
      (1) Location Zones
          200 Upper Half of Fuselage

   C. Procedure

      S 862-297-001
      (1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
          (a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

      S 012-089-001
      (2) Open the oxygen module door, but do not let the masks fall.

      S 022-198-001
      (3) Hold the masks in the module and turn the 1/4-turn fasteners.

      S 032-199-001
      (4) Lower the oxygen module approximately 12 inches.

S 032-201-001
(5) Disconnect the electrical connector from the oxygen module.

S 042-202-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(6) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 022-203-001
(7) Remove the oxygen module.
(a) If the oxygen module is to be shipped, do the Oxygen Generator Removal procedure.

TASK 35-21-12-402-204-001
3. Oxygen Module Installation (Fig. 201)
A. References
(1) AMM 35-21-00/501, Passenger Oxygen System
(2) AMM 35-21-04/201, Oxygen Generator
B. Access
(1) Location Zones
200 Upper Half of Fuselage

C. Procedure

S 912-314-001
(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 442-205-001

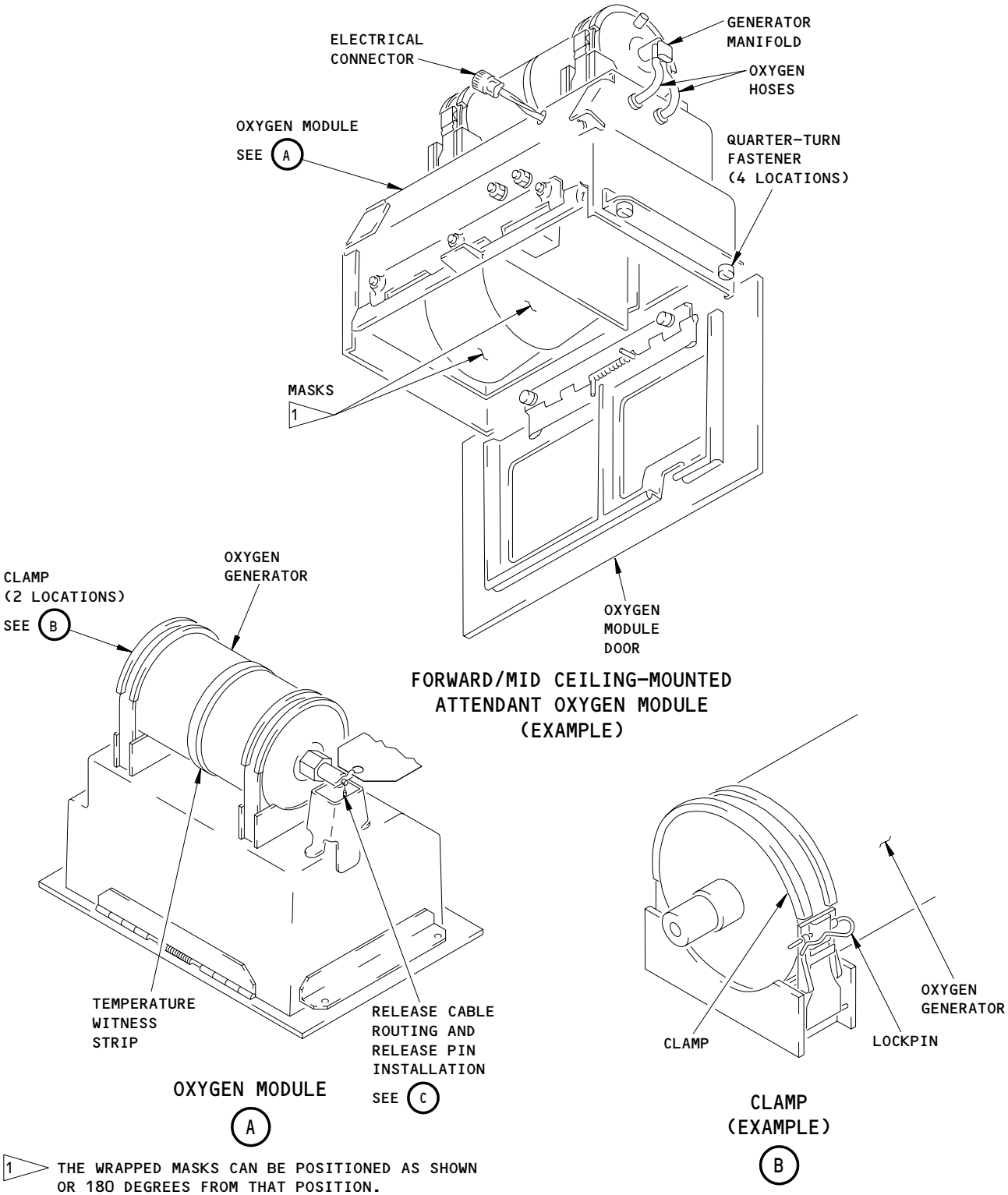
WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(2) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 422-206-001
(3) Hold the masks in the oxygen module and put the module in position near the ceiling.

S 432-208-001
(4) Connect the electrical connector to the oxygen module.

S 422-209-001
(5) Put the module in its position and turn the 1/4-turn fasteners.



Forward/Mid Ceiling-Mounted Attendant Oxygen Module
Figure 201 (Sheet 1)

S 412-210-001
(6) Close the oxygen module door.

S 862-298-001
(7) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 702-212-001
(8) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

TASK 35-21-12-002-213-001

4. Oxygen Generator Removal (Fig. 201)

A. Equipment
(1) Retraction Equipment - Firing Pin - C35003-1 (Active)
Retraction Equipment - Firing Pin - A35001-10 (Replaced)
(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References
(1) AMM 35-21-04/201, Oxygen Generator

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

D. Procedure

S 012-214-001
(1) Do the Oxygen Module Removal procedure to get access to the oxygen generator.

S 912-215-001
(2) Put on clean, nylon gloves that are lint-free during oxygen system maintenance.

S 492-304-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(3) If the generator has not fired, make sure the safety pin is installed on the oxygen generator, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 212-217-001

CAUTION: CHECK WORK AREA FOR CLEANLINESS. IT MUST BE VISIBLY CLEAN. UNDER NO CONDITION SHOULD GREASE OR OIL COME IN CONTACT WITH THE MASKS, HOSES OR ANY OTHER COMPONENT OF THE OXYGEN SYSTEM.

(4) Put the oxygen module PSU on a suitable work area.

S 032-218-001

(5) If the oxygen generator has not fired, remove the release pin from the generator.

S 032-219-001

(6) If installed, remove the clamp from the hose which is connected to the oxygen generator with the Oetiker crimping tool or equivalent tool.
(a) Discard the clamp.

S 032-220-001

(7) Disconnect the hose from the oxygen generator manifold.

S 022-221-001

(8) Remove the lock pins from the clamps.

S 022-222-001

(9) Release the clamps.

S 022-223-001

(10) Remove the oxygen generator.

S 022-224-001

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 FIRE THE GENERATORS AND MAKE SURE THE OXIDIZER CORE HAS ACTIVATED. THIS MUST BE DONE BEFORE YOU PREPARE THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT FIRED, THEY CAN ACCIDENTALLY FIRE DURING TRANSPORT AND CAUSE HEAT AND IGNITION. THIS CAN CAUSE DEATH OR INJURY TO PERSONS AND DAMAGE TO THE AIRCRAFT.

(11) Observe all approved procedures and regulations for the transport and disposal of oxygen generators.

TASK 35-21-12-402-225-001

5. Oxygen Generator Installation (Fig. 201, 202)

A. Equipment

(1) Retraction Equipment - Firing Pin - C35003-1 (Active)
Retraction Equipment - Firing Pin - A35001-10 (Replaced)

(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References

(1) AMM 35-21-00/501, Passenger Oxygen System

(2) AMM 35-21-04/201, Oxygen Generator

C. Access

(1) Location Zone
200 Upper Half of the Fuselage

D. Procedure

S 912-226-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 492-303-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(2) Make sure the safety pin is installed on the oxygen generator, if the safety pin is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 212-228-001

(3) Make sure the oxygen generator did not fire as follows:

(a) Look at the temperature sensitive tape on the oxygen generator. If the tape is black, the oxygen generator has fired.

NOTE: Do not install this generator.

(b) Look at the position of the firing pin.

1) If you cannot see the firing pin (the release pin cannot be installed), it is in the fired position.

NOTE: The oxygen generator has fired or the firing mechanism is bad. Do not install this generator.

S 422-229-001

(4) Put the new generator in position in the clamps and latch the generator clamps.

S 212-230-001

(5) Adjust the oxygen generator so that the generator label can be read easily.

S 432-231-001

(6) Connect the hose to the oxygen generator manifold.

S 422-232-001

(7) If applicable, slide the clamp over the hose and crimp the clamp with the Oetiker crimping tool or equivalent tool.

S 432-233-001

(8) Put the release cable through the lanyard rings.

S 422-316-001

WARNING: MAKE SURE THE RELEASE CABLE IS ROUTED THROUGH THE CENTER OF THE GUIDE BRACKET. IF THE CABLE IS NOT ROUTED CORRECTLY, IT CAN PREVENT THE FLOW OF OXYGEN.

(9) Make sure that the release cable is installed correctly through the center of the guide bracket (Fig. 201, detail view C).

S 442-236-001

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(10) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 422-237-001

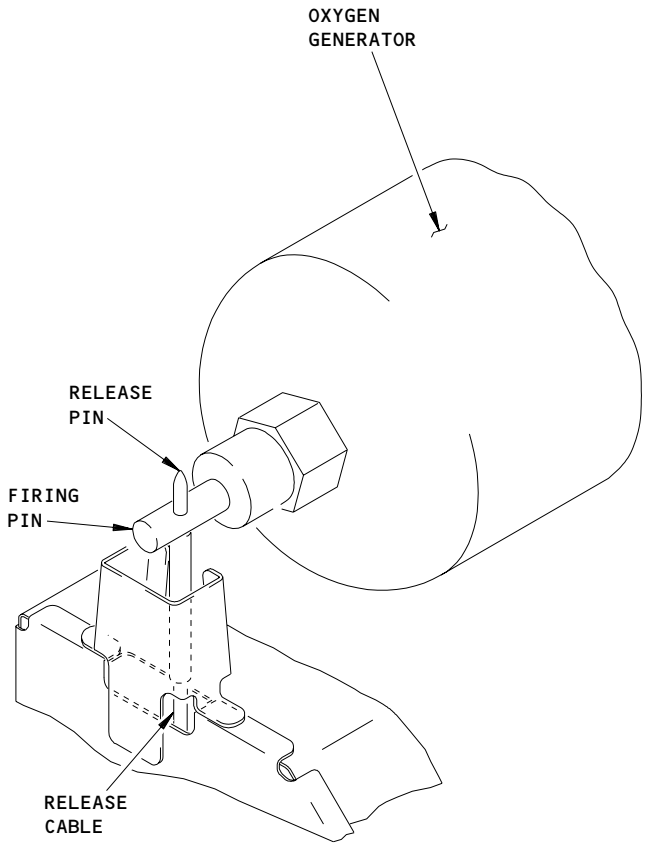
(11) Do the Oxygen Module Installation procedure, if it is necessary.

TASK 35-21-12-002-238-001

6. Oxygen Mask Removal (Fig. 202)

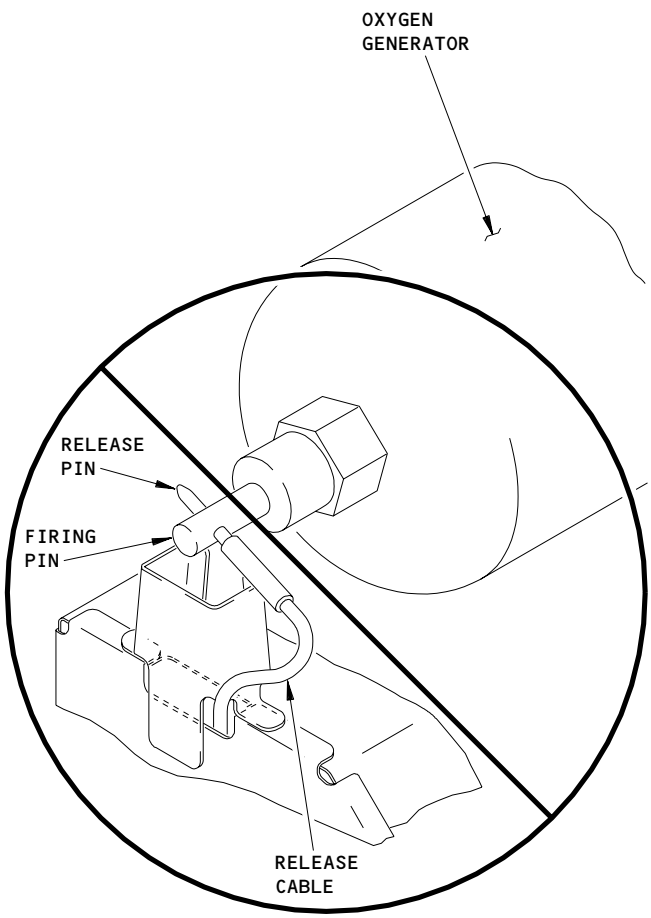
A. References

(1) AMM 35-21-04/201, Oxygen Generator



RELEASE CABLE ROUTING AND RELEASE PIN
(CORRECT INSTALLATION)

C



RELEASE CABLE ROUTING AND RELEASE PIN
(INCORRECT INSTALLATION)

C

Forward/Mid Ceiling-Mounted Attendant Oxygen Module
Figure 201 (Sheet 2)

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

C. Procedure

S 012-239-001
(1) Do the Oxygen Module Removal procedure to get access to the oxygen generator.

S 912-240-001
(2) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 042-241-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

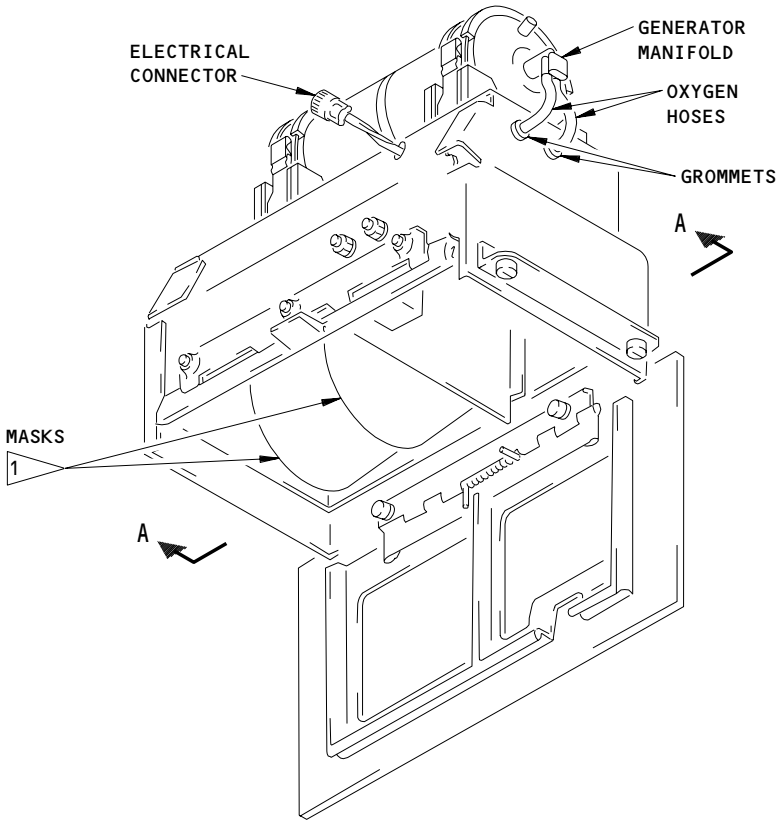
S 012-243-001
(4) Remove lanyards from the release cable.

S 022-245-001
(5) Disconnect the mask hoses from the oxygen generator manifold.

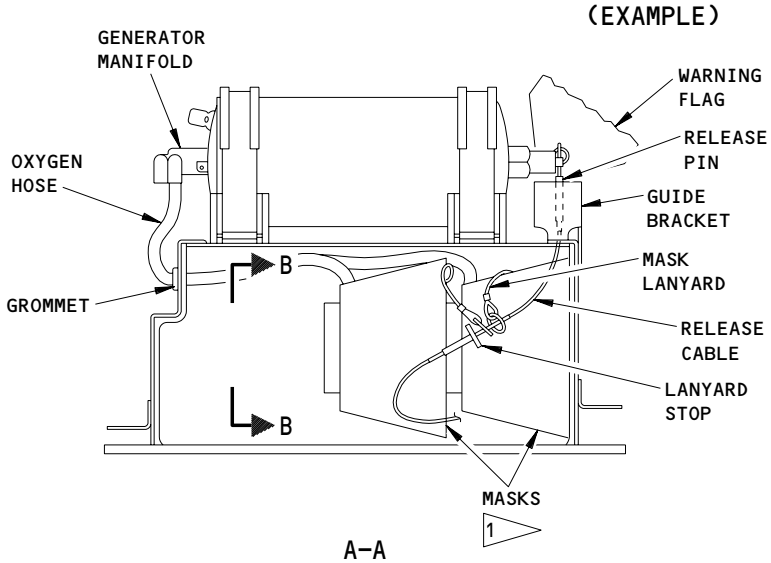
S 022-246-001
(6) Carefully pull the ends of the mask hoses through the grommets on the oxygen module.

S 022-247-001
(7) Remove the oxygen masks.

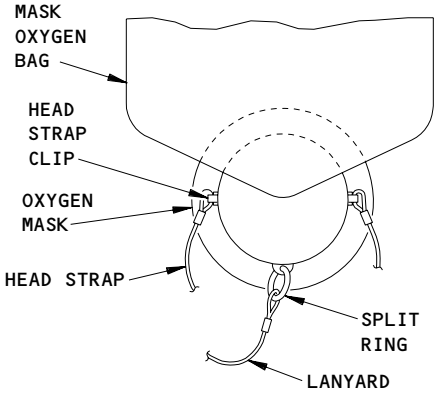
NOTE: To clean and keep all oxygen systems components that are supplied by vendor, refer to applicable vendor instructions (Vendor CMM).



FORWARD/MID CEILING-MOUNTED
ATTENDANT OXYGEN MODULE
(EXAMPLE)



A-A



B-B

1 THE WRAPPED MASKS CAN BE POSITIONED AS SHOWN OR 180 DEGREES FROM THAT POSITION.

Oxygen Mask Installation
Figure 202

TASK 35-21-12-402-248-001

7. Oxygen Mask Installation (Fig. 202)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 912-315-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 492-306-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(2) Make sure the safety pin is installed on the oxygen generator, if the safety pin is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 412-250-001

(3) Carefully push the ends of the mask hoses through the grommets on the oxygen module.

S 422-251-001

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

S 412-253-001

WARNING: MAKE SURE THE RELEASE CABLE IS ROUTED THROUGH THE CENTER OF THE BRACKET. IF THE CABLE IS NOT ROUTED CORRECTLY, IT CAN PREVENT THE FLOW OF OXYGEN.

(5) Push the release cable through all of the lanyard rings. Make sure all of the masks are attached to the release cable by a lanyard.

S 532-255-001

(6) Make sure to do the Oxygen Mask Repacking procedure before the oxygen module installation.

S 442-256-001

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(7) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

TASK 35-21-12-532-257-001

8. Oxygen Mask Repacking (Fig. 203)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

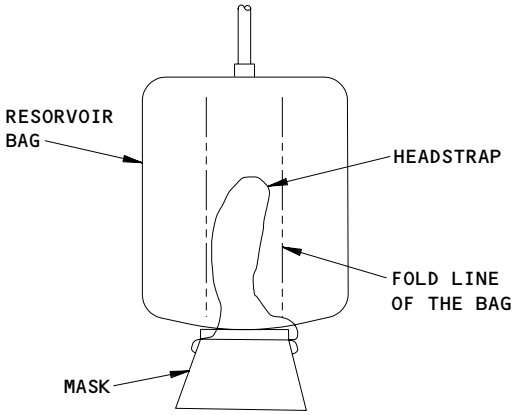
S 912-258-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

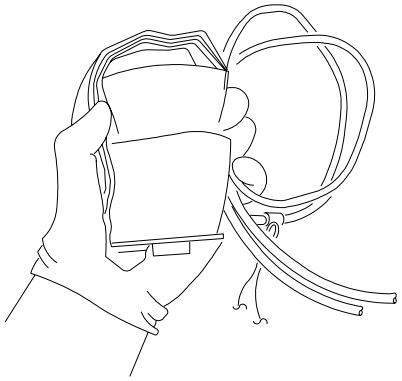
S 492-307-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

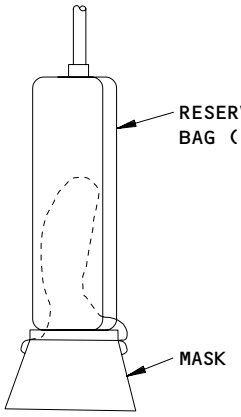
(2) Make sure the safety pin is installed on the oxygen generator, if the safety pin is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).



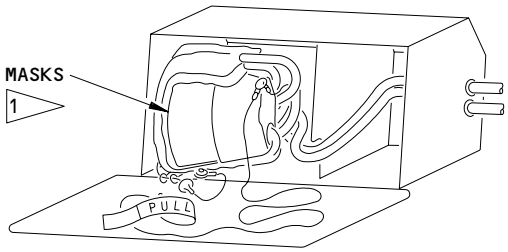
STEP 1



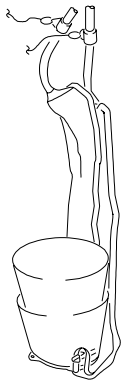
STEP 4



STEP 2



STEP 5



STEP 3

1 THE WRAPPED MASKS CAN BE POSITIONED AS SHOWN OR 180 DEGREES FROM THAT POSITION.

Passenger Oxygen Mask Repacking Procedure
Figure 203

S 862-260-001

(3) Examine the door latch actuator. If it was tripped, push the latch reset striker until the actuator plunger engages.

S 212-261-001

(4) Examine the mask assembly for nicks, cuts, abrasions and chemical or heat damage.
   (a) If the mask assembly is damaged, replace the mask assembly.

S 212-262-001

(5) Make sure that a lanyard is attached to either the mask or the hose.
   (a) If the lanyard assembly is damage or missing, replace the lanyard assembly.

S 532-263-001

(6) Do the steps that follow to repack the masks:
   (a) Make sure that the reservoir bag is flat and put the headstrap on the reservoir bag (Step 1).

      NOTE: Make sure all the lanyards and hoses are separated (not tangled).

   (b) Fold the reservoir bag in thirds, lengthwise over the headstrap (Step 2).
   (c) Nest the masks loosely one inside the other (stacked together) in the same direction, with the reservoir bags on the same side (Step 3).
   (d) Wrap all the folded reservoir bags around the nested masks (Step 4).

      NOTE: While you hold the wrapped masks, make a large coil of the group of hoses. The coil must fit inside the oxygen module. Neatness of hose coil is not critical.

   (e) Put all the masks, reservoir bags, hose coil and lanyards attached to the release cable, in the oxygen module (Step 5).

      NOTE: The masks may be packed facing either way in the length of the box but must all face the same direction, with the hoses above the masks, not on the sides. Hoses and masks should be free to fall out of the module.

   (f) Make sure that the release cable is threaded through the lanyard rings with the release pin in the oxygen generator firing pin.
   (g) Put the streamer (if installed) on the door so it will be free to fall out.

S 442-265-001

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(7) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 412-264-001

(8) Carefully close the oxygen module door until the latch engages.

TASK 35-21-12-002-281-001

9. Door Latch Actuator Removal (Fig. 204)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zone

200 Upper Half of the Fuselage

C. Procedure

S 862-282-001

(1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:

(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 012-296-001

(2) Do the Oxygen Module Removal procedure to get access to the door latch actuator.

S 042-283-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 012-284-001

(4) Remove the oxygen module, if it is necessary.

S 022-285-001

(5) Disconnect or cut the wires for the door latch actuator from the electrical connector.

S 022-286-001

(6) Remove the screws, washers and nuts.

S 022-287-001
(7) Remove the door latch actuator.

TASK 35-21-12-402-288-001

10. Door Latch Actuator Installation (Fig. 204)

A. References
(1) AMM 35-21-00/501, Passenger Oxygen System
(2) AMM 35-21-04/201, Oxygen Generator

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

C. Procedure

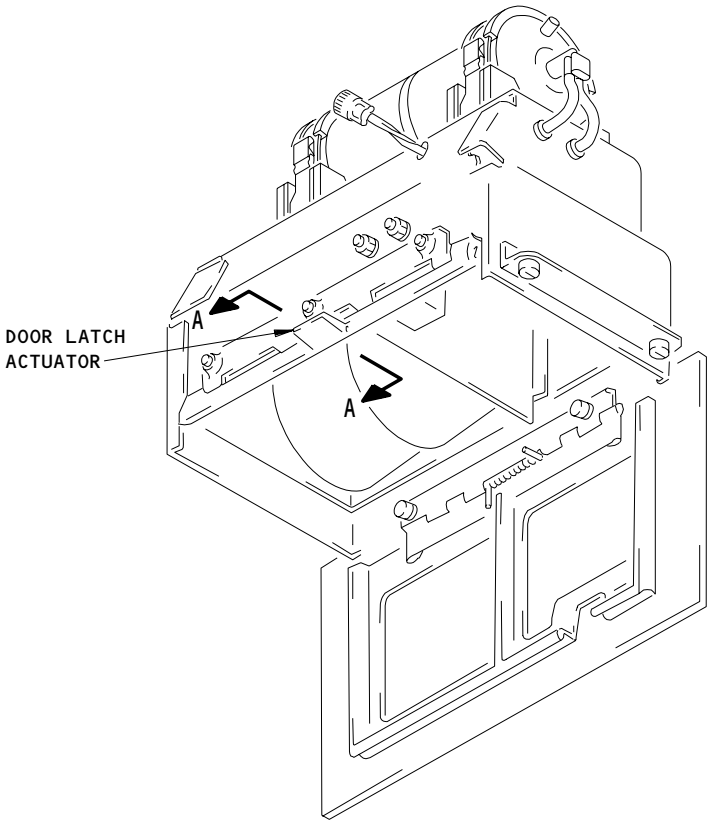
S 492-308-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

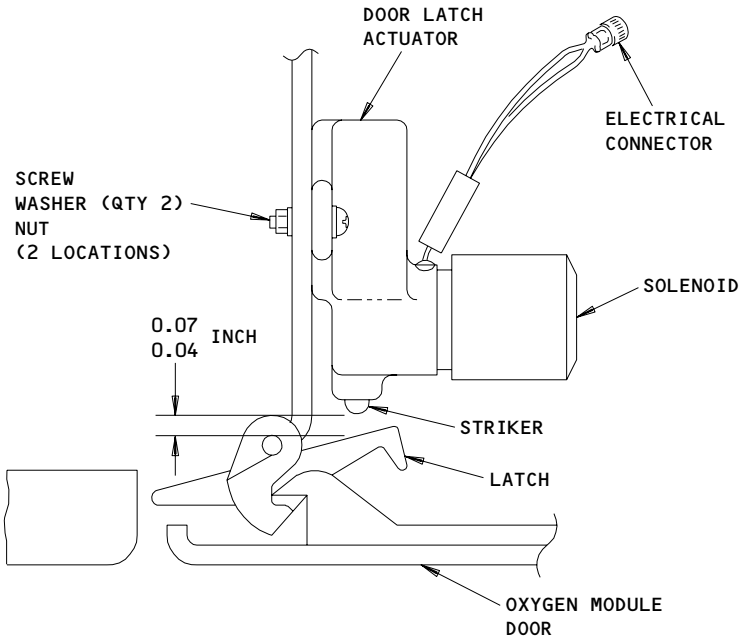
(1) Make sure the safety pin is installed on the oxygen generator, if the safety pin is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 422-290-001
(2) Hold the door latch actuator in position and install the screws, washers and nuts.

S 422-291-001
(3) Connect the wires from the door latch actuator to the electrical connector.



OXYGEN MODULE
(EXAMPLE)



DOOR LATCH ACTUATOR
A-A

Door Latch Actuator Installation
Figure 204

S 412-292-001

(4) Install the oxygen module, if it was removed.

S 442-293-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(5) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 862-294-001

(6) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 722-295-001

(7) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

FORWARD/MID CEILING-MOUNTED ATTENDANT OXYGEN MODULE - MAINTENANCE PRACTICES

TASK 35-21-12-902-001-002

1. Forward/Mid Ceiling-Mounted Attendant Oxygen Module
   A. General
      (1) This configuration not used.

LAVATORY OXYGEN MODULE - MAINTENANCE PRACTICES

1. General
   A. This procedure has these tasks:
      (1) Oxygen Module Removal
      (2) Oxygen Module Installation
      (3) Oxygen Generator Removal
      (4) Oxygen Generator Installation
      (5) Oxygen Mask Removal
      (6) Oxygen Mask Installation
      (7) Oxygen Mask Repacking
      (8) Door Latch Actuator Removal
      (9) Door Latch Actuator Installation
   B. This section uses configurations to identify the difference between CLASSIC INTERIOR and SIGNATURE INTERIOR oxygen modules:
      (1) CONFIG 1 - CLASSIC INTERIOR
      (2) CONFIG 2 - SIGNATURE INTERIOR
   C. An operator will only receive a complete procedure for the applicable configuration(s) in their fleet. If a configuration is not applicable to an operator's fleet, that procedure will be limited to one page with the statement CONFIGURATION NOT USED.

TASK 35-21-13-002-087-001

2. Oxygen Module Removal (Fig. 201)
   A. References
      (1) AMM 35-21-04/201, Oxygen Generator
   B. Access
      (1) Location Zones
          200 Upper Half of Fuselage

   C. Procedure

      S 912-258-001
      (1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

      S 862-238-001
      (2) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
          (a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

      S 012-089-001
      (3) Open the oxygen module door, but do not let the masks fall.

      S 022-090-001
      (4) Hold the masks in the module and turn the 1/4-turn fasteners.

      S 032-241-001
      (5) Lower the oxygen module approximately 12 inches.
          (a) Disconnect the electrical connector from the oxygen module.

S 042-198-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(6) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 022-095-001

(7) Remove the oxygen module.

(a) If the oxygen module is to be shipped, do the Oxygen Generator Removal procedure.

TASK 35-21-13-402-097-001

3. Oxygen Module Installation (Fig. 201)

A. References

(1) AMM 35-21-00/501, Passenger Oxygen System

(2) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of Fuselage

C. Procedure

S 912-259-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenace.

S 442-199-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(2) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 422-098-001

(3) Hold the masks in the oxygen module and put the module in position near the ceiling.

S 432-100-001

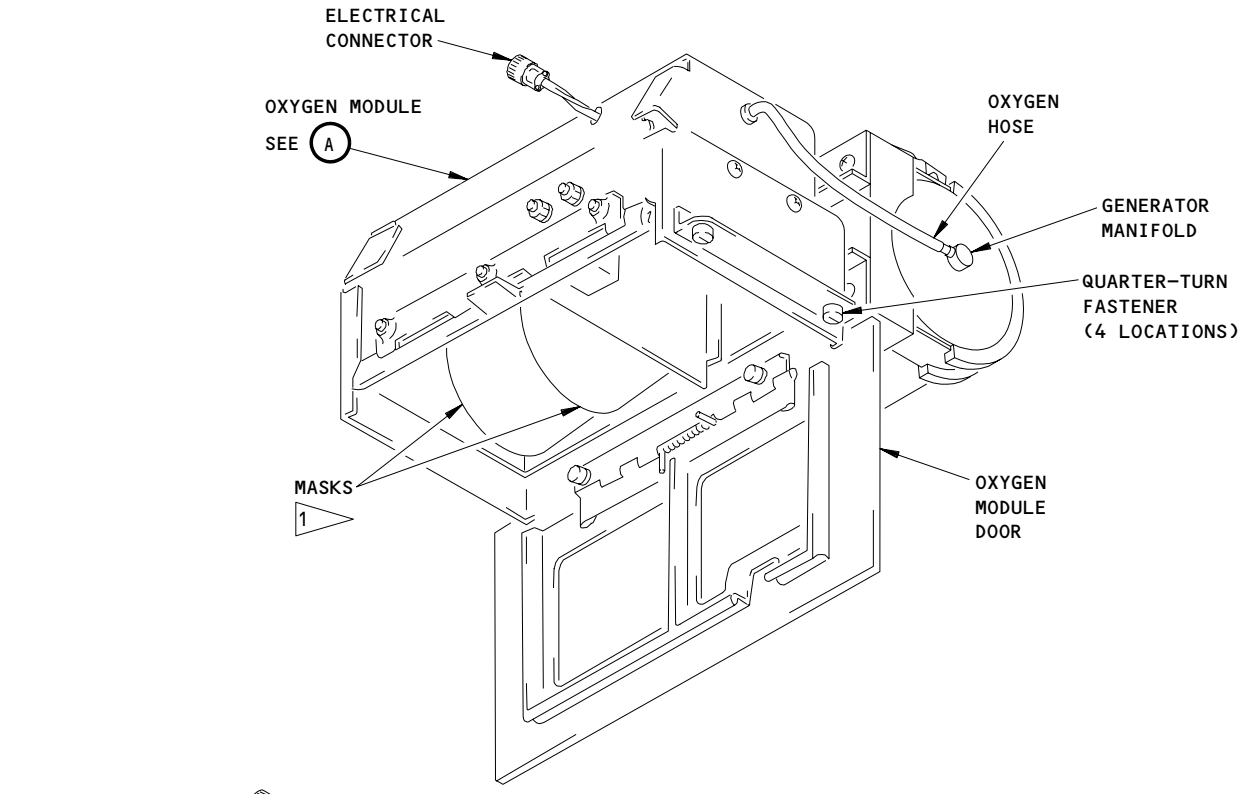
(4) Connect the electrical connector to the oxygen module.

S 422-102-001

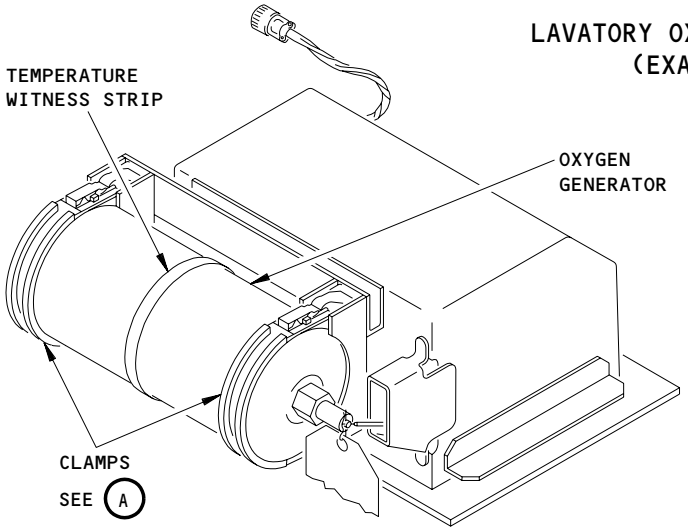
(5) Put the module in its position and turn the 1/4-turn fasteners.

S 412-103-001

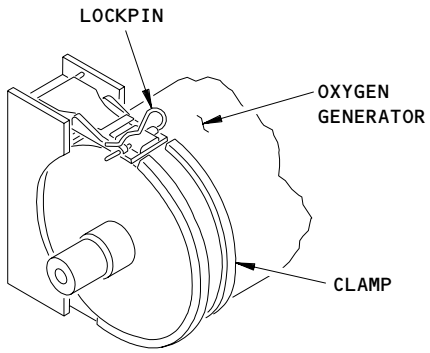
(6) Close the oxygen module door.



LAVATORY OXYGEN MODULE
(EXAMPLE)



OXYGEN MODULE
A



CLAMP
(EXAMPLE)
B

1 THE WRAPPED MASKS CAN BE POSITIONED AS SHOWN OR 180 DEGREES FROM THAT POSITION.

Lavatory Oxygen Module
Figure 201

S 862-239-001

(7) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 702-156-001

(8) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

TASK 35-21-13-002-157-001

4. Oxygen Generator Removal (Fig. 201)

A. Equipment

(1) Retraction Equipment - Firing Pin - A35001-10

(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References

(1) AMM 35-21-04/201, Oxygen Generator

C. Access

(1) Location Zones
200 Upper Half of the Fuselage

D. Procedure

S 012-158-001

(1) Do the Oxygen Module Removal procedure to get access to the oxygen generator.

S 912-200-001

(2) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 862-253-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(3) If the generator has not fired, make sure the safety pin is installed on the oxygen generator, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 212-202-001

CAUTION: EXAMINE WORK AREA FOR CLEANLINESS. IT MUST BE VISIBLY CLEAN. UNDER NO CONDITION SHOULD GREASE OR OIL COME IN CONTACT WITH THE MASKS, HOSES OR ANY OTHER COMPONENT OF THE OXYGEN SYSTEM.

(4) Put the oxygen module PSU on a suitable work area.

S 032-160-001

(5) If the oxygen generator has not fired, remove the release pin from the generator.

S 032-162-001

(6) If installed, remove the clamp from the hose which is connected to the oxygen generator with the Oetiker crimping tool or equivalent tool.
(a) Discard the clamp.

S 032-163-001

(7) Disconnect the hose from the oxygen generator manifold.

S 022-164-001

(8) Remove the lock pins from the clamps.

S 022-165-001

(9) Release the clamps.

S 022-166-001

(10) Remove the oxygen generator.

S 022-167-001

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 FIRE THE GENERATORS AND MAKE SURE THE OXIDIZER CORE HAS ACTIVATED. THIS MUST BE DONE BEFORE YOU PREPARE THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT FIRED, THEY CAN ACCIDENTALLY FIRE DURING TRANSPORT AND CAUSE HEAT AND IGNITION. THIS CAN CAUSE DEATH OR INJURY TO PERSONS AND DAMAGE TO THE AIRCRAFT.

(11) Obey all approved procedures and regulations for the transport and disposal of oxygen generators.

TASK 35-21-13-402-168-001

5. Oxygen Generator Installation (Fig. 201)

A. Equipment

(1) Retraction Equipment - Firing Pin - A35001-10

(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References

(1) AMM 35-21-04/201, Oxygen Generator

C. Access

(1) Location Zones
200 Upper Half of the Fuselage

D. Procedure

S 912-204-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 492-247-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(2) Make sure the safety pin is installed on the oxygen generator, if the safety pin is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 212-170-001

(3) Make sure the oxygen generator did not fire as follows:

(a) Look at the temperature sensitive tape on the oxygen generator.

1) If the tape is black, the oxygen generator has fired.

NOTE: Do not install this generator.

(b) Look at the position of the firing pin.

1) If you cannot see the firing pin (the release pin cannot be installed), it is in the fired position.

NOTE: The oxygen generator has fired or the firing mechanism is bad. Do not install this generator.

S 422-171-001

(4) Put the new generator in position in the clamps and latch the generator clamps.

S 212-205-001

(5) Adjust the oxygen generator so that the generator label can be read easily.

S 432-174-001

(6) Connect the hose to the oxygen generator manifold.

S 422-173-001

(7) If applicable, slide the clamp over the hose and crimp the clamp with the Oetiker crimping tool or equivalent tool.

S 432-176-001

(8) Put the release cable through the lanyard rings.

S 422-242-001

WARNING: MAKE SURE THE RELEASE CABLE IS ROUTED THROUGH THE CENTER OF THE GUIDE BRACKET. IF THE CABLE IS NOT ROUTED CORRECTLY, IT CAN PREVENT THE FLOW OF OXYGEN.

(9) Make sure that the release cable is installed correctly through the center of the guide bracket (Fig. 201A).

S 442-182-001

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(10) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 422-203-001

(11) Do the Oxygen Module Installation procedure, if it is necessary.

TASK 35-21-13-002-183-001

6. Oxygen Mask Removal (Fig. 202)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 012-206-001

(1) Do the Oxygen Module Removal procedure to get access to the oxygen generator.

S 912-207-001

(2) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 042-185-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

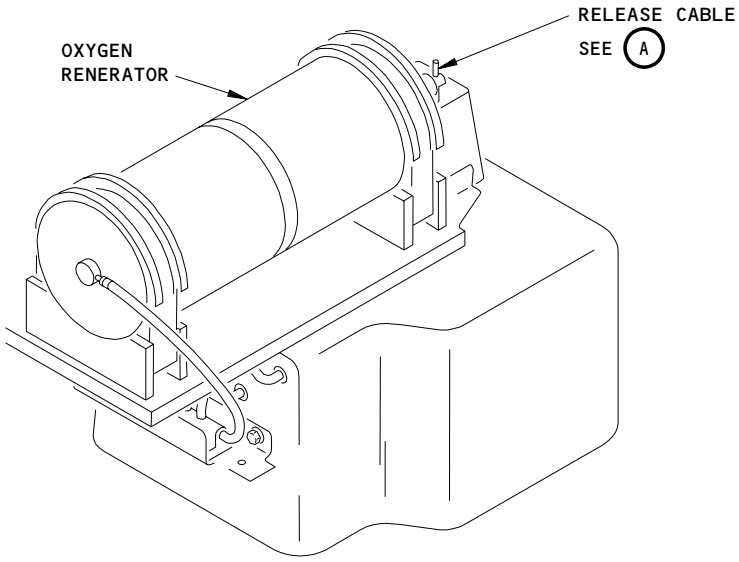
(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 012-187-001

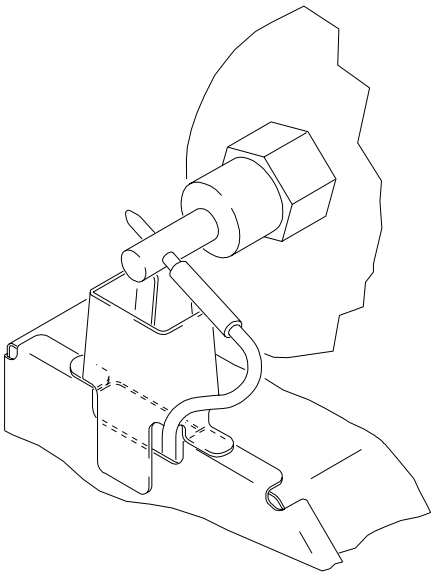
(4) Remove lanyards from the release cable.

S 022-189-001

(5) Disconnect the mask hoses from the oxygen generator manifold.

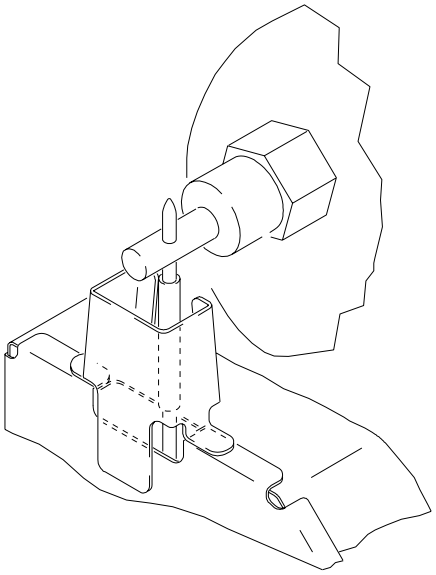


OXYGEN GENERATOR
(EXAMPLE)



RELEASE CABLE
(INCORRECT INSTALLATION)

(A)



RELEASE CABLE
(CORRECT INSTALLATION)

(A)

Release Cable Routing and Release Pin Installation
Figure 201A

S 022-190-001
(6) Carefully pull the ends of the mask hoses through the grommets on the oxygen module.

S 022-191-001
(7) Remove the oxygen masks.

NOTE: To clean and keep all oxygen systems components that are supplied by vendor, refer to applicable vendor instructions (Vendor CMM).

TASK 35-21-13-402-192-001

7. Oxygen Mask Installation (Fig. 202)

A. References
(1) AMM 35-21-04/201, Oxygen Generator

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

C. Procedure

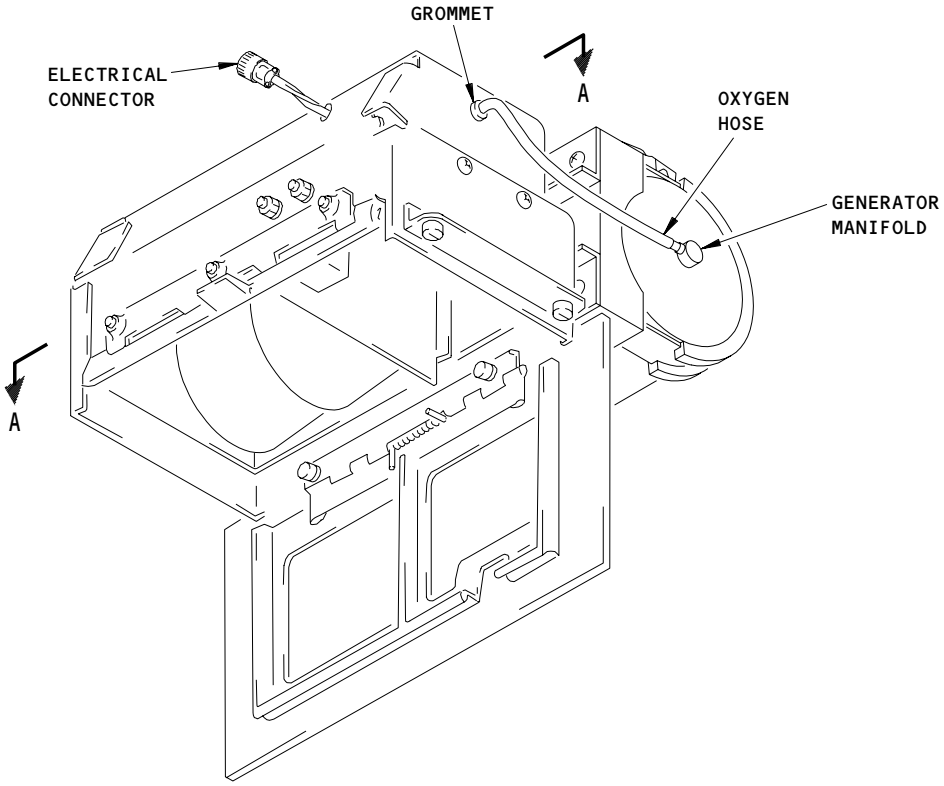
S 912-260-001
(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 492-249-001

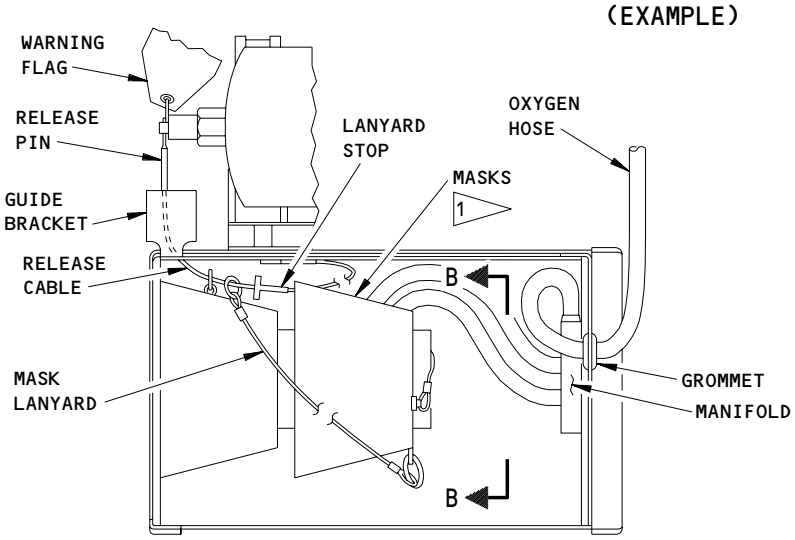
WARNING: MAKE SURE THAT THE OXYGEN MASK EQUIPMENT IS INSTALLED CLEAR OF OBSTRUCTIONS BEFORE THE DOOR IS CLOSED. THE OXYGEN MASKS MUST FALL FREELY DURING DEPLOYMENT. FAILURE TO DO SO COULD PREVENT THE FULL DEPLOYMENT OF THE OXYGEN MASK IN AN EMERGENCY.

(2) Make sure the safety pin is installed on the oxygen generator, if the safety pin is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

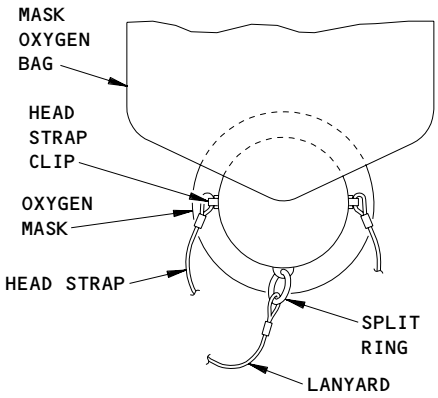
S 412-193-001
(3) Carefully push the ends of the mask hoses through the grommets on the oxygen module.



LAVATORY OXYGEN MODULE
(EXAMPLE)



A–A



B–B

1 THE WRAPPED MASKS CAN BE POSITIONED AS SHOWN OR 180 DEGREES FROM THAT POSITION.

Oxygen Mask Installation
Figure 202

S 422-194-001

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

S 412-195-001

WARNING: MAKE SURE THE RELEASE CABLE IS ROUTED THROUGH THE CENTER OF THE BRACKET. IF THE CABLE IS NOT ROUTED CORRECTLY, IT CAN PREVENT THE FLOW OF OXYGEN.

(5) Push the release cable through all of the lanyard rings.

NOTE: Make sure all of the masks are attached to the release cable by a lanyard.

S 532-210-001

(6) Make sure to do the Oxygen Mask Repacking procedure before the oxygen module installation.

S 442-212-001

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(7) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

TASK 35-21-13-532-128-001

8. Oxygen Mask Repacking (Fig. 203)

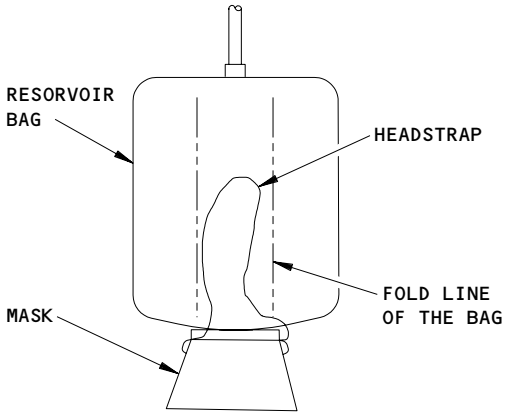
A. References

(1) AMM 35-21-04/201, Oxygen Generator

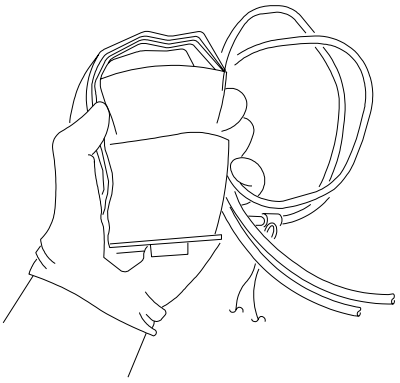
B. Access

(1) Location Zones

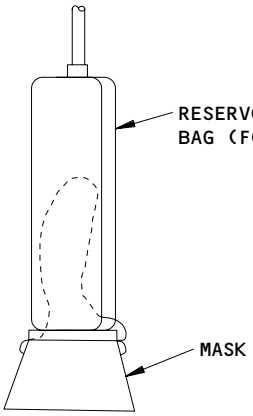
200 Upper Half of the Fuselage



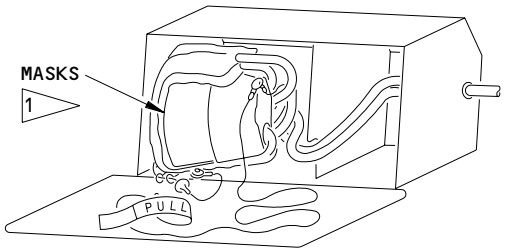
STEP 1



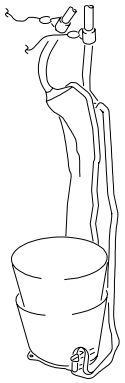
STEP 4



STEP 2



STEP 5



STEP 3

1 THE WRAPPED MASKS CAN BE POSITIONED AS SHOWN OR 180 DEGREES FROM THAT POSITION.

Passenger Oxygen Mask Repacking Procedure
Figure 203

C. Procedure

S 912-213-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 492-251-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(2) Make sure the safety pin is installed on the oxygen generator, if the safety pin is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 862-215-001

(3) Examine the door latch actuator. If it was tripped, push the latch reset striker until the actuator plunger engages.

S 212-216-001

(4) Examine the mask assembly for nicks, cuts, abrasions and chemical or heat damage.
   (a) If the mask assembly is damaged, replace the mask assembly.

S 212-217-001

(5) Make sure that a lanyard is attached to either the mask or the hose.
   (a) If the lanyard assembly is damage or missing, replace the lanyard assembly.

S 532-220-001

(6) Do the steps that follow to repack the masks:
   (a) Make sure that the reservoir bag is flat and put the headstrap on the reservoir bag (Step 1).

      NOTE: Make sure all the lanyards and hoses are separated (not tangled).

   (b) Fold the reservoir bag in thirds, lengthwise over the headstrap (Step 2).
   (c) Nest the masks loosely one inside the other (stacked together) in the same direction, with the reservoir bags on the same side (Step 3).

(d) Wrap all the folded reservoir bags around the nested masks (Step 4).

NOTE: While you hold the wrapped masks, make a large coil of the group of hoses. The coil must fit inside the oxygen module. Neatness of hose coil is not critical.

(e) Put all the masks, reservoir bags, hose coil and lanyards attached to the release cable, in the oxygen module (Step 5).

NOTE: The masks may be packed facing either way in the length of the box but must all face the same direction, with the hoses above the masks, not on the sides. Hoses and masks should be free to fall out of the module. Hoses must be above the masks, not on the sides.

(f) Make sure that the release cable is threaded through the lanyard rings with the release pin in the oxygen generator firing pin.

(g) Put the streamer on the door so it will be free to fall out.

S 412-221-001

(7) Carefully close the oxygen module door until the latch engages.

S 442-218-001

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(8) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

TASK 35-21-13-002-222-001

9. Door Latch Actuator Removal (Fig. 204)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 862-223-001

(1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:

(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 012-237-001

(2) Do the Oxygen Module Removal procedure to get access to the door latch actuator.

S 042-224-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 012-225-001

(4) Remove the oxygen module, if it is necessary.

S 022-226-001

(5) Disconnect or cut the wires for the door latch actuator from the electrical connector.

S 022-227-001

(6) Remove the screws, washers and nuts.

S 022-228-001

(7) Remove the door latch actuator.

TASK 35-21-13-402-229-001

10. Door Latch Actuator Installation (Fig. 204)

A. References

(1) AMM 35-21-00/501, Passenger Oxygen System

(2) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

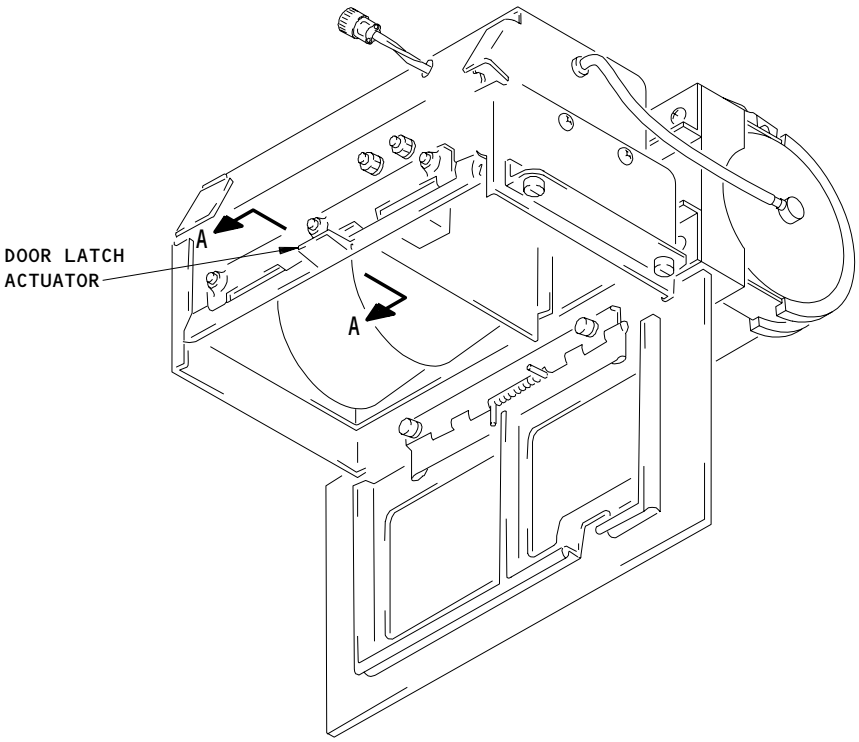
200 Upper Half of the Fuselage

C. Procedure

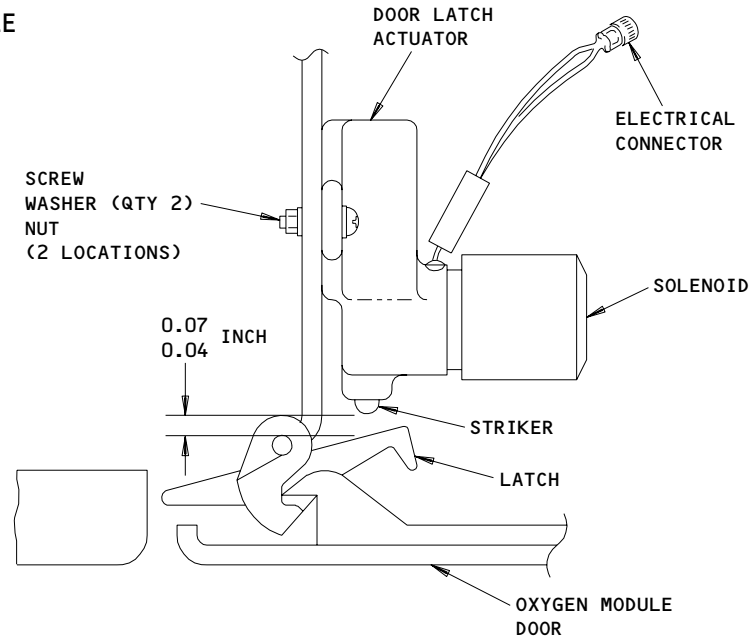
S 492-252-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(1) Make sure the safety pin is installed in the oxygen generator, if it is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).



OXYGEN MODULE



DOOR LATCH ACTUATOR
A-A

Door Latch Actuator Installation
Figure 204

S 422-231-001
(2) Hold the door latch actuator in position and install the screws, washers and nuts.

S 422-232-001
(3) Connect the wires from the door latch actuator to the electrical connector.

S 412-233-001
(4) Install the oxygen module, if it was removed.

S 442-234-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(5) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 862-235-001
(6) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 722-236-001
(7) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

LAVATORY OXYGEN MODULE - MAINTENANCE PRACTICES

TASK 35-21-13-802-001-002

1. Lavatory Oxygen Module
   A. General
      (1) This configuration not used.

OUTBOARD PASSENGER OXYGEN MODULE - MAINTENANCE PRACTICES

1. General
   A. This procedure has these tasks:
      (1) Oxygen Module Removal
      (2) Oxygen Module Installation
      (3) Oxygen Generator Removal
      (4) Oxygen Generator Installation
      (5) Oxygen Mask Removal
      (6) Oxygen Mask Installation
      (7) Oxygen Mask Repacking
      (8) Door Latch Actuator Removal
      (9) Door Latch Actuator Installation
   B. This section uses configurations to identify the difference between CLASSIC INTERIOR and SIGNATURE INTERIOR oxygen modules:
      (1) CONFIG 1 - CLASSIC INTERIOR
      (2) CONFIG 2 - SIGNATURE INTERIOR
   C. An operator will only receive a complete procedure for the applicable configuration(s) in their fleet. If a configuration is not applicable to an operator's fleet, that procedure will be limited to one page with the statement CONFIGURATION NOT USED.

TASK 35-21-14-002-279-001

2. Oxygen Module Removal (Fig. 201)
   A. Equipment
      (1) Latch release tool - make from a 1/16 inch (2 mm) diameter rod
   B. References
      (1) AMM 35-21-04/201, Oxygen Generator
   C. Access
      (1) Location Zones
          200 Upper half of Fuselage

   D. Procedure

      S 862-295-001
      (1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
          (a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

      S 012-280-001
      (2) Open the oxygen-light PSU panel as follows:
          (a) Hold up the PSU. Put the latch release tool into one of the access holes to release one of the two the latches.
          (b) Continue to hold the PSU. Put the latch release tool into the other access hole to release the second latch.
          (c) Carefully lower the PSU.

S 492-281-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 032-282-001

(4) Disconnect the electrical connector(s).

S 022-283-001

(5) Turn the 1/4-turn fasteners to the released position.

S 022-284-001

(6) Remove the oxygen module.

(a) If the oxygen module is to be shipped, do the Oxygen Generator Removal procedure.

TASK 35-21-14-402-285-001

3. Oxygen Module Installation (Fig. 201)

A. References

(1) AMM 35-21-00/501, Passenger Oxygen System

B. Access

(1) Location Zones

200 Upper Half of Fuselage

C. Procedure

S 912-317-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 212-286-001

(2) Make sure the oxygen module door on the PSU is closed.

S 422-287-001

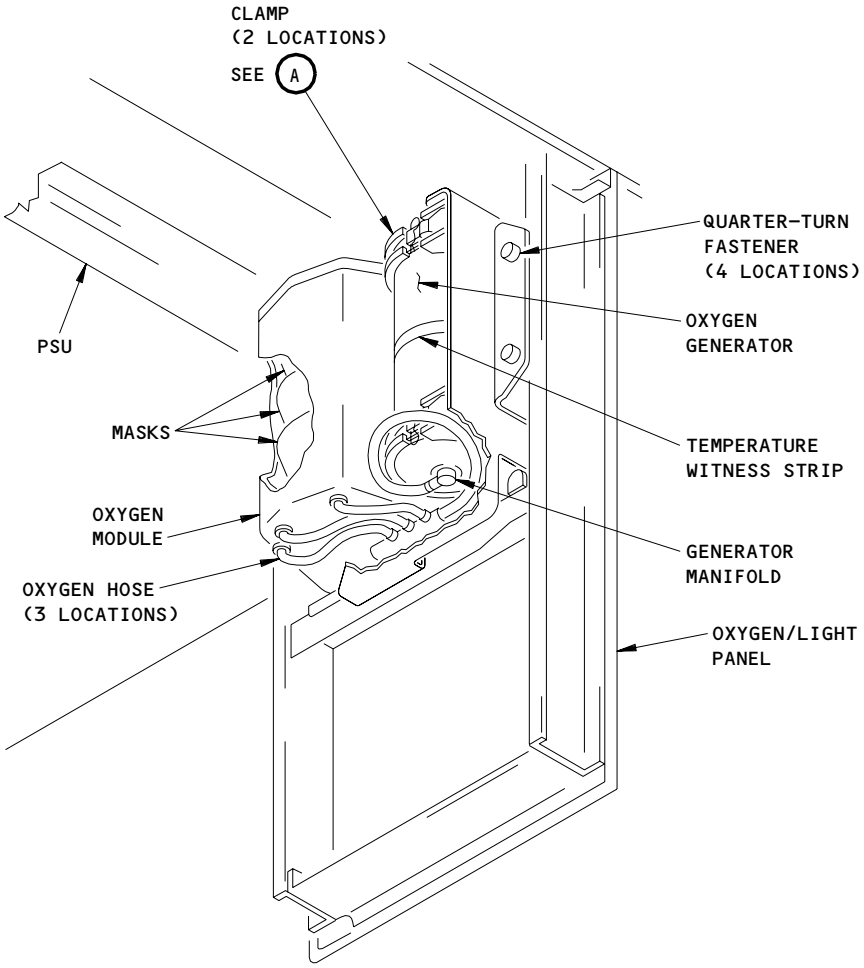
(3) Hold the masks in the oxygen module and put the oxygen module in its position on the oxygen-light PSU panel.

S 422-288-001

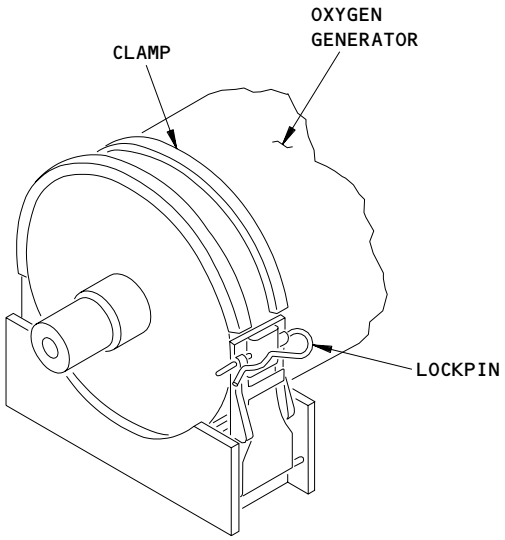
(4) Turn the 1/4-turn fasteners.

S 432-289-001

(5) Connect the electrical connector(s).



OUTBOARD OXYGEN MODULE
(EXAMPLE)



CLAMP
(EXAMPLE)
A

Outboard Oxygen Module
Figure 201

S 442-291-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(6) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

SAS
SAS S 412-293-001
SAS (7) Open the latches and close the oxygen-light PSU panel, make sure the
SAS two latches engage.

S 862-297-001
(8) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 702-294-001
(9) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

TASK 35-21-14-002-200-001

4. Oxygen Generator Removal (Fig. 201)

A. Equipment
(1) Latch release tool - make from a 1/16 inch (2 mm) diameter rod
(2) Retraction Equipment - Firing Pin - C35003-1 (Active)
Retraction Equipment - Firing Pin - A35001-10 (Replaced)
(3) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References
(1) AMM 35-21-04/201, Oxygen Generator

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

D. Procedure

S 012-296-001
(1) Open the oxygen-light PSU panel as follows:
(a) Hold up the PSU. Put the latch release tool into one of the access holes to release one of the two the latches.
(b) Continue to hold the PSU. Put the latch release tool into the other access hole to release the second latch.
(c) Carefully lower the PSU.

S 042-202-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(2) If the generator has not fired, make sure you do the Oxygen Generator - Deactivation procedure before you remove the release pin (AMM 35-21-04/201).
   (a) Remove the release pin from the oxygen generator.

S 032-203-001
(3) Remove the oxygen module, if it is necessary.

S 912-204-001
(4) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 032-205-001
(5) Remove the clamp from the hose which is connected to the oxygen generator with the Oetiker crimping tool or equivalent tool.
   (a) Discard the clamp.

S 032-206-001
(6) Disconnect the hose from the oxygen generator manifold.

S 022-207-001
(7) Remove the lock pins from the clamps.

S 022-208-001
(8) Release the clamps.

S 022-209-001
(9) Remove the oxygen generator.

S 022-210-001

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 FIRE THE GENERATORS AND MAKE SURE THE OXIDIZER CORE HAS ACTIVATED. THIS MUST BE DONE BEFORE YOU PREPARE THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT FIRED, THEY CAN ACCIDENTALLY FIRE DURING TRANSPORT AND CAUSE HEAT AND IGNITION. THIS CAN CAUSE DEATH OR INJURY TO PERSONS AND DAMAGE TO THE AIRCRAFT.

(10) Obey all approved procedures and regulations for the transport and disposal of oxygen generators.

TASK 35-21-14-402-211-001

5. Oxygen Generator Installation (Fig. 201)

A. Equipment

(1) Retraction Equipment - Firing Pin - C35003-1 (Active)
Retraction Equipment - Firing Pin - A35001-10 (Replaced)

(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References

(1) AMM 35-21-04/201, Oxygen Generator

C. Access

(1) Location Zones
200 Upper Half of the Fuselage

D. Procedure

S 912-299-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 492-307-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(2) Make sure the safety pin is installed on the oxygen generator, if the safety pin is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 212-213-001

(3) Make sure the oxygen generator did not fire as follows:

(a) Look at the temperature sensitive tape on the oxygen generator.

1) If the tape is black, the oxygen generator has fired.

NOTE: Do not install this generator.

(b) Look at the position of the firing pin.

1) If you cannot see the firing pin (the release pin cannot be installed), it is in the fired position.

NOTE: The oxygen generator has fired or the firing mechanism is bad. Do not install this generator.

S 422-214-001

(4) Put the new generator in position in the clamps and latch the generator clamps.

S 212-300-001

(5) Adjust the oxygen generator so that the generator label can be read easily.

S 432-217-001

(6) Connect the hose to the oxygen generator manifold.

S 432-218-001

(7) If applicable, slide the clamp over the hose and crimp the clamp with the Oetiker crimping tool or equivalent tool.

S 432-324-001

WARNING: MAKE SURE THE RELEASE CABLE IS CAPABLE OF FREE TRAVEL. THE RELEASE CABLE MUST PULL THE RELEASE PIN WHEN THE MASKS ARE PULLED AFTER DEPLOYMENT. INCORRECT ROUTING OF THE RELEASE CABLE CAN CAUSE A FAILURE IN THE OXYGEN DISTRIBUTION SYSTEM. THIS CAN CAUSE INJURY TO PASSENGERS.

(8) Put the release cable through the lanyard rings.

NOTE: Make sure all of the masks are attached to the release cable.

S 442-225-001

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(9) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

TASK 35-21-14-002-226-001

6. Oxygen Mask Removal (Fig. 202)

A. Equipment

(1) Latch release tool - make from a 1/16 inch (2 mm) diameter rod

B. References

(1) AMM 35-21-04/201, Oxygen Generator

C. Access

(1) Location Zones

200 Upper Half of the Fuselage

D. Procedure

S 912-318-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 012-227-001

(2) Open the oxygen-light PSU panel as follows:

(a) Hold up the PSU. Put the latch release rod into one of the access holes to release one of the two the latches.

(b) Continue to hold the PSU. Put the latch release rod into the other access hole to release the second latch.

(c) Carefully lower the PSU.

S 042-228-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 012-230-001

(4) Remove lanyards from the release cable.

S 012-231-001

(5) Remove the oxygen module from the PSU (optional).

S 022-232-001
(6) Disconnect the mask hoses from the generator manifold.

S 022-233-001
(7) Carefully pull the ends of the mask hoses through the grommets on the oxygen module.

S 022-234-001
(8) Remove the oxygen masks.

NOTE: To clean and keep all oxygen systems components that are supplied by vendor, refer to applicable vendor instructions (Vendor CMM).

TASK 35-21-14-402-235-001

7. Oxygen Mask Installation (Fig. 202)

A. References
(1) AMM 35-21-04/201, Oxygen Generator

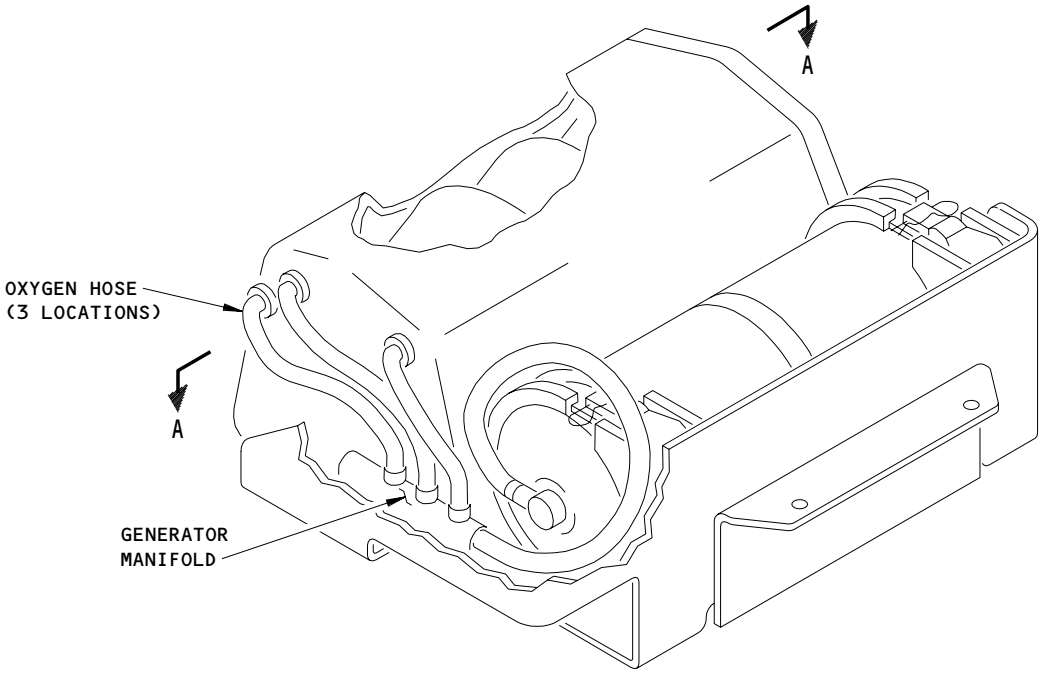
B. Access
(1) Location Zones
200 Upper Half of the Fuselage

C. Procedure

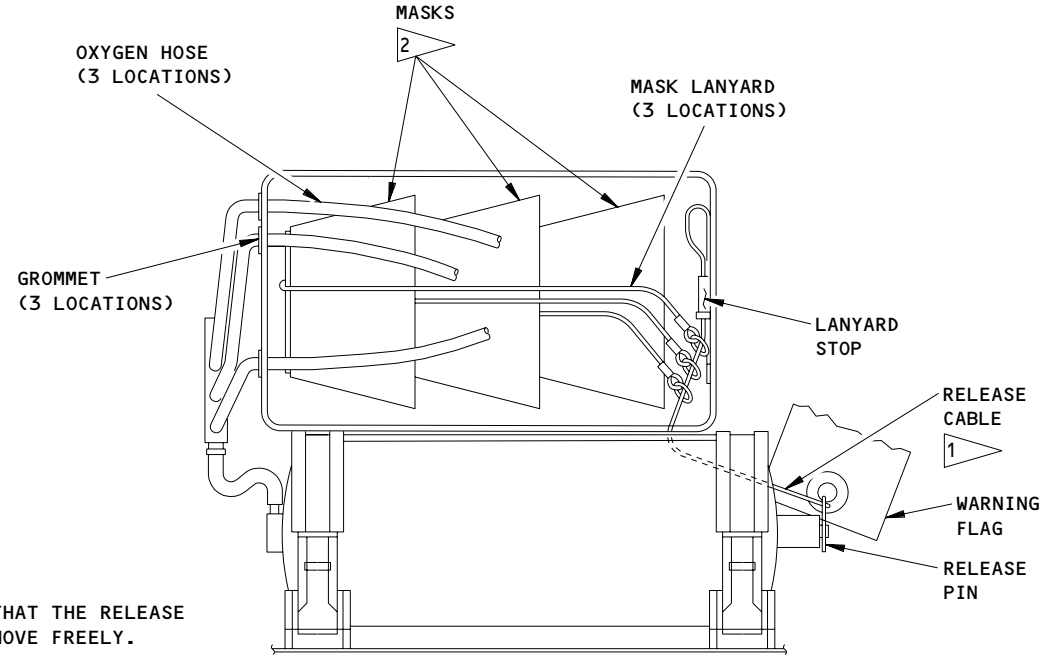
S 912-319-001
(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 412-236-001
(2) Carefully push the ends of the mask hoses through the grommets on the oxygen module.

S 422-237-001
(3) Connect the mask hoses to the generator manifold.



OUTBOARD OXYGEN MODULE
(EXAMPLE)



1 MAKE SURE THAT THE RELEASE CABLE CAN MOVE FREELY.

2 THE WRAPPED MASKS CAN BE POSITIONED AS SHOWN OR 180 DEGREES FROM THAT POSITION.

A-A

Oxygen Mask Installation
Figure 202

S 412-325-001

WARNING: MAKE SURE THE RELEASE CABLE IS CAPABLE OF FREE TRAVEL. THE RELEASE CABLE MUST PULL THE RELEASE PIN WHEN THE MASKS ARE PULLED AFTER DEPLOYMENT. INCORRECT ROUTING OF THE RELEASE CABLE CAN CAUSE A FAILURE IN THE OXYGEN DISTRIBUTION SYSTEM. THIS CAN CAUSE INJURY TO PASSENGERS.

(4) Push the release cable through all of the lanyard rings.

NOTE: Make sure all of the masks are attached to the release cable by a lanyard.

S 442-240-001

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(5) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

TASK 35-21-14-532-268-001

8. Oxygen Mask Repacking (Fig. 203)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

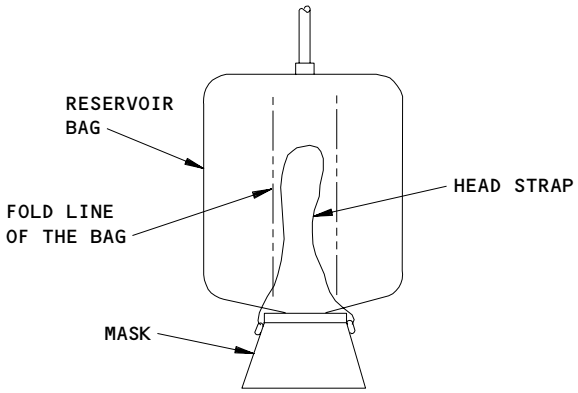
S 912-269-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

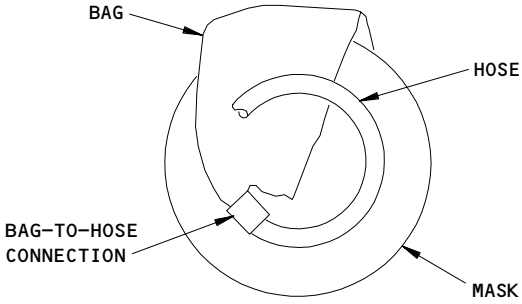
S 492-310-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

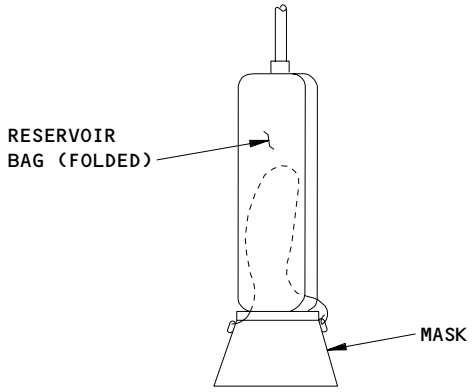
(2) Make sure the safety pin is installed on the oxygen generator, if the safety pin is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).



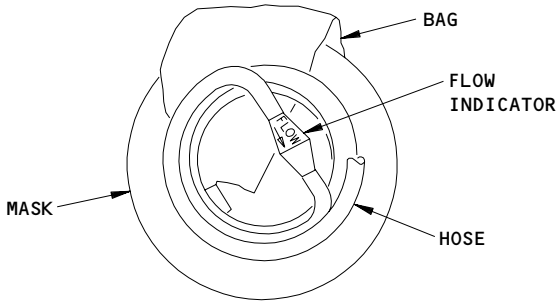
STEP 1



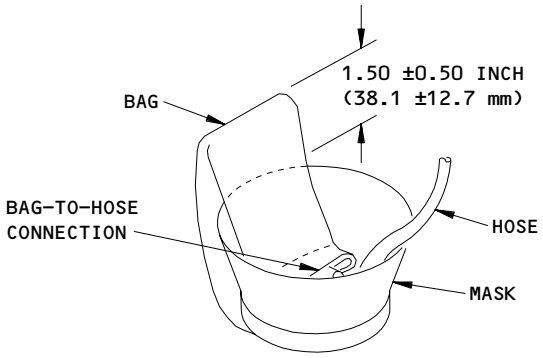
STEP 4



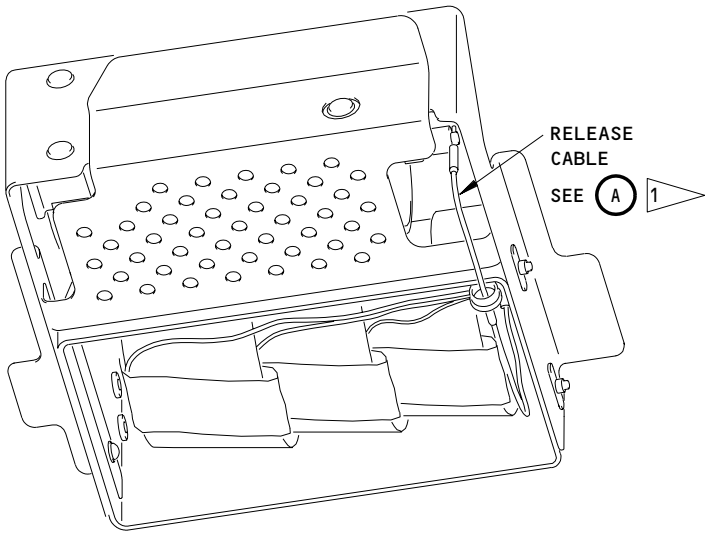
STEP 2



STEP 5



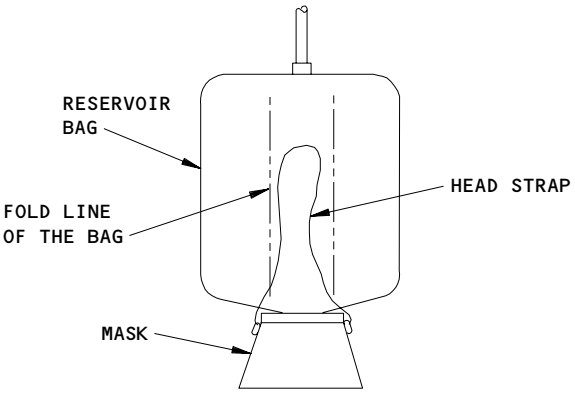
STEP 3



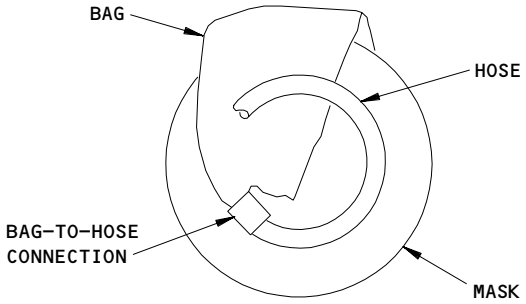
STEP 6
(EXAMPLE)

1 MAKE SURE THAT THE RELEASE CABLE CAN MOVE FREELY.

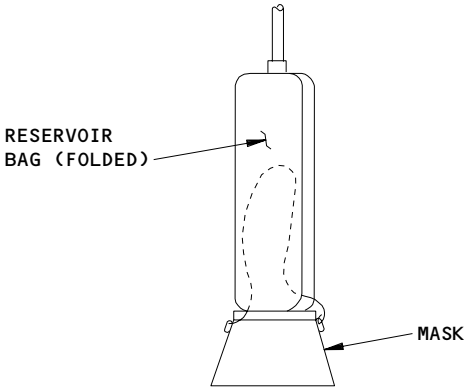
Oxygen Mask Repacking Procedure
Figure 203 (Sheet 1)



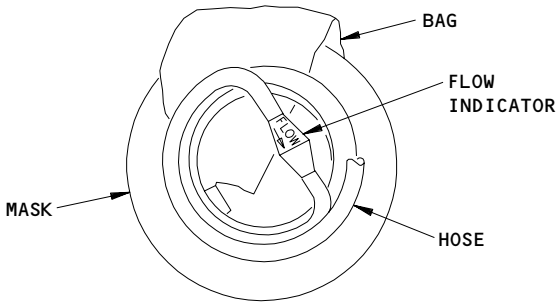
STEP 1



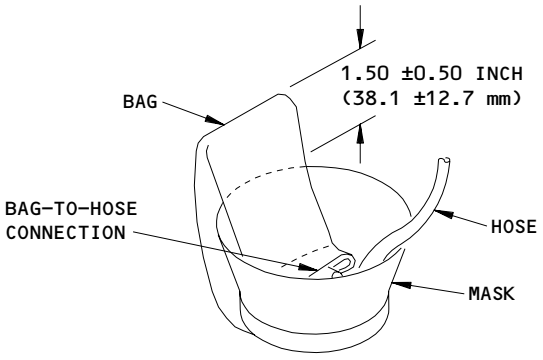
STEP 4



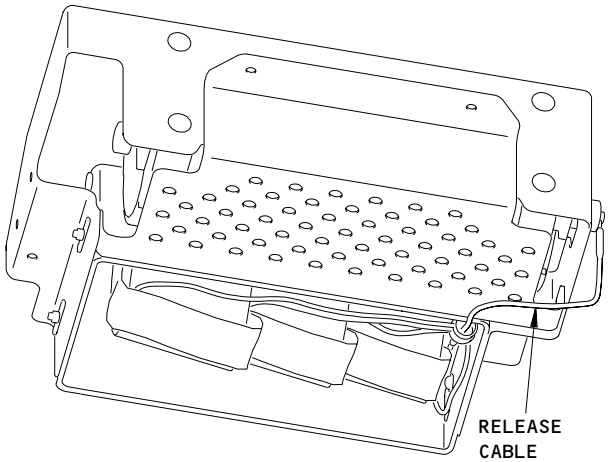
STEP 2



STEP 5



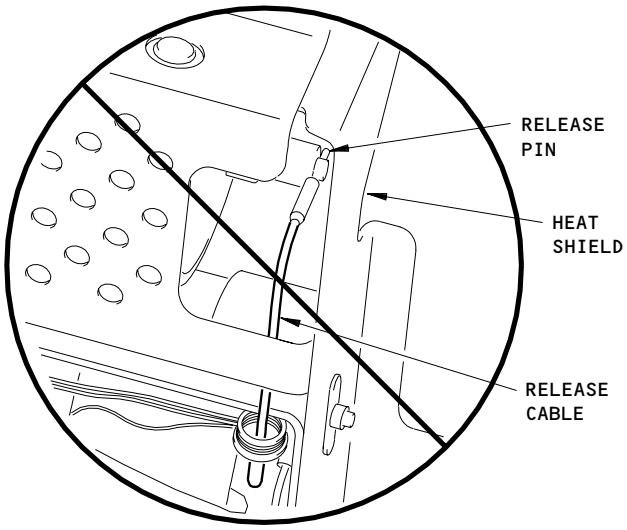
STEP 3



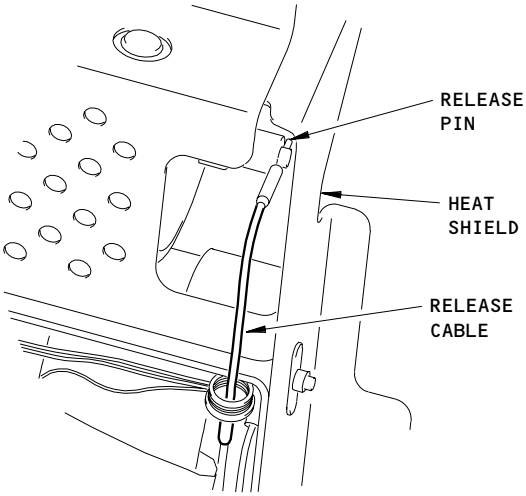
STEP 6
(EXAMPLE)

1 MAKE SURE THAT THE RELEASE CABLE CAN MOVE FREELY.

Oxygen Mask Repacking Procedure
Figure 203 (Sheet 2)

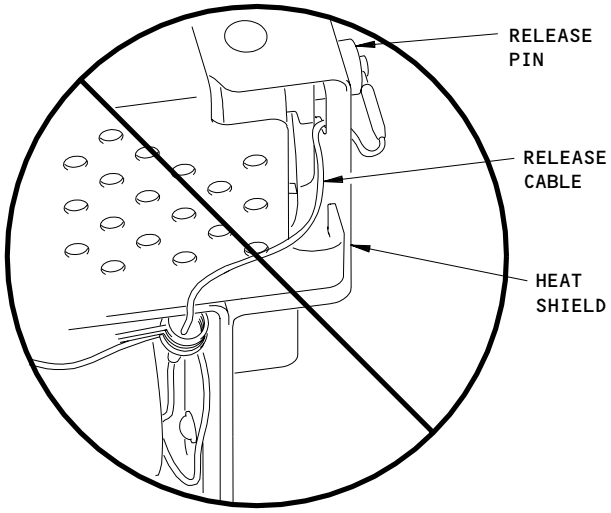


(INCORRECT ROUTING,
12 MINUTE GENERATOR)
RELEASE CABLE
A



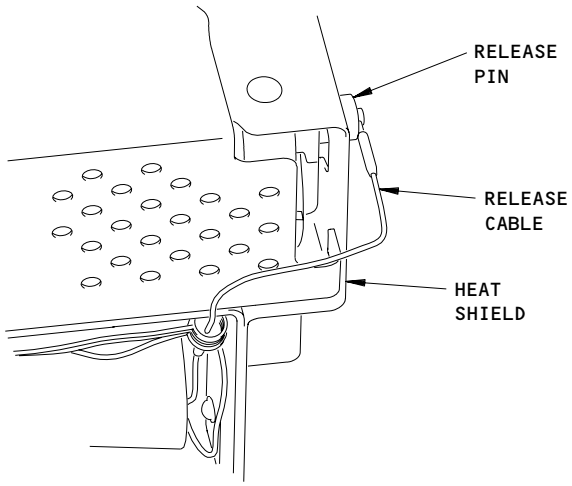
(CORRECT ROUTING,
12 MINUTE GENERATOR)
RELEASE CABLE
A

Oxygen Mask Repacking Procedure
Figure 203 (Sheet 3)



(INCORRECT ROUTING,
22 MINUTE GENERATOR)
RELEASE CABLE

B



(CORRECT ROUTING,
22 MINUTE GENERATOR)
RELEASE CABLE

B

Oxygen Mask Repacking Procedure
Figure 203 (Sheet 4)

S 862-271-001

(3) Examine the door latch actuator. If it was tripped, push the latch reset striker until the actuator plunger engages.

S 212-272-001

(4) Examine the mask assembly for nicks, cuts, abrasions and chemical or heat damage.
   (a) If the mask assembly is damaged, replace the mask assembly.

S 212-273-001

(5) Make sure that a lanyard is attached to the mask.
   (a) If the lanyard assembly is damage or missing, replace the lanyard assembly.

S 532-274-001

(6) Do the steps that follow to repack the masks:
   (a) Make sure that the reservoir bag is flat and put the headstrap on the reservoir bag (Step 1).

      NOTE: Make sure all the lanyards and hoses are separated (not tangled).

   (b) Fold the reservoir bag in thirds, lengthwise over the headstrap (Step 2).
   (c) Put the folded reservoir bag up the side of the mask and put it in the mask (Step 3).

      NOTE: Move the bag-to-hose connection to the center in the bottom of the mask, with the excess bag above the mask by 1.50 +/- 0.50 inches.

   (d) Coil the hose from the bottom of the mask in a counterclockwise direction on top of the folded reservoir bag (Step 4).

      NOTE: Allow slack between the hose coils and the mask so that the hose separates from the mask easily during mask deployment.

(e) Put the flow indicator in position and reserve enough hose length to reach the oxygen generator manifold, if it is not connected to the oxygen generator manifold (Step 5).

(f) Put the masks, reservoir bags, hoses and lanyards attached to the release cable, in the oxygen module (Step 6).

NOTE: The masks may be packed facing either way in the length of the box but must all face the same direction, with the hoses above the masks, not on the sides. Hoses and masks should be free to fall out of the module.

(g) Make sure that the release cable is threaded through the lanyard rings with the release pin in the oxygen generator firing pin.

S 212-323-001

WARNING: MAKE SURE THE RELEASE CABLE IS CAPABLE OF FREE TRAVEL. THE RELEASE CABLE MUST PULL THE RELEASE PIN WHEN THE MASKS ARE PULLED AFTER DEPLOYMENT. INCORRECT ROUTING OF THE RELEASE CABLE CAN CAUSE A FAILURE IN THE OXYGEN DISTRIBUTION SYSTEM. THIS CAN CAUSE INJURY TO PASSENGERS.

(7) Make sure that the oxygen generator firing pin release cable is installed correctly (Fig. 203).

S 412-275-001

(8) Carefully close the oxygen module door until the latch engages.

S 442-276-001

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(9) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

TASK 35-21-14-002-241-001

9. Door Latch Actuator Removal (Fig. 204)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 862-242-001
(1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 012-256-001
(2) Do the Oxygen Module Removal procedure to get access to the door latch actuator.

S 042-243-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 012-244-001
(4) Remove the oxygen module, if it is necessary.

S 022-245-001
(5) Disconnect or cut the wires for the door latch actuator at the electrical connector.

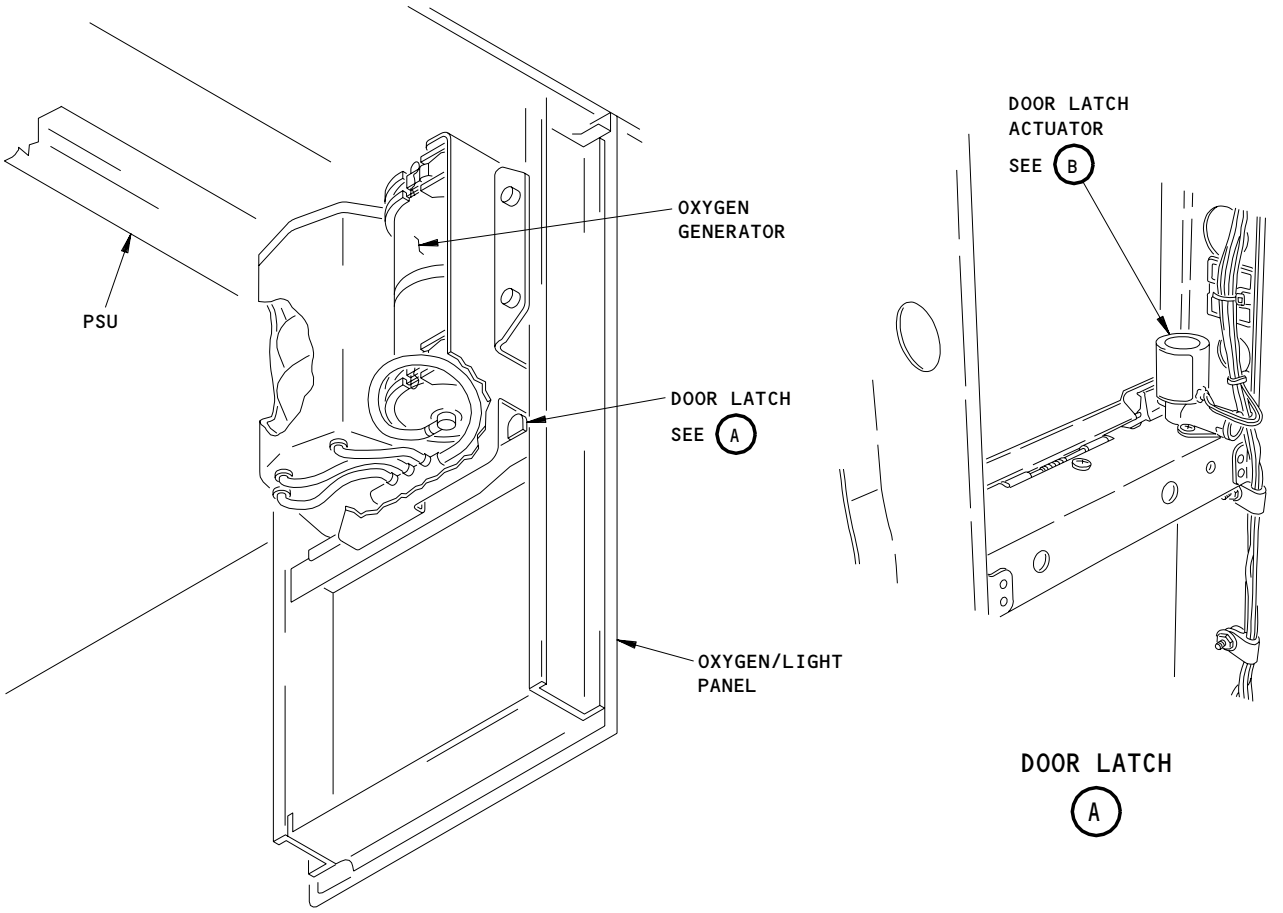
S 022-246-001
(6) Remove the screws, washers and nuts.

S 022-247-001
(7) Remove the door latch actuator.

TASK 35-21-14-402-248-001

10. Door Latch Actuator Installation (Fig. 204)
A. References
(1) AMM 35-21-00/501, Passenger Oxygen System
(2) AMM 35-21-04/201, Oxygen Generator
B. Access
(1) Location Zones
200 Upper Half of the Fuselage

C. Procedure



Door Latch Actuator Installation
Figure 204

S 492-311-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL IGNITE. IGNITED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(1) Make sure the safety pin is installed in the oxygen generator, if it is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 422-257-001

(2) Hold the door latch actuator in position and install the screws, washers and nuts.

S 422-258-001

(3) Connect the wires from the door latch actuator to the electrical connector per standard wiring practices.

S 412-259-001

(4) Install the oxygen module, if it was removed.

S 442-260-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(5) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 862-261-001

(6) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 722-262-001

(7) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

OUTBOARD PASSENGER OXYGEN MODULE - MAINTENANCE PRACTICES

TASK 35-21-14-802-001-002

1. Outboard Passenger Oxygen Module
   A. General
      (1) This configuration not used.

CENTER PASSENGER OXYGEN MODULE - MAINTENANCE PRACTICES

1. General
   A. This procedure has these tasks:
      (1) Oxygen Module Removal
      (2) Oxygen Module Installation
      (3) Oxygen Generator Removal
      (4) Oxygen Generator Installation
      (5) Oxygen Mask Removal
      (6) Oxygen Mask Installation
      (7) Oxygen Mask Repacking
      (8) Door Latch Actuator Removal
      (9) Door Latch Actuator Installation
   B. This section uses configurations to identify the difference between CLASSIC INTERIOR and SIGNATURE INTERIOR oxygen modules:
      (1) CONFIG 1 - CLASSIC INTERIOR
      (2) CONFIG 2 - SIGNATURE INTERIOR
   C. An operator will only receive a complete procedure for the applicable configuration(s) in their fleet. If a configuration is not applicable to an operator's fleet, that procedure will be limited to one page with the statement CONFIGURATION NOT USED.

TASK 35-21-15-002-086-001

2. Oxygen Module Removal (Fig. 201)
   A. Equipment
      (1) Latch release tool - make from a 1/16 inch (2 mm) diameter rod
   B. References
      (1) AMM 35-21-04/201, Oxygen Generator
   C. Access
      (1) Location Zones
          200 Upper half of Fuselage

   D. Procedure

      S 862-256-001
      (1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
          (a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

      S 012-220-001
      (2) Open the oxygen-light PSU panel as follows:
          (a) Hold up the PSU. Put the latch release tool into one of the access holes to release one of the two latches.
          (b) Continue to hold the PSU. Put the latch release tool into the other access hole to release the second latch.
          (c) Carefully lower the PSU.

S 492-095-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 032-243-001

(4) Disconnect the electrical connector(s).

S 022-094-001

(5) Turn the 1/4-turn fasteners to the released position.

S 022-096-001

(6) Remove the oxygen module.

(a) If the oxygen module is to be shipped, do the Oxygen Generator Removal procedure.

TASK 35-21-15-402-097-001

3. Oxygen Module Installation (Fig. 201)

A. References

(1) AMM 35-21-00/501, Passenger Oxygen System

B. Access

(1) Location Zones

200 Upper Half of Fuselage

C. Procedure

S 212-104-001

(1) Make sure the oxygen module door on the PSU is closed.

S 422-105-001

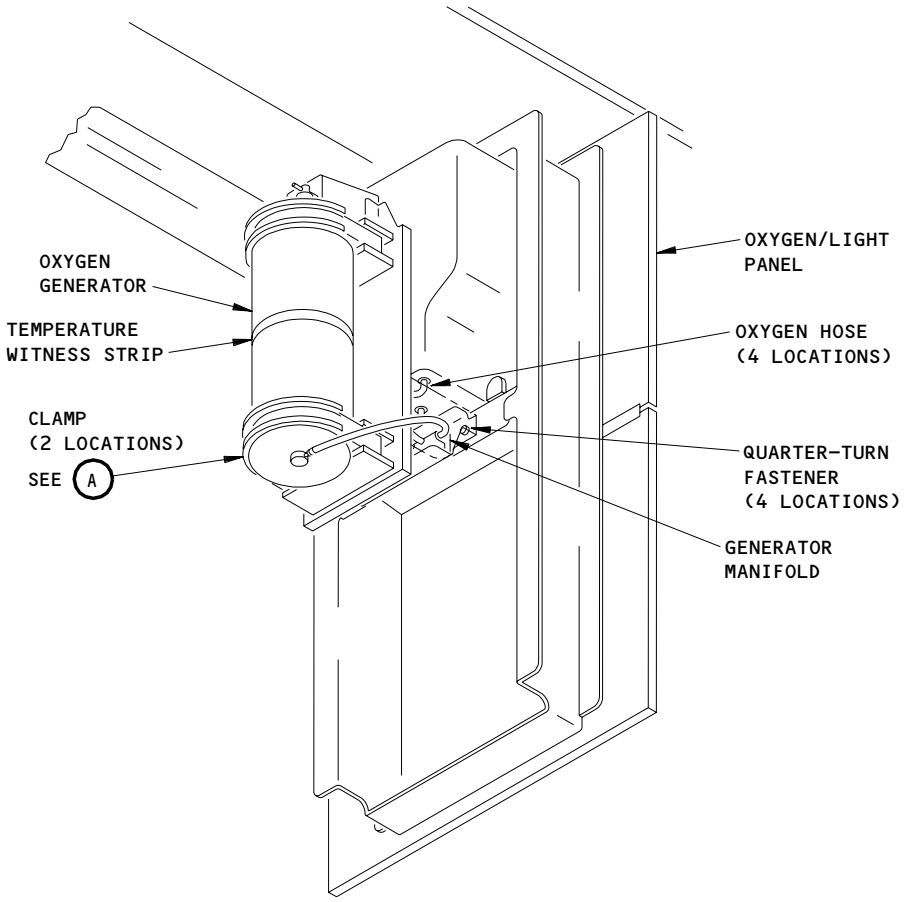
(2) Hold the masks in the oxygen module and put the oxygen module in its position on the oxygen-light PSU panel.

S 422-106-001

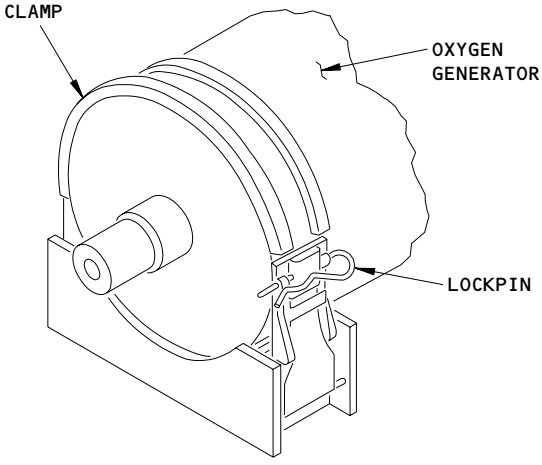
(3) Turn the 1/4-turn fasteners.

S 432-253-001

(4) Connect the electrical connector(s).



CENTER OXYGEN MODULE
(EXAMPLE)



CLAMP
(EXAMPLE)
A

Center Oxygen Module
Figure 201

S 442-244-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(5) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

SAS
SAS S 412-109-001
SAS (6) Open the latches and close the oxygen-light PSU panel, make sure the
SAS two latches engage.

S 862-257-001
(7) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 702-178-001
(8) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

TASK 35-21-15-002-179-001

4. Oxygen Generator Removal (Fig. 201)
A. Equipment
(1) Latch release tool - make from a 1/16 inch (2 mm) diameter rod
(2) Retraction Equipment - Firing Pin - C35003-1 (Active)
Retraction Equipment - Firing Pin - A35001-10 (Replaced)
(3) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References
(1) AMM 35-21-04/201, Oxygen Generator

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

D. Procedure

S 012-246-001
(1) Open the oxygen-light PSU panel as follows:
(a) Hold up the PSU. Put the latch release rod into one of the access holes to release one of the two latches.
(b) Continue to hold the PSU. Put the latch release rod into the other access hole to release the second latch.
(c) Carefully lower the PSU.

S 212-259-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(2) If the generator has not fired, make sure you do the Oxygen Generator - Deactivation procedure before you remove the release pin (AMM 35-21-04/201).
(a) Remove the release pin from the oxygen generator.

S 912-183-001
(3) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 032-184-001
(4) Remove the clamp from the hose which is connected to the oxygen generator with the Oetiker crimping tool or equivalent tool.
(a) Discard the clamp.

S 032-185-001
(5) Disconnect the hose from the oxygen generator manifold.

S 022-186-001
(6) Remove the lock pins from the clamps.

S 022-187-001
(7) Release the clamps.

S 022-188-001
(8) Remove the oxygen generator.

S 022-189-001

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 FIRE THE GENERATORS AND MAKE SURE THE OXIDIZER CORE HAS ACTIVATED. THIS MUST BE DONE BEFORE YOU PREPARE THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT FIRED, THEY CAN ACCIDENTALLY FIRE DURING TRANSPORT AND CAUSE HEAT AND IGNITION. THIS CAN CAUSE DEATH OR INJURY TO PERSONS AND DAMAGE TO THE AIRCRAFT.

(9) Obey all approved procedures and regulations for the transport and disposal of oxygen generators.

TASK 35-21-15-402-190-001

5. Oxygen Generator Installation (Fig. 201)

A. Equipment

(1) Retraction Equipment - Firing Pin - C35003-1 (Active)
Retraction Equipment - Firing Pin - A35001-1 (Replaced)

(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References

(1) AMM 35-21-04/201, Oxygen Generator

C. Access

(1) Location Zones
200 Upper Half of the Fuselage

D. Procedure

S 912-254-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 212-266-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(2) Make sure the safety pin is installed on the oxygen generator, if the safety pin is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 212-192-001

(3) Make sure the oxygen generator did not fire as follows:

(a) Look at the temperature sensitive tape on the oxygen generator.

1) If the tape is black, the oxygen generator has fired.

NOTE: Do not install this generator.

(b) Look at the position of the firing pin.

1) If you cannot see the firing pin (the release pin cannot be installed), it is in the fired position.

NOTE: The oxygen generator has fired or the firing mechanism is bad. Do not install this generator.

S 422-193-001

(4) Put the new generator in position in the clamps and latch the generator clamps.

S 212-255-001

(5) Adjust the oxygen generator so that the generator label can be read easily.

S 432-196-001

(6) Connect the hose to the oxygen generator manifold.

S 432-197-001

(7) If applicable, slide the clamp over the hose and crimp the clamp with the Oetiker crimping tool or equivalent tool.

S 432-198-001

(8) Put the release cable through the lanyard rings.

S 422-283-001

WARNING: MAKE SURE THE RELEASE CABLE ROUTING IS THROUGH THE CENTER OF THE BRACKET. IF THE RELEASE CABLE ROUTING IS NOT CORRECT, IT CAN PREVENT THE FLOW OF OXYGEN.

(9) Make sure that the release cable is installed correctly through the center of the guide bracket (Fig. 201A).

S 442-204-001

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(10) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

TASK 35-21-15-002-205-001

6. Oxygen Mask Removal (Fig. 202)

A. Equipment

(1) Latch release tool - make from a 1/16 inch (2 mm) diameter rod

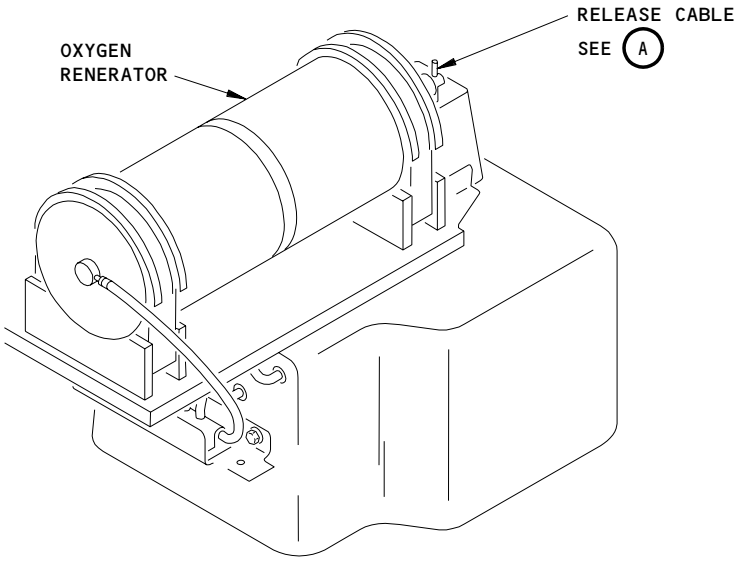
B. References

(1) AMM 35-21-04/201, Oxygen Generator

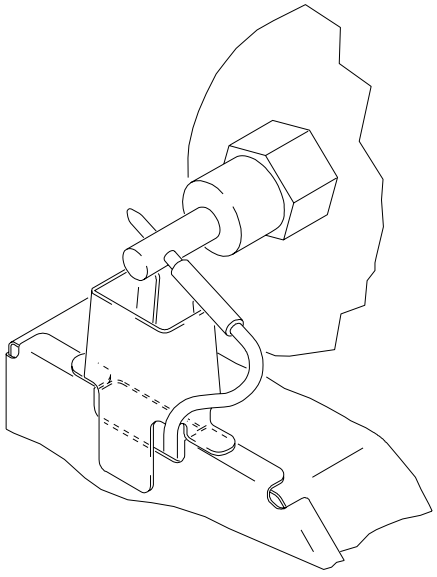
C. Access

(1) Location Zones

200 Upper Half of the Fuselage

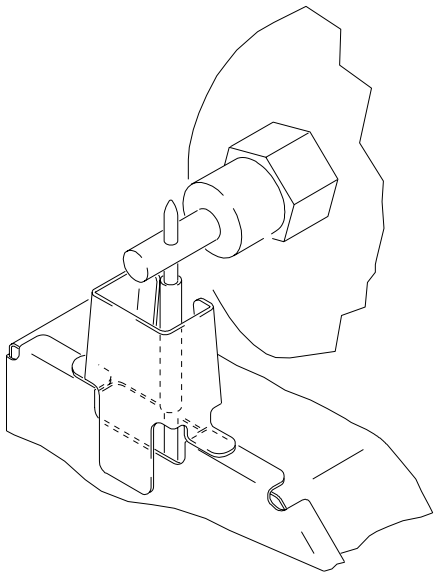


OXYGEN GENERATOR
(EXAMPLE)



RELEASE CABLE
(INCORRECT INSTALLATION)

(A)



RELEASE CABLE
(CORRECT INSTALLATION)

(A)

Release Cable Routing and Release Pin Installation
Figure 201A

D. Procedure

S 012-206-001

(1) Open the oxygen-light PSU panel as follows:
   (a) Hold up the PSU. Put the latch release rod into one of the access holes to release one of the two latches.
   (b) Continue to hold the PSU. Put the latch release rod into the other access hole to release the second latch.
   (c) Carefully lower the PSU.

S 042-207-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(2) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 012-209-001

(3) Remove lanyards from the release cable.

S 012-210-001

(4) Remove the oxygen module from the PSU (optional).

S 022-211-001

(5) Disconnect the mask hoses from the generator manifold.

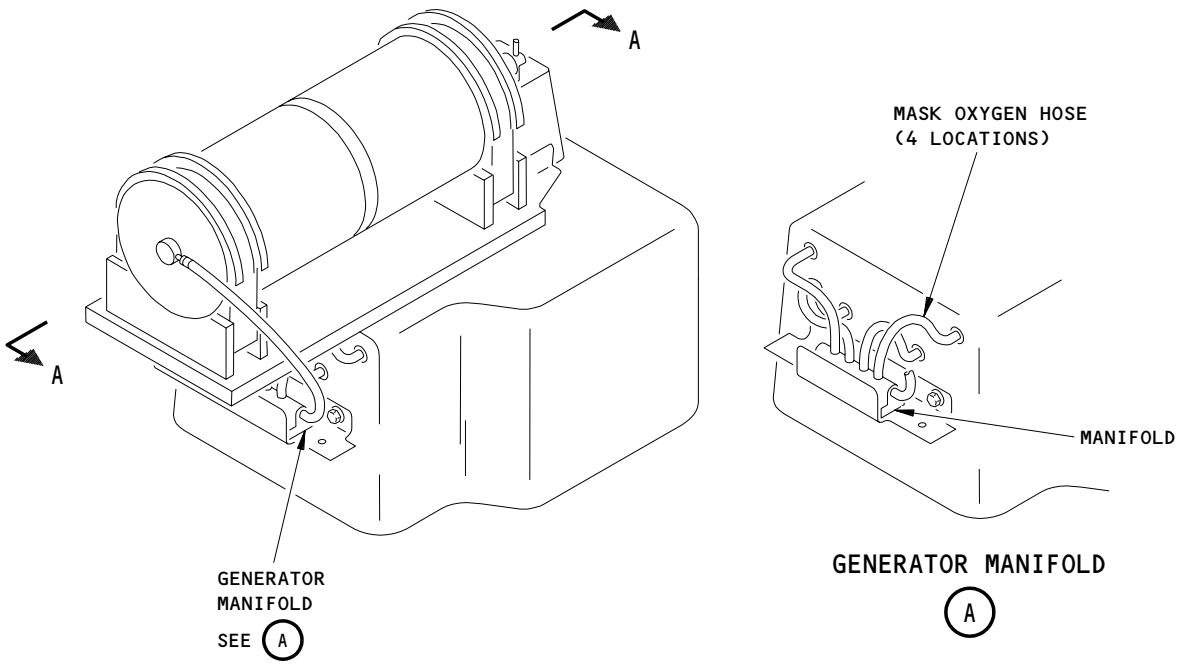
S 022-212-001

(6) Carefully pull the ends of the mask hoses through the grommets on the oxygen module.

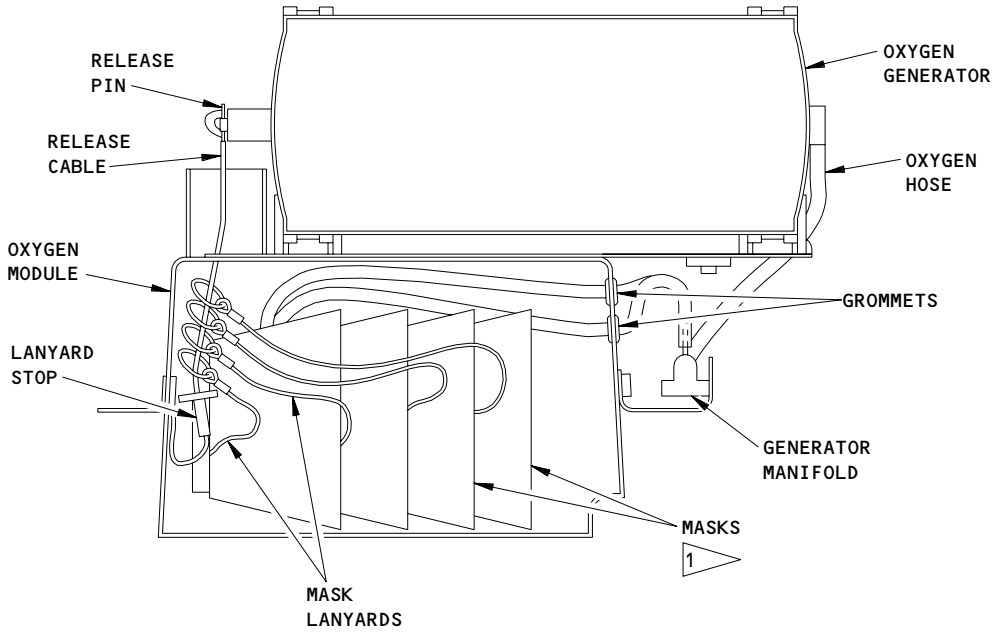
S 022-213-001

(7) Remove the oxygen masks.

NOTE: To clean and keep all oxygen systems components that are supplied by vendor, refer to applicable vendor instructions (Vendor CMM).



OXYGEN MODULE
(EXAMPLE)



A–A

1 THE WRAPPED MASKS CAN BE POSITIONED AS SHOWN OR 180 DEGREES FROM THAT POSITION.

Oxygen Mask Installation
Figure 202

TASK 35-21-15-402-214-001

7. Oxygen Mask Installation (Fig. 202)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 912-282-001

(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 412-215-001

(2) Carefully push the ends of the mask hoses through the grommets on the oxygen module.

NOTE: If the airplane 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 422-216-001

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

S 422-261-001

WARNING: MAKE SURE THE RELEASE CABLE ROUTING IS THROUGH THE CENTER OF THE BRACKET. IF THE RELEASE CABLE ROUTING IS NOT CORRECT, IT CAN PREVENT THE FLOW OF OXYGEN.

(4) Push the release cable through all of the lanyard rings.

NOTE: Make sure all of the masks are attached to the release cable by a lanyard.

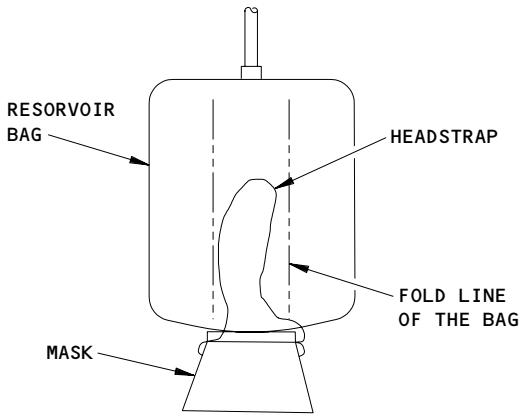
S 442-219-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

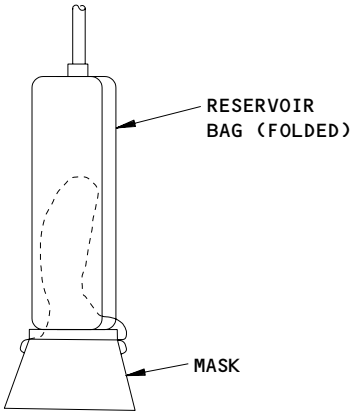
(5) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

TASK 35-21-15-532-150-001

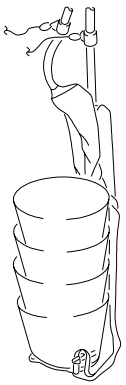
8. Oxygen Mask Repacking (Fig. 203)



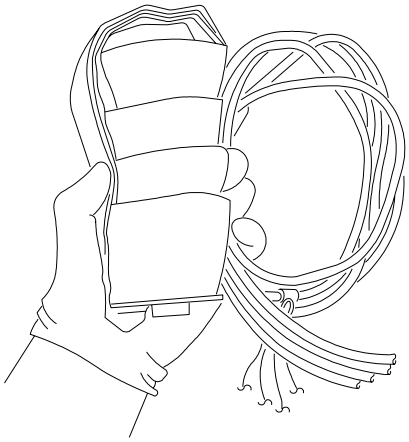
STEP 1



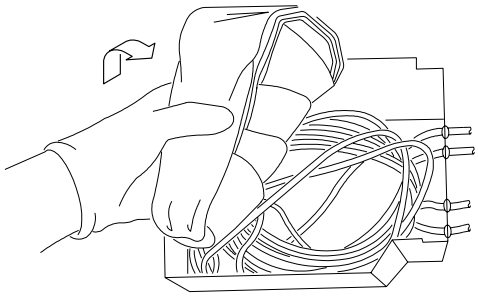
STEP 2



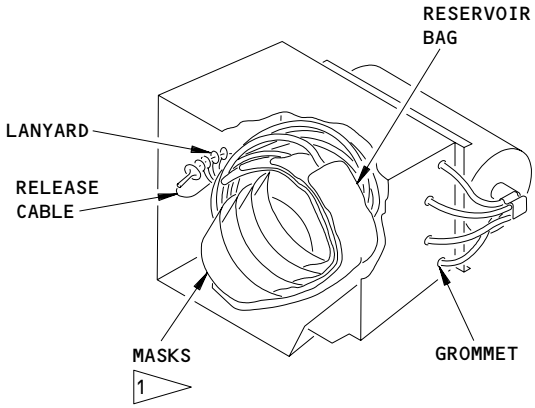
STEP 3



STEP 4



STEP 5



STEP 6

1 THE WRAPPED MASKS CAN BE POSITIONED AS SHOWN OR 180 DEGREES FROM THAT POSITION.

Oxygen Mask Repacking Procedure
Figure 203

A. References
(1) AMM 35-21-04/201, Oxygen Generator
B. Access
(1) Location Zones
200 Upper Half of the Fuselage

C. Procedure

S 912-221-001
(1) Put on clean, nylon gloves that are lint-free prior to oxygen system maintenance.

S 212-269-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL ACTIVATE. ACTIVATED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(2) Make sure the safety pin is installed on the oxygen generator, if the safety pin is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 862-223-001
(3) Examine the door latch actuator. If it was tripped, push the latch reset striker until the actuator plunger engages.

S 212-224-001
(4) Examine the mask assembly for nicks, cuts, abrasions and chemical or heat damage.
(a) If the mask assembly is damaged, replace the mask assembly.

S 212-225-001
(5) Make sure that a lanyard is attached to either the mask or the hose.
(a) If the lanyard assembly is damage or missing, replace the lanyard assembly.

S 532-226-001
(6) Do the steps that follow to repack the masks:
(a) Make sure that the reservoir bag is flat and put the headstrap on the reservoir bag (Step 1).

NOTE: Make sure all the lanyards and hoses are separated (not tangled).

(b) Fold the reservoir bag in thirds, lengthwise over the headstrap (Step 2).

(c) Nest the masks loosely one inside the other (stacked together) in the same direction, with the reservoir bags on the same side (Step 3).

(d) Wrap all the folded reservoir bags around the nested masks (Step 4).

NOTE: While you hold the wrapped masks, make a large coil of the group of hoses. The coil must fit inside the oxygen module. Neatness of hose coil is not critical.

(e) Put all the masks, reservoir bags, hose coil and lanyards attached to the release cable, in the oxygen module (Step 5).

NOTE: The masks may be packed facing either way in the length of the box but must all face the same direction, with the hoses above the masks, not on the sides. Hoses and masks should be free to fall out of the module.

(f) Make sure that the release cable is threaded through the lanyard rings with the release pin in the oxygen generator firing pin (Step 6).

WARNING: MAKE SURE THE RELEASE CABLE ROUTING IS THROUGH THE CENTER OF THE BRACKET. IF THE RELEASE CABLE ROUTING IS NOT CORRECT, IT CAN PREVENT THE FLOW OF OXYGEN.

(g) Make sure the release cable is properly routed through the center of the guide bracket.

S 412-227-001

(7) Carefully close the oxygen module door until the latch engages.

S 442-228-001

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(8) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

TASK 35-21-15-002-230-001

9. Door Latch Actuator Removal (Fig. 204)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 862-232-001
(1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 012-252-001
(2) Do the Oxygen Module Removal procedure to get access to the door latch actuator.

S 042-251-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE INJURY.

(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 012-233-001
(4) Remove the oxygen module, if it is necessary.

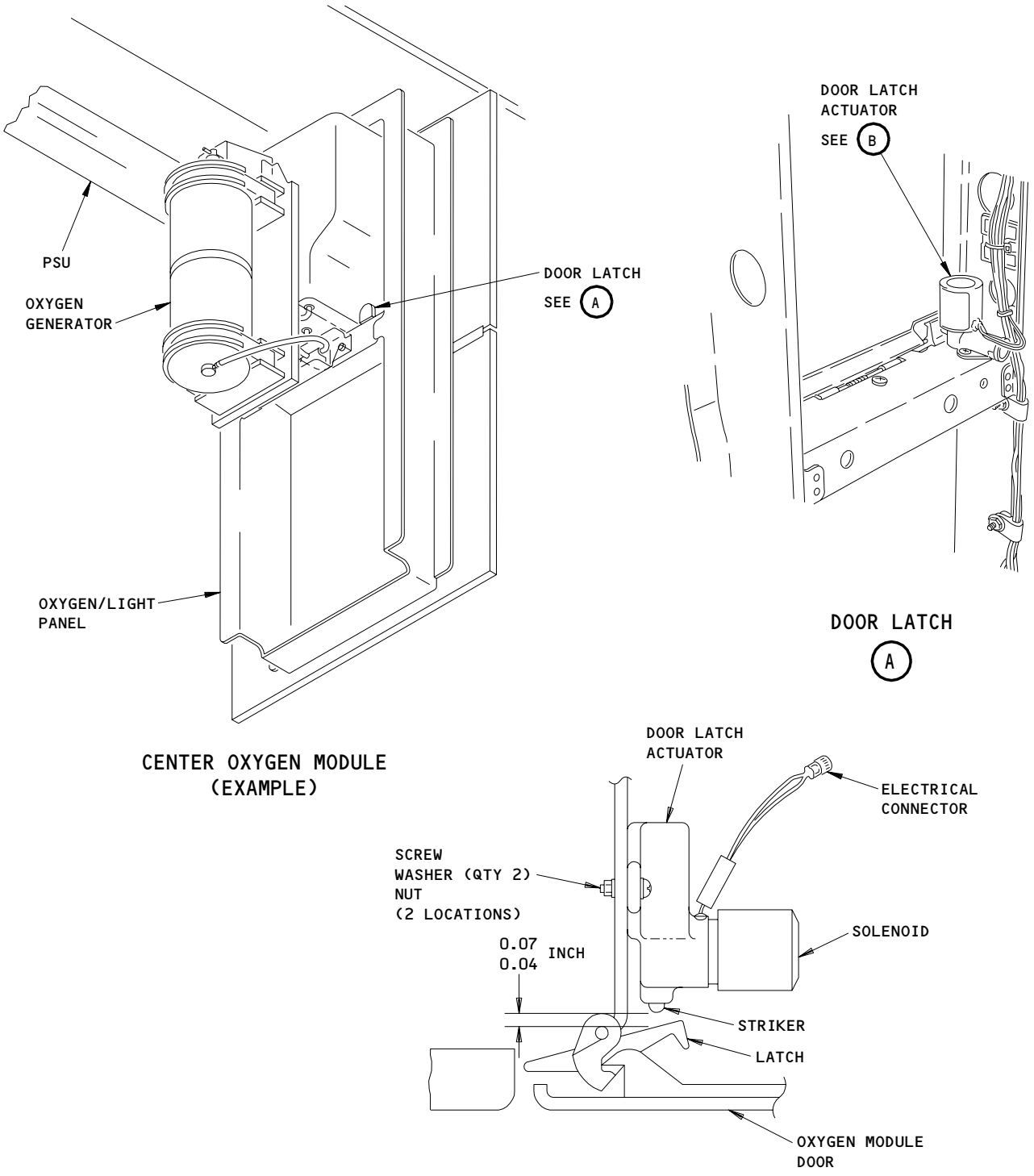
S 022-234-001
(5) Disconnect or cut the wires for the door latch actuator at the electrical connector.

S 022-235-001
(6) Remove the screws, washers and nuts.

S 022-236-001
(7) Remove the door latch actuator.

TASK 35-21-15-402-237-001
10. Door Latch Actuator Installation (Fig. 204)
A. References
(1) AMM 35-21-00/501, Passenger Oxygen System
(2) AMM 35-21-04/201, Oxygen Generator
B. Access
(1) Location Zones
200 Upper Half of the Fuselage

C. Procedure



Door Latch Actuator Installation
Figure 204

S 212-270-001

WARNING: THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. MAKE SURE THAT EITHER THE RELEASE PIN OR THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED THE UNFIRED GENERATOR. IF BOTH THE RELEASE PIN AND THE SAFETY PIN ARE REMOVED, THE GENERATOR WILL IGNITE. IGNITED GENERATORS WILL GET HOT (450°F OR MORE). CONTACT WITH A HOT GENERATOR CAN CAUSE INJURY.

(1) Make sure the safety pin is installed in the oxygen generator, if it is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 422-239-001

(2) Hold the door latch actuator in position and install the screws, washers and nuts.

S 422-240-001

(3) Connect the wires from the door latch actuator to the electrical connector per standard wiring practices.

S 412-241-001

(4) Install the oxygen module, if it was removed.

S 442-249-001

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(5) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 862-242-001

(6) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 722-248-001

(7) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

CENTER PASSENGER OXYGEN MODULE - MAINTENANCE PRACTICES

TASK 35-21-15-802-001-002

1. Center Passenger Oxygen Module
   A. General
      (1) This configuration not used.

FLIGHT CREW REST OXYGEN MODULE - MAINTENANCE PRACTICES

1. General
   A. This procedure has these tasks:
      (1) Oxygen Module Removal
      (2) Oxygen Module Installation
      (3) Oxygen Generator Removal
      (4) Oxygen Generator Installation
      (5) Oxygen Mask Removal
      (6) Oxygen Mask Installation
      (7) Oxygen Mask Repacking
      (8) Door Latch Actuator Removal
      (9) Door Latch Actuator Installation

TASK 35-21-16-002-111

2. Oxygen Module Removal (Fig. 201)
   A. References
      (1) AMM 35-21-04/201, Oxygen Generator
   B. Access
      (1) Location Zones
          200 Upper Half of Fuselage

   C. Procedure

      S 862-112
      (1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:
          (a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

      S 012-113
      (2) Open the oxygen module door, but do not let the masks fall.

      S 022-114
      (3) Hold the masks in the module and turn the 1/4-turn fasteners. Lower the one end of the oxygen module.

      S 032-115
      (4) Disconnect the electrical connector(s).

      S 022-116
      (5) Pull the oxygen module from the spring clip mounting bracket. Lower the oxygen module approximately 12 inches.

S 042-118

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE AN INJURY.

(6) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 022-196

(7) Remove the oxygen module.
   (a) If the oxygen module is to be shipped, do the Oxygen Generator Removal procedure.

TASK 35-21-16-402-119

3. Oxygen Module Installation (Fig. 201)
   A. References
      (1) AMM 35-21-00/501, Passenger Oxygen System
      (2) AMM 35-21-04/201, Oxygen Generator
   B. Access
      (1) Location Zones
          200 Upper Half of Fuselage
   C. Procedure

S 442-120

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(1) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 422-121

(2) Hold the masks in the oxygen module and put the module in position.

S 432-122

(3) Connect the electrical connector(s).

S 422-123

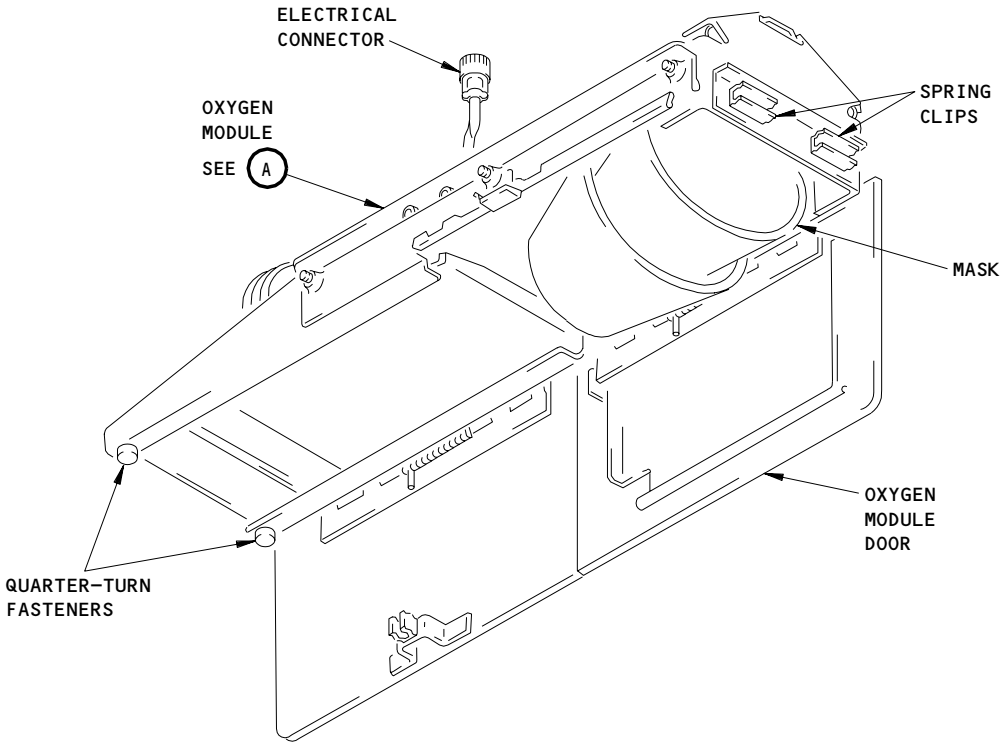
(4) Push one end of the oxygen module into the spring clip mounting bracket.

S 422-124

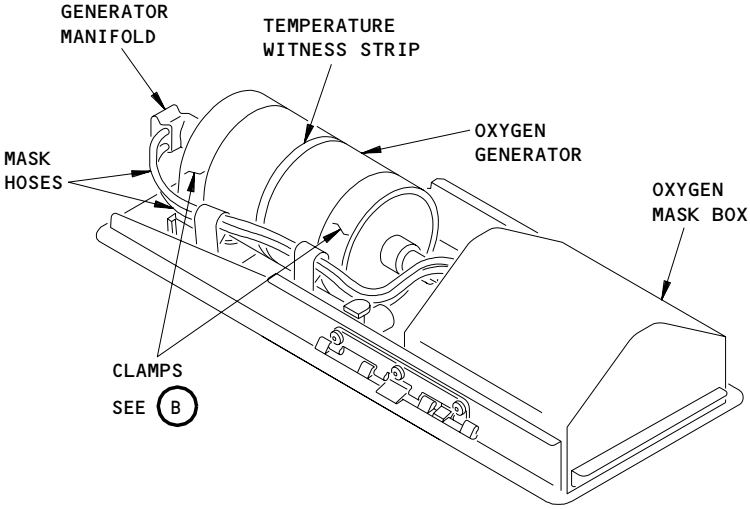
(5) Raise the other end of the module and turn the 1/4-turn fasteners.

S 412-125

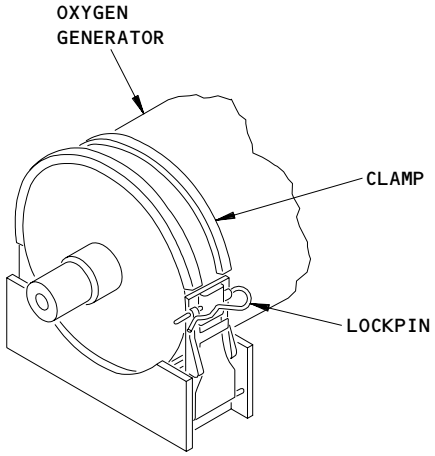
(6) Close the oxygen module door.



FLIGHT CREW REST OXYGEN MODULE
(EXAMPLE)



OXYGEN MODULE
A



CLAMP
(EXAMPLE)
B

Flight Crew Rest Oxygen Module Installation
Figure 201

S 862-126
(7) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 702-127
(8) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

TASK 35-21-16-002-128

4. Oxygen Generator Removal (Fig. 201)

A. Equipment
(1) Retraction Equipment - Firing Pin - A35001-10
(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References
(1) AMM 35-21-04/201, Oxygen Generator

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

D. Procedure

S 012-129
(1) Do the Oxygen Module Removal procedure to get access to the oxygen generator.

S 042-130

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE AN INJURY.

(2) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 912-132
(3) Put on clean, nylon gloves that are lint-free during oxygen system maintenance.

S 032-133
(4) Remove the clamp from the hose which is connected to the oxygen generator with the Oetiker crimping tool or equivalent tool.
(a) Discard the clamp.

S 032-134
(5) Disconnect the hose from the oxygen generator.

S 022-135
(6) Remove the lock pins from the clamps.

S 022-136
(7) Release the clamps.

S 022-137
(8) Remove the oxygen generator.

S 022-138

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 FIRE THE GENERATORS AND MAKE SURE THE OXIDIZER CORE IS EMPTY. THIS MUST BE DONE BEFORE YOU PREPARE THE GENERATORS FOR TRANSPORT. IF THE GENERATORS ARE NOT FIRED AND EMPTY, THEY CAN ACCIDENTALLY FIRE DURING TRANSPORT AND CAUSE HEAT AND IGNITION. THIS CAN CAUSE DEATH OR INJURY TO PERSONS AND DAMAGE TO THE AIRCRAFT.

(9) Obey all approved procedures and regulations for the transport and disposal of oxygen generators.

TASK 35-21-16-402-139

5. Oxygen Generator Installation (Fig. 201)

A. Equipment
(1) Retraction Equipment - Firing Pin - A35001-10
(2) Crimping Tool - Oetiker Model 1098 (P/N 14100118 or 14100082) or equivalent tool
Oetiker, Inc., 3305 Wilson Street, P. O. Box 217
Marlette, MI 48453-0217, U.S.A./Tel: (517)635-3621

B. References
(1) AMM 35-21-04/201, Oxygen Generator

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

D. Procedure

S 212-140

WARNING: MAKE SURE THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED ON THE GENERATOR. THE GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. IF THE GENERATOR FIRES, IT WILL GET VERY HOT (450°F OR MORE). IF YOU TOUCH A HOT GENERATOR, YOU WILL GET AN INJURY.

(1) Make sure the safety pin is installed on the oxygen generator.

S 212-141

(2) Make sure the oxygen generator did not fire as follows:
   (a) Look at the temperature sensitive tape on the oxygen generator.
      1) If the tape is black, the oxygen generator has fired.

         NOTE: Do not install this generator.

   (b) Look at the position of the firing pin.
      1) If you cannot see the firing pin (the release pin cannot be installed), it is in the fired position.

         NOTE: The oxygen generator has fired or the firing mechanism is bad. Do not install this generator.

S 422-142

(3) Put the new generator in position in the clamps and latch the generator clamps.

S 912-143

(4) Put on clean, nylon gloves that are lint-free during oxygen system maintenance.

S 422-144

(5) Slide the clamp over the hose.

S 432-145

(6) Connect the hose to the oxygen generator.

S 432-146

(7) Crimp the clamp with the Oetiker crimping tool or equivalent tool.

S 432-147

(8) Put the release cable through the lanyard rings.

S 442-153

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(9) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 432-149

(10) Repack the oxygen masks again, if it is necessary.

S 432-195

(11) Do the Oxygen Module Installation procedure.

TASK 35-21-16-002-154

6. Oxygen Mask Removal (Fig. 202)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 012-155

(1) Do the Oxygen Module Removal procedure.

S 042-156

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE AN INJURY.

(2) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 022-157

(3) Carefully remove the release pin from the firing mechanism on the oxygen generator.

S 012-158

(4) Remove lanyards from the release cable.

S 012-159
(5) Remove the oxygen module from the crew rest, if it is necessary.

S 022-160
(6) Disconnect the mask hoses from the generator manifold.

S 022-161
(7) Carefully pull the ends of the mask hoses through the grommets on the oxygen module.

S 022-162
(8) Remove the oxygen masks.

NOTE: To clean and keep all oxygen systems components that are supplied by vendor, refer to applicable vendor instructions (Vendor CMM).

TASK 35-21-16-402-163

7. Oxygen Mask Installation (Fig. 202)

A. References
(1) AMM 35-21-04/201, Oxygen Generator

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

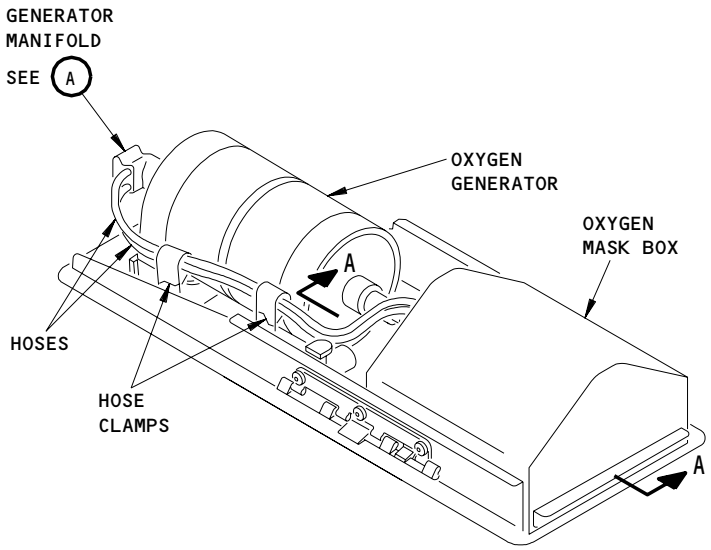
C. Procedure

S 412-164
(1) Carefully push the ends of the mask hoses through the grommets on the oxygen module.

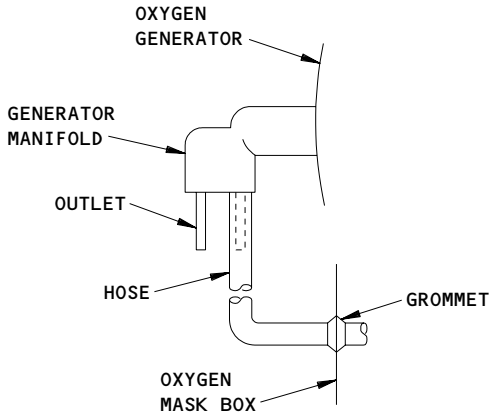
S 422-165
(2) Connect the mask hoses to the generator manifold.

S 422-166
(3) Push the release cable through all of the lanyard rings.

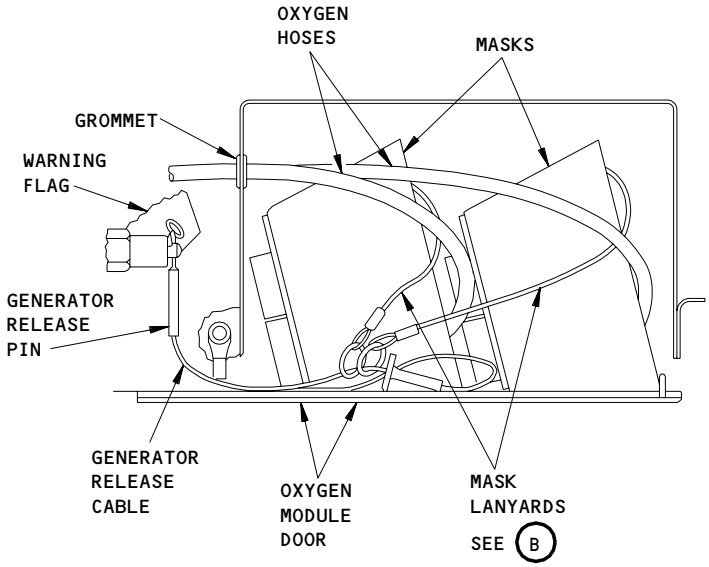
NOTE: Make sure all of the masks are attached to the release cable by a lanyard.



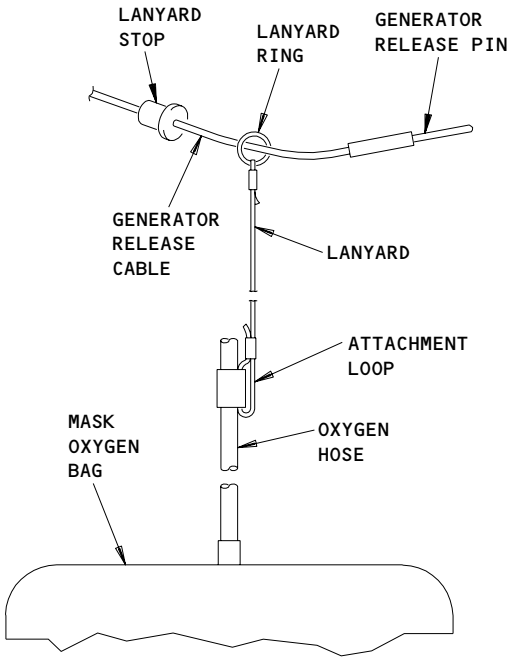
OXYGEN MODULE
(EXAMPLE)



GENERATOR MANIFOLD
A



A-A



MASK LANYARD
(EXAMPLE)
B

Oxygen Mask Installation
Figure 202

K43593

S 442-168

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(4) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 432-197

(5) Do the Oxygen Module Installation procedure.

TASK 35-21-16-532-169

8. Oxygen Mask Repacking (Fig. 203)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 912-170

(1) Put on clean, nylon gloves that are lint-free during oxygen system maintenance.

S 212-171

WARNING: MAKE SURE THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED ON THE GENERATOR. THE GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. IF THE GENERATOR FIRES, IT WILL GET VERY HOT (450°F OR MORE). IF YOU TOUCH A HOT GENERATOR, YOU WILL GET AN INJURY.

(2) Make sure that the safety pin is installed in the oxygen generator.

S 862-172

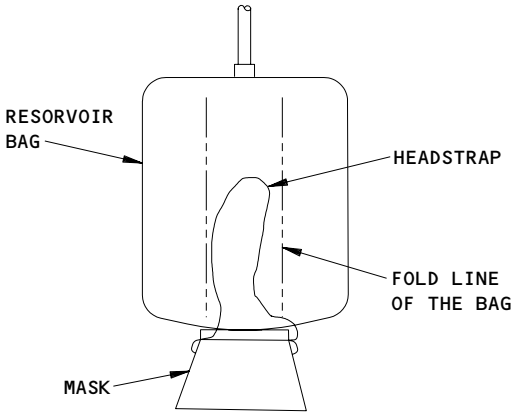
(3) Examine the door latch actuator.

(a) If it was tripped, push the latch reset striker until the actuator plunger engages.

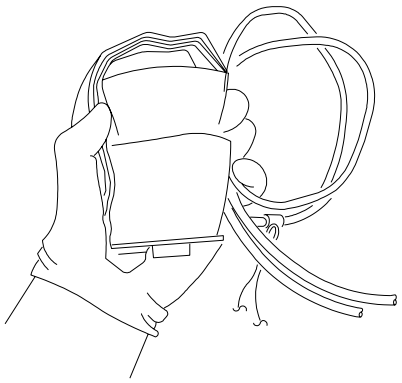
S 212-173

(4) Examine the mask assembly for nicks, cuts, abrasions and chemical or heat damage.

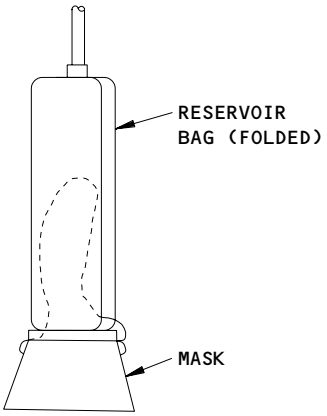
(a) If the mask assembly is damaged, replace the mask assembly.



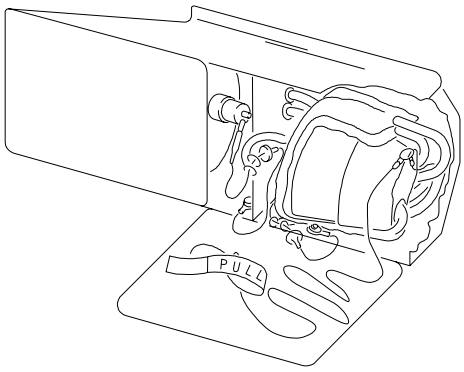
STEP 1



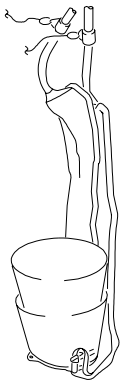
STEP 4



STEP 2



STEP 5



STEP 3

Oxygen Mask Repacking Procedure
Figure 203

K43594

S 212-174

(5) Make sure that a lanyard is attached to either the mask or the hose.
  (a) If the lanyard assembly is damage or missing, replace the lanyard assembly.

S 532-175

(6) Do the steps that follow to repack the masks:
  (a) Make sure that the reservoir bag is flat and put the headstrap on the reservoir bag (Step 1).

    NOTE: Make sure all the lanyards and hoses are separated (not tangled).

  (b) Fold the reservoir bag in thirds, lengthwise over the headstrap (Step 2).
  (c) Nest the masks loosely one inside the other (stacked together) in the same direction, with the reservoir bags on the same side (Step 3).
  (d) Wrap all the folded reservoir bags around the nested masks (Step 4).

    NOTE: While you hold the wrapped masks, make a large coil of the group of hoses. The coil must fit inside the oxygen module. Neatness of hose coil is not critical.

  (e) Put all the masks, reservoir bags, hose coil and lanyards attached to the release cable, in the oxygen module (Step 5).

    NOTE: Hoses must be above the masks, not on the sides. Hoses and masks should be free to fall out of the module.

  (f) Make sure that the release cable is threaded through the lanyard rings with the release pin in the oxygen generator firing pin.

S 442-177

CAUTION: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(7) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 412-176

(8) Carefully close the oxygen module door until the latch engages.

TASK 35-21-16-002-179

9. Door Latch Actuator Removal (Fig. 204)

A. References

(1) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 862-180

(1) Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:

(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

S 012-181

(2) Do the Oxygen Module Removal procedure to get access to the door latch actuator.

S 042-182

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR DEACTIVATION PROCEDURE. THE ACCIDENTAL OPERATION OF THE OXYGEN GENERATOR CAN CAUSE AN INJURY.

(3) Do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 012-183

(4) Remove the oxygen module, if it is necessary.

S 022-184

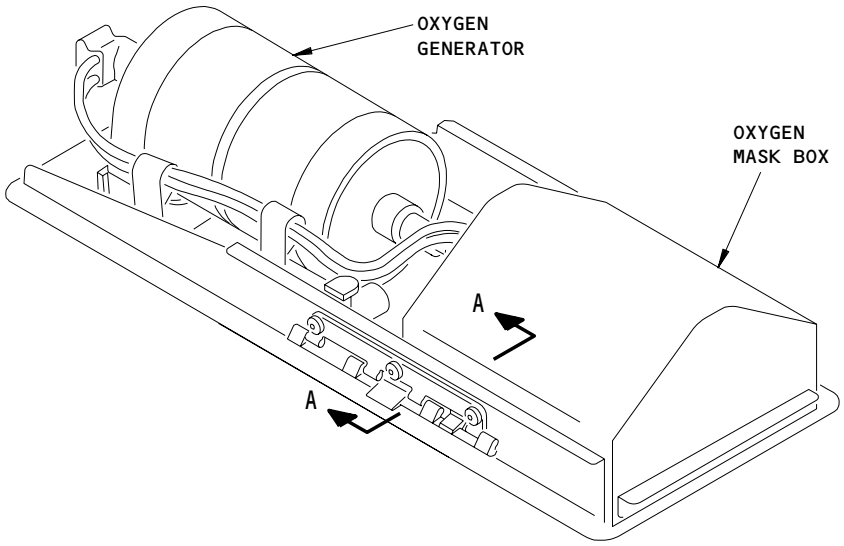
(5) Disconnect or cut the wires for the door latch actuator from the electrical connector.

S 022-185

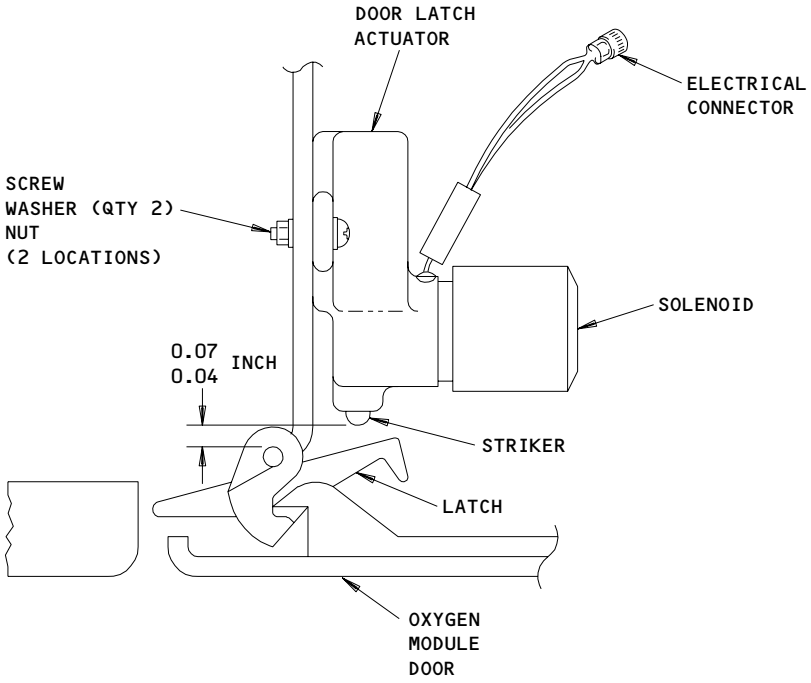
(6) Remove the screws, washers and nuts.

S 022-186

(7) Remove the door latch actuator.



OXYGEN MODULE
(EXAMPLE)



A-A

Door Latch Actuator Installation
Figure 204

K43595

TASK 35-21-16-402-187

10. Door Latch Actuator Installation (Fig. 204)

A. References

(1) AMM 35-21-00/501, Passenger Oxygen System

(2) AMM 35-21-04/201, Oxygen Generator

B. Access

(1) Location Zones

200 Upper Half of the Fuselage

C. Procedure

S 212-188

WARNING: MAKE SURE THE SAFETY PIN WITH A WARNING FLAG IS INSTALLED ON THE OXYGEN GENERATOR. THE OXYGEN GENERATOR IS A PYROTECHNIC-ACTIVATED DEVICE. IF THE OXYGEN GENERATOR FIRES, IT GETS VERY HOT. IF YOU TOUCH A HOT OXYGEN GENERATOR, YOU WILL GET AN INJURY.

(1) Make sure the safety pin is installed in the oxygen generator, if it is not installed, do the Oxygen Generator - Deactivation procedure (AMM 35-21-04/201).

S 422-189

(2) Hold the door latch actuator in position and install the screws, washers and nuts.

S 422-190

(3) Connect the wires from the door latch actuator to the electrical connector.

S 412-191

(4) Install the oxygen module, if it was removed.

S 442-192

WARNING: REFER TO AMM 35-21-04/201 FOR THE OXYGEN GENERATOR ACTIVATION PROCEDURE. FAILURE TO ACTIVATE THE OXYGEN GENERATOR WILL PREVENT THE OPERATION OF THE OXYGEN GENERATOR IN AN EMERGENCY.

(5) Do the Oxygen Generator - Activation procedure (AMM 35-21-04/201).

S 862-193

(6) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
(a) 11A25, PASSENGER OXYGEN MANUAL DEPLOY

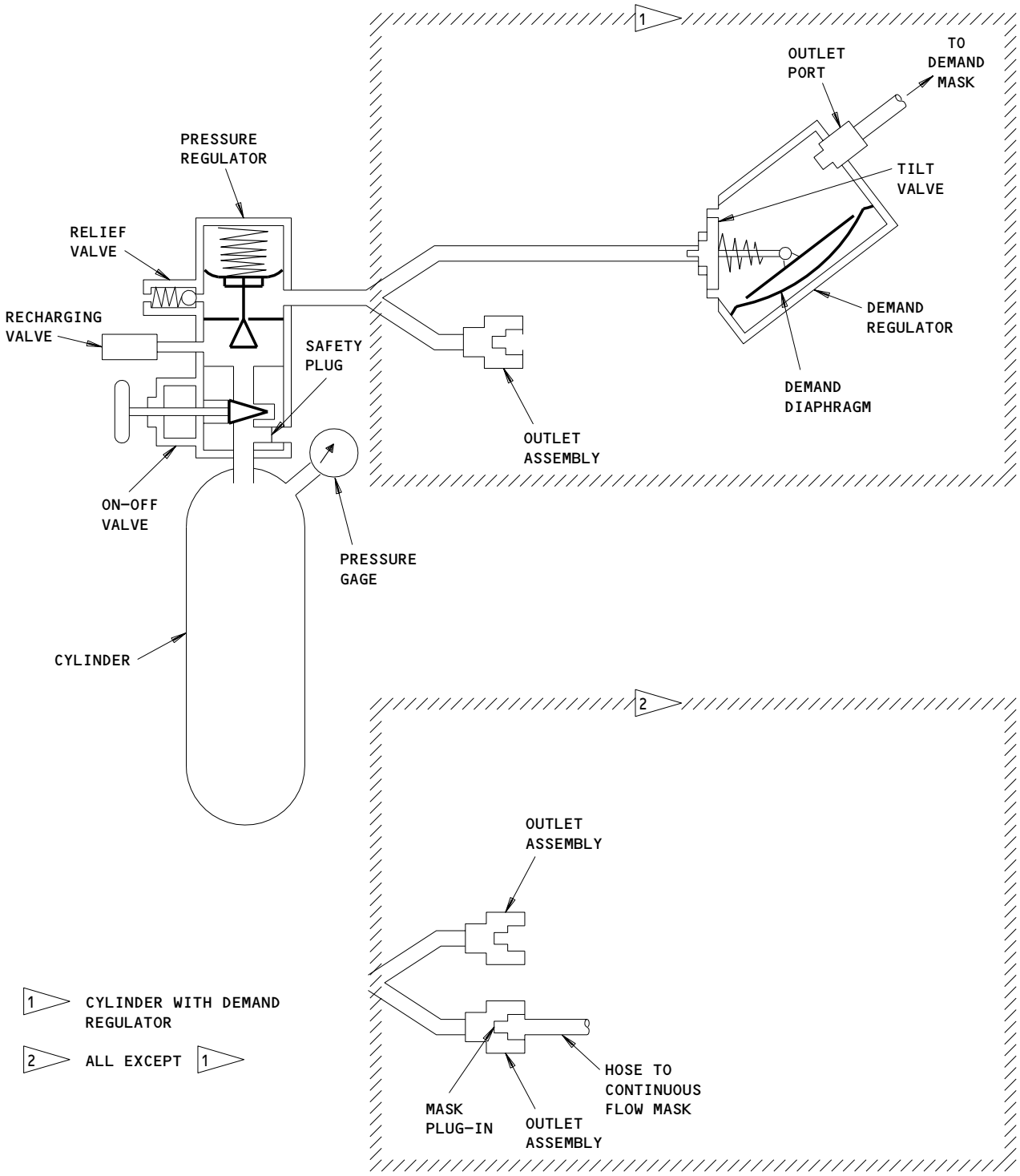
S 722-194

(7) Do the Manual Deployment Test of Passenger Oxygen Masks procedure (AMM 35-21-00/501).

PORTABLE OXYGEN SYSTEM - DESCRIPTION AND OPERATION

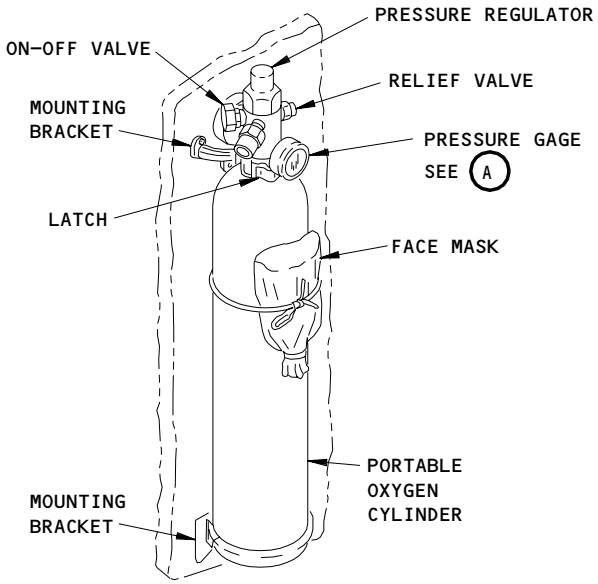
1. General
   A. Portable oxygen cylinder assemblies for the first aid and other auxiliary uses are installed at designated locations throughout the airplane for for quick and easy access.
2. Portable Oxygen Cylinder (Fig. 1 and 2)
   A. There are two types of portable oxygen cylinders, those with a 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.

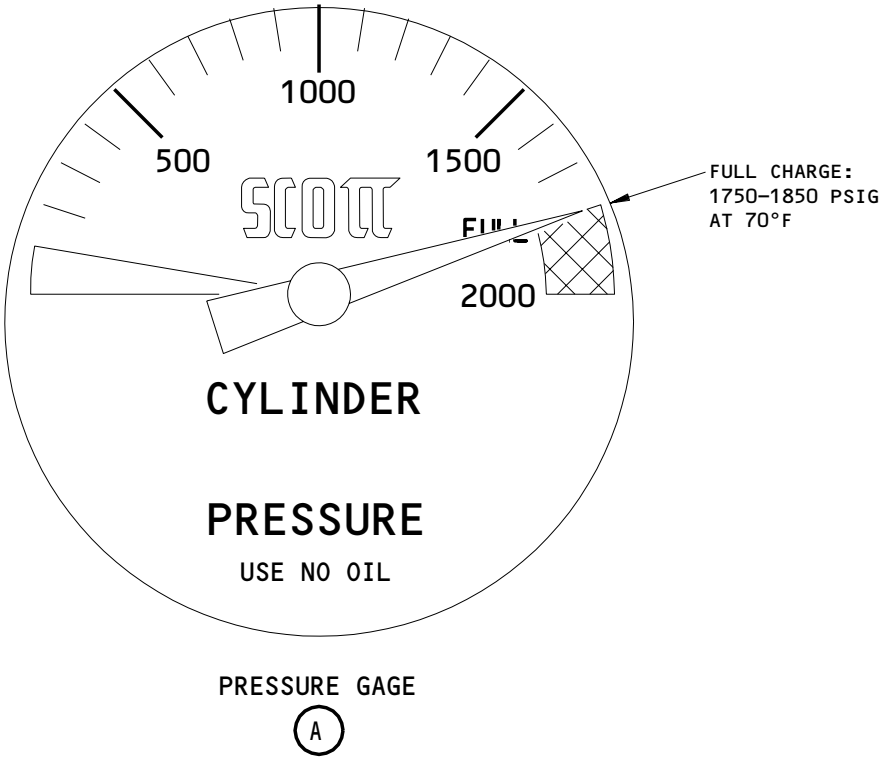


Portable Oxygen Equipment Schematic
Figure 1

L73089



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 167-004
(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 (AMM 35-31-01/401).

F. Clean the Portable Oxygen Cylinder Masks

S 167-005
(1) Use one of these detergent disinfectants (or equivalent) to clean the oxygen mask(s):
(a) Airwick Antimicrobial Topical Gel
(b) West Wecodyne
(c) Lysol Brand Disinfectant
(d) Isopropyl Alcohol

S 167-006
(2) Mix a solution of detergent disinfectant with warm water.

NOTE: Obey the instructions on the label.

S 167-007
(3) Apply the solution to the face piece with a cheesecloth or sponge applicator.

S 167-008
(4) Rinse the face piece in clear, warm water.

S 167-009
(5) Completely dry the face piece with a dry cheesecloth.

S 427-010

(6) Connect and position the oxygen mask on the portable oxygen cylinder.

PORTABLE OXYGEN CYLINDER - REMOVAL/INSTALLATION

1. General
   A. This procedure contains two tasks:
      (1) Portable oxygen cylinder removal
      (2) Portable oxygen cylinder installation.
   B. The portable oxygen cylinders for first aid and other auxiliary uses are installed at designated locations throughout the 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 any damaged oxygen cylinders.

TASK 35-31-01-004-001

2. Portable Oxygen Cylinder Removal (Fig. 401)
   A. Access
      (1) Location Zone
          200 Upper Half of Fuselage
   B. Procedure

      S 014-002
      (1) Open the stowage compartment door, where applicable to get access to the portable oxygen cylinder.

      S 024-020
      (2) Unlatch the clamp which holds the portable oxygen cylinder to the mounting bracket.

      S 024-011
      (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 414-012
      (4) Close the stowage compartment door, where applicable.

TASK 35-31-01-404-005

3. Portable Oxygen Cylinder Installation (Fig. 401)
   A. Access
      (1) Location Zone
          200 Upper Half of Fuselage

B. Prepare to Install the Cylinder

S 214-016
(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 424-017
(2) Put the oxygen mask(s) in the protective bag and secure it to the cylinder by velcro tape or equivalent.

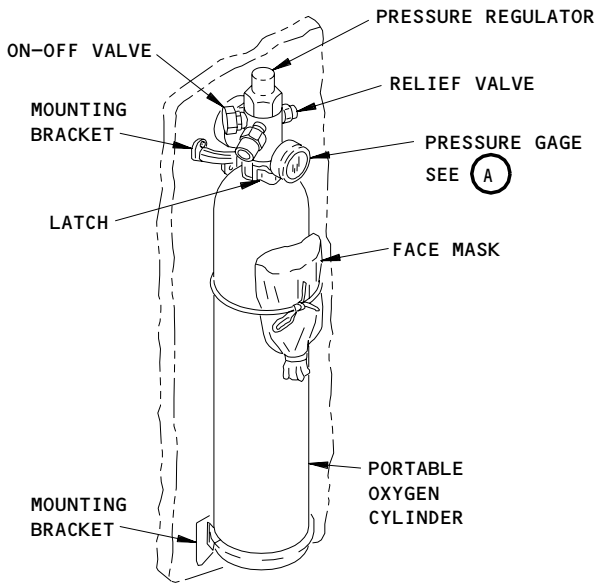
C. Install the Cylinder

S 414-006
(1) Open the stowage compartment door, where applicable.

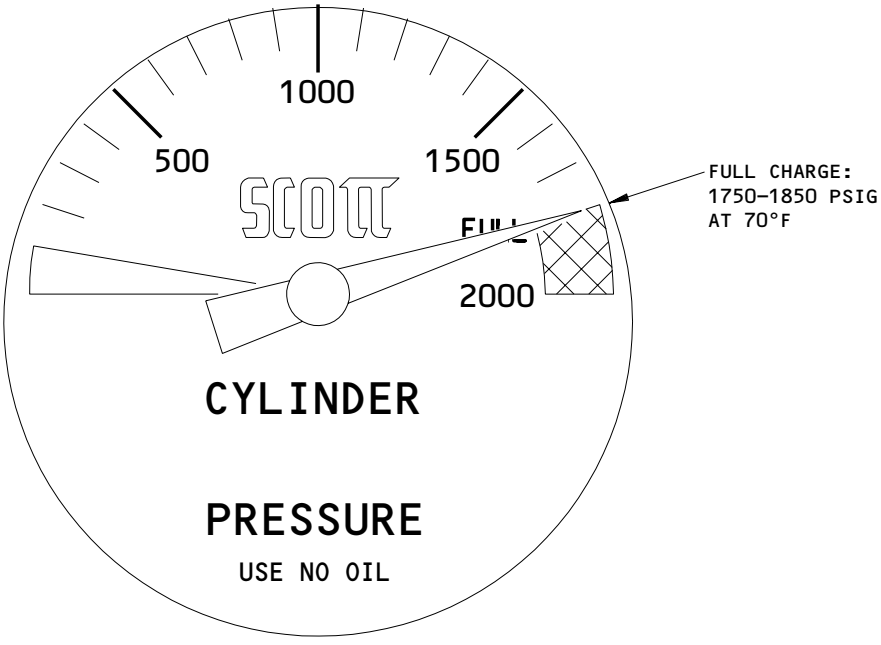
S 424-007
(2) Install the portable oxygen cylinder on the mounting bracket.

S 434-010
(3) Secure the latch on the clamp to keep the portable oxygen cylinder in place.

S 414-013
(4) Close the stowage compartment door, where applicable.



PORTABLE OXYGEN CYLINDER INSTALLATION
(EXAMPLE)



PRESSURE GAGE
A

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
      (3) Portable Oxygen Cylinder Installation Check.

TASK 35-31-01-206-011

2. Portable Oxygen Cylinder Pressure and Condition Check (Fig. 601, 602)
   A. References
      (1) AMM 35-31-00/701, Portable Oxygen System
   B. Access
      (1) Location Zone
          211 Control Cabin – Left
          212 Control Cabin – Right
          221 Passenger Cabin – Left
          222 Passenger Cabin – Right
          241 Passenger Cabin – Left
          242 Passenger Cabin – Right
          251 Passenger Cabin – Left
          252 Passenger Cabin – Right
   C. Portable Oxygen Cylinder Pressure Check

S 216-056

(1) 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 airline.

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

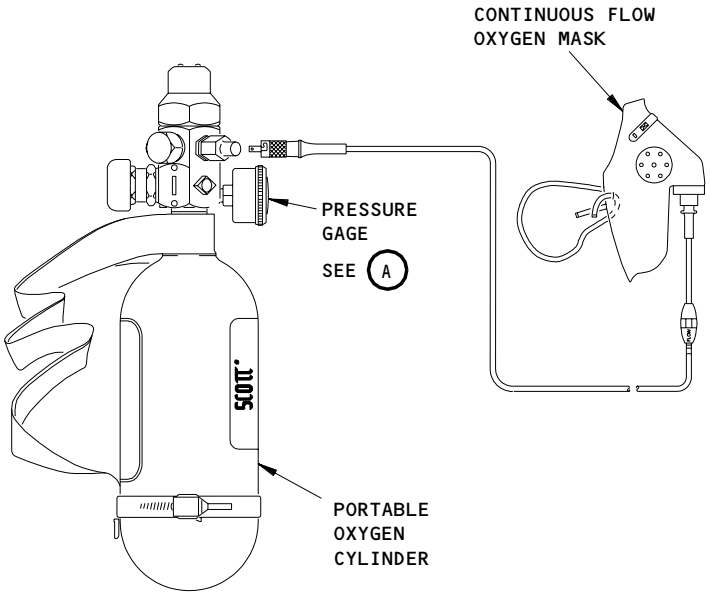
S 216-040

(2) Make sure the oxygen cylinder gage pressure is not more than 1850 psi at 70°F (21°C).

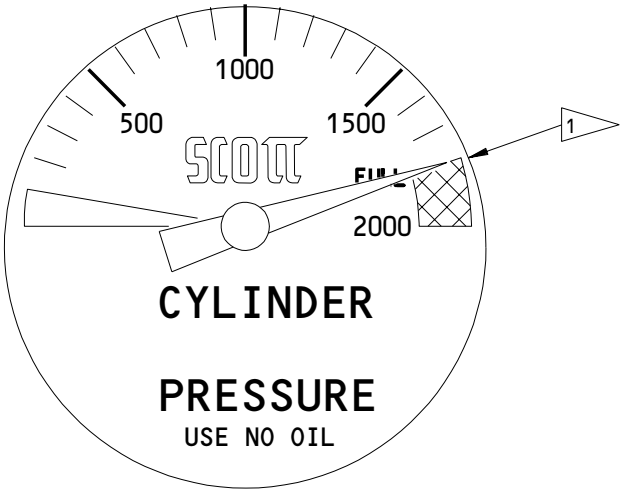
NOTE: See Fig. 602 for equivalent portable oxygen cylinder pressures for temperatures other than 70°F (21°C).

S 966-041

(3) Replace the portable oxygen cylinder, if the gage pressure is below the minimum guideline set for the airline or regulatory authority.



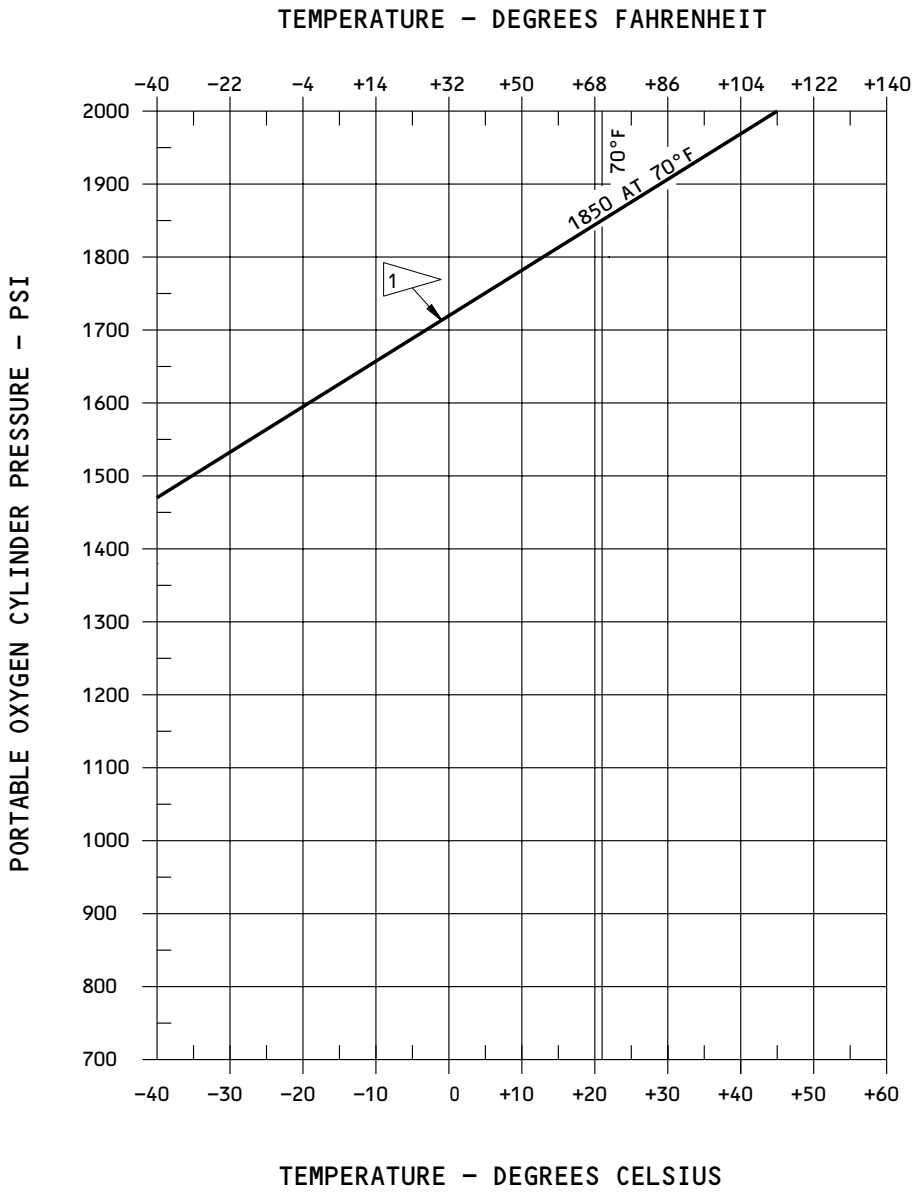
PORTABLE OXYGEN CYLINDER
(EXAMPLE)



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



1 MAXIMUM ALLOWABLE PRESSURE FOR FULLY SERVICED PORTABLE OXYGEN CYLINDER

Portable Oxygen Cylinder – Pressure/Temperature Correction Chart
Figure 602

D. Portable Oxygen Cylinder Condition Check

S 216-047
(1) Make sure the portable oxygen cylinder is correctly stowed.

S 216-048
(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.

S 216-061
(3) For portable oxygen cylinders equiped with the part number 289-601 series oxygen masks, do these steps:
(a) Do a general visual inspection of the oxygen mask assembly per the vendor's CMM (AVOX Systems CMM 35-22-26).
(b) Do a visual check of the mask assembly manufacturer's tag. Determine the date of manufacture and the date placed in service. Make sure the mask is wihtin its service life, as prescrived by the mask vendor or air carrier. Overhaul or replace masks that will exceed their prescribed service life limit before the next scheduled maintenance check. Overhaul the masks per the vendor's CMM (AVOX Systems CMM 35-22-26).

NOTE: The total service life of a passenger oxygen mask is six years from the date of manufacture. This includes shelf life and on-aircraft service life. After six years, replace the passenger oxygen mask, or do an overhaul per the vendor's CMM.

TASK 35-31-01-706-054

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 866-042
(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 796-043
(2) Apply the leak detection compound to all of the valve fittings.

S 216-049
(3) Look for bubbles to find leaks.

S 116-050
(4) Remove the leak detection compound from the cylinder components with a dry piece of cheesecloth immediately after you check for leaks.

S 796-051
(5) If you find a leak, do these steps:

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 796-052
(6) If there are no leaks, the portable oxygen cylinder is satisfactory.

S 436-057
(7) Turn the knob on ON-OFF valve in the clockwise direction to close the valve.

TASK 35-31-01-706-023
4. Portable Oxygen Cylinder Installation Check
A. General
(1) The following installation check applies to oxygen cylinders that are installed in door type, track mounted stowages.
B. Access
(1) Location Zone
200 Upper Half of Fuselage

C. Procedure

S 216-024
(1) Make sure the oxygen cylinder is installed in the door type, track mounted stowage as follows:
(a) The carrying strap and the oxygen mask are in the up position.

S 216-025

(2) Make sure the attached carrying strap is on the top side of the oxygen cylinder.

S 216-026

(3) Make sure the oxygen mask is positioned on the top side of the oxygen cylinder.

S 216-027

(4) Make sure the mask lays on top of the carrying strap.