DOUGLAS AIRCRAFT COMPANY
MCDONNELL DOUGLAS CORPORATION

DC-10 SERVICE BULLETIN

REVISION TRANSMITTAL SHEET

Bulletin 35-16
DC-10 SC 1981/2134

OXYGEN - Passenger - Modify Oxygen Compartment In Passenger Seat Back And Compartment Partition.

This page transmits Revision 1 for DC-10 Service Bulletin 35-16 to incorporate the following changes:

NOTE: This revision constitutes a complete reissue.

Reason for Revision: To provide an improved method of attaching oxygen tube rack to oxygen compartment door ensuring a more positive bond and to revise Service Bulletin Effectivity. No additional work is required by this revision for operators who have complied with the original issue of this Service Bulletin, as amended by All Operators Letter (AOL) 10-741, dated December 20, 1974. Additional work is required by this revision for operators who have complied with the original issue of this Service Bulletin without incorporating AOL 10-741.

NOTE: Operators who have complied with the original issue of this Service Bulletin, without incorporating AOL 10-741, or who had the original modification incorporated at DAC (Group II), should accomplish instructions outlined under Group II at next functional drop test of passenger oxygen system. An additional 0.1 man-hour per seat back is required.

Pages 1 thru 3:

Changed page number to 1 of 18, was 1 of 10.

Added Service Change number 2134.

Added NOTE under Service Bulletin title.

Added NOTE to paragraph 1.A.(1).

Created Group I and listed aircraft affected by original issue of this Service Bulletin under Group I.

Deleted operator KE and Factory Serial Number 46934 (No. 160).

Added new code MP for operator MH.

Deleted Factory Serial Numbers 46713, 46942, and 46943 (No. 165, 162, and 163) from operator NA.

Pages 1 thru 3: (Cont)

Created Group II and added 2 aircraft under Group II.

Added operator VG to Service Bulletin Effectivity.

Revised paragraph 1.B to clarify Reason.

Page 4:

Added Group I heading to original Description and increased Configurations to VII, was V.

Identified paragraph 1.C (4) under Group I as applicable only to Configuration IV.

Added Description for Group II.

Added Group I heading to original Man-Hours.

Added Man-Hours for Group II.

Pages 5 and 6:

Added the following to References:

Data Identification	Change	Type of Data
AWM7592	J (was new)	Drawing
AWM7592	K (was B)	Advance E.O.
C1-750-435/COM PROGRAMS (AOL 10-741), dtd December 20, 1974, ATA File Code 10-35-00-05		Douglas Letter
DPS 1.07-66, dtd August 10, 1973	H	Douglas Process Standard

Pages 7 and 8:

Added NOTE to paragraph 2.

Identified original Accomplishment Instructions as Group I and increased Configurations to VII, was V.

Revised paragraph 2.B and 2.C.

Added Accomplishment Instructions for Group II.

Pages 9 thru 16:

Added Group I heading to original instructions and increased Configurations to VI, was IV.

Added CAUTION and revised NOTE preceeding instructions.

Revised step 1 and CAUTION.

Revised step 2.

Revised step 4 and deleted CAUTION.

Pages 9 thru 16: (Cont)	Added Group II instructions.
	Completely revised Figure 1 to better define modification details for each oxygen compartment configuration.
Page 17:	Added Group I heading to original instructions and reidentified Configuration V as Configuration VII.
	Added CAUTION preceeding instructions.
	Revised step 1 and added CAUTION.
	Added Group II instructions.
Page 18:	Completely revised Qty Configuration headings.
	Revised all tape and adhesive specifications to read "or equivalent".
	Added Material Information for Group II aircraft.
	Added EA9311 A/B adhesive and supplier source.
	Revised width and thickness for P-2650 self fusion tape and corrected supplier address.
	Revised P133UA tape requirement for Configuration II.
	Deleted requirement for Silastic 140 adhesive, except for Configuration IV.
	Deleted 4282 tape and quantity required.

NOTE: The affected operators should make appropriate corrections to the Service Bulletin Summary, as required to incorporate the intent of this revision.

ABA
HDW

DOUGLAS AIRCRAFT COMPANY
MCDONNELL DOUGLAS CORPORATION

3855 Lakewood Boulevard
Long Beach, California 90801

DC-10 SERVICE BULLETIN

BULLETIN 35-16
DC-10 SC 1981/2134

OXYGEN - Passenger - Modify Oxygen Compartment In Passenger Seat Back And Compartment Partition.

NOTE

Aircraft which have been modified to incorporate a DAC approved unitized-type passenger oxygen system are not affected by this Service Bulletin.

1. Planning Information:

A. Effectivity:

(1) Aircraft Affected:

Model DC-10, Series 10, 30, and 40

NOTE: Previous operator code, now obsolete, is shown in parentheses.

Operator	Factory Serial No.	Mfr's Fuselage No.
	Group I	
AA	46500 46502 thru 46525	1 3, 5, 7, 9, 12, 13, 20 thru 24, 30, 31, 37, 48, 49, 51, 52, 54 thru 56, 58, 65, and 72
AM	46936 and 46937	147 and 152
AZ	47861 thru 47866	75, 88, 94, 121, 135, and 149
CO	46900 thru 46904	34, 40, 41, 43, and 44
	47800 thru 47806	92, 98, 101, 139, 142, 145, and 148
DL	47965 thru 47969	59, 64, 67, 74, and 80

Operator	Factory Serial No.	Mfr's Fuselage No.
	Group I (Cont)	
IB	46926 and 46927	99 and 100
	47980	150
KL	46550 thru 46556	46, 60, 71, 82, 84, 91, and 146
	46933	159
LH	47921 thru 47925	117, 122, 123, 129, and 166
LT	46727	83
	46905 and 46906	47 and 50
MP (MH)	46891	127
NA	46700 thru 46703	14, 16, 18 and 19
	46706 thru 46712	38, 61, 62, 68, 70, 105, and 106
NW	46750 thru 46770	28, 36, 53, 66, 79, 97, 102, 108, 111, 113, 120, 124, 126, 128, 130, 143, 151, 161, 164, 168, and 175
OV	46825 and 46826	81 and 109
PK	46931	137
	46935	172
	46940	141
QC	46932	158
	47886	90
RG	46941	176
	46944 and 46945	133 and 156
RK	46890	77
SK	46868 and 46869	171 and 174
SN	47906 and 47907	115 and 157
SR	46575 thru 46579	57, 73, 114, 131, and 132
TE	47846 thru 47848	69, 116, and 136

Operator	Factory Serial No.	Mfr's Fuselage No.
	Group I (Cont)	
TK	46705	33
	46907	78
TV	46800 thru 46802	96, 103, and 110
UA	46600 thru 46624	4, 6, 8, 10, 11, 15, 17, 25 thru 27, 32, 35, 39, 42, 45, 76, 86, 89, 118, 119, 138, 140, 144, 154, and 155
UT	46850 thru 46853	63, 85, 93, and 134
WA	46908	95
	46928 thru 46930	104, 107, and 112
	46938	153
	Group II	
LH	47926	170
VG	47887	125

Affected aircraft other than those listed above will be modified prior to delivery or included in a subsequent revision to this Service Bulletin.

Manufacturer's fuselage numbers are applicable to affected aircraft at time of Service Bulletin issue and are for reference only.

(2) Spares Affected:

None.

B. Reason:

Several operators have reported instances where passenger oxygen mask hoses were being crimped by the door hinge and the lanyard was protruding through gap at door hinge area. In one instance the mask lanyard became entangled in the mask holder which could have resulted in expending of oxygen and passenger not being able to bring mask to face. Securing the oxygen mask hoses to the door and installing a seal to close the gap will aid in preventing these conditions from recurring.

C. Description:

Group I
Configurations I thru VI, Except as Noted

This modification is accomplished on each passenger seat back oxygen compartment, as follows:

(1) Installs an oxygen mask hose rack on compartment door.

(2) Installs door seal (tape) on compartment door.

(3) Applies two wraps of tape around oxygen hoses.

(4) Configuration IV - Fills gap with sealant between mask holders and raised surface of compartment door.

(5) Applies tape to oxygen mask holders.

Configuration VII

This modification installs an oxygen mask hose rack on each oxygen compartment door, located in passenger compartment partition.

Group II
Configurations I thru VII

This modification revises method of attaching oxygen mask hose rack to oxygen compartment door located on the back of each passenger seat and/or passenger compartment partition.

D. Compliance:

It is recommended this modification be incorporated at first convenient "C" check period, but not to exceed 1200 flight-hours after receipt of this Service Bulletin.

E. Approval:

This Service Bulletin is FAA approved.

F. Manpower:

Group I

This modification may be accomplished in approximately 0.5 man-hour or 0.5 elapsed hour per oxygen compartment.

Group II

This modification may be accomplished in approximately 0.1 man-hour or 0.1 elapsed hour per oxygen compartment.

NOTE: This Service Bulletin assumes that the aircraft/unit has been placed in a maintenance status. The man-hour/elapsed time estimates do not include:

1. Preparation for the modification: Examples; defueling, purging, placing work stands, opening standard access doors, obtaining tools, and jacking when jacking is not essential to the modification.

2. Nonproductive elapsed time: Examples; sealant or adhesive cure time, cleaning, paint drying time, lunch and/or rest periods, and quality assurance inspections.

3. Administrative functions: Examples; planning, engineering liaison, parts requisition, shift change coordination, and report writing.

Operators should take the above into consideration when scheduling this modification.

G. Material - Cost and Availability:

(1) Aircraft:

Parts and materials required to accomplish this modification are to be procured from operator's stock or sources indicated in paragraph 3.A.

(2) Spares:

Not applicable.

H. Tooling - Price and Availability:

None.

I. Weight and Balance:

Weight change at appropriate fuselage stations by incorporation of any part of this Service Bulletin is contingent upon the modification of each particular aircraft. Weight data is to be computed by the operator by weighing parts installed and parts removed during modification. Necessary revisions should be made to the appropriate weight and balance report.

J. References:

Data used in preparation of this Service Bulletin:

Data Identification	Change	Type of Data
AWM7592	J	Drawing
AWM7592	K	Advance E.O.

Data Identification	Change	Type of Data
C1-750-435/COM PROGRAMS (AOL 10-741), dtd December 20, 1974, ATA File Code 10-35-00-05		Douglas Letter
DPS 1.07-2, dtd April 8, 1966	D	Douglas Process Standard
DPS 1.07-66, dtd August 10, 1973	H	Douglas Process Standard
DPS 1.091, dtd April 30, 1971	B	Douglas Process Standard
MM Chapter 35		Maintenance Manual

K. Publications Affected:

The modification outlined in this Service Bulletin affects the following DAC DC-10 aircraft publications.

Publication	Chapter and/or Section
Illustrated Parts Catalog	35-22
Maintenance Manual	35-22
Weight and Balance Charts	

2. Accomplishment Instructions:

WARNING: TO AVOID INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT, MAKE CERTAIN ADEQUATE PRECAUTIONS ARE TAKEN WHILE PERFORMING ANY WORK IF ELECTRICAL POWER IS APPLIED TO THE AIRCRAFT.

CAUTION: ELECTRICALLY GROUND THE AIRCRAFT.

NOTE: Chapters within parentheses refer to sections of the Maintenance Manual.

Passenger oxygen compartments in lavatories, overhead positions, and attendant stations are not affected by this modification.

Each operator is to determine applicable seat back oxygen compartment configuration as shown on Figure 1.

All metal tape affixed within the passenger oxygen compartment must be securely attached.

Instructions are typical for each passenger seat back oxygen compartment or passenger partition oxygen compartment.

Group I
Configurations I thru VII, Except as Noted

A. Gain access to modification area by manually opening passenger oxygen compartment door in passenger seat back or passenger compartment partition. Install safety cap on oxygen generator. (See Chapter 35-00-00.)

B. Configurations I thru VI - Modify oxygen compartment installed in passenger seat back as shown on Figure 1.

Configuration	Seat Type
I	Weber
II	Flying Services
III A	Burns Coach
III B	Burns 1st Class
IV	Hardman
V	UOP (Universal Oil Products)
VI	UNOPI/SICMA

C. Configuration VII - Modify oxygen compartment installed in passenger compartment partition as shown on Figure 2.

D. Remove safety cap from oxygen generator.

E. Reset latch and close oxygen compartment door. (See Chapter 35-22-02.)

F. Check modified oxygen compartment door for proper operation. (See Chapter 35-21-01.)

Group II
Configurations I thru VII, Except as Noted

A. Gain access to modification area by manually opening passenger oxygen compartment door in passenger seat back or passenger compartment partition. Install safety cap on oxygen generator. (See Chapter 35-00-00.)

B. Configurations I thru VI - Revise method of attaching oxygen mask hose rack to oxygen compartment door located on each passenger seat back as shown on Figure 1.

Configuration	Seat Type
I	Weber
II	Flying Services
III A	Burns Coach
III B	Burns 1st Class
IV	Hardman
V	UOP (Universal Oil Products)
VI	UNOPI/SICMA

C. Configuration VII - Revise method of attaching oxygen mask hose rack to oxygen compartment door located on passenger compartment partition as shown on Figure 2.

D. Remove safety cap from oxygen generator, reset door latch, and close oxygen compartment door. (See Chapter 35-22-02.)

GROUP I
CONFIGURATIONS I THRU VI, EXCEPT AS NOTED

NOTE: INSTRUCTIONS ARE TYPICAL FOR ALL CONFIGURATIONS OF SEAT BACK INSTALLATIONS.

CAUTION: WHEN BONDING PARTS OR APPLYING TAPE TO OXYGEN COMPARTMENT DOORS, PREPARE FAYING SURFACES BY SANDING WITH A MEDIUM GRIT SANDPAPER TO REMOVE SURFACE GLOSS. REMOVE SANDING DUST USING A CLEAN DRY CLOTH. DO NOT USE CLEANING SOLVENTS WHERE REFERENCED IN APPLICABLE DOUGLAS PROCESS STANDARDS (DPS).

(1) APPLY TWO OR THREE COMPLETE WRAPS OF P-2650 TAPE AROUND OXYGEN HOSES TO DIMENSIONS SHOWN.

CAUTION: DO NOT COLLAPSE OXYGEN HOSES WHILE APPLYING TAPE.

AVOID TOUCHING ADHESIVE SIDE OF TAPE AS TAPE IS SELF FUSION TYPE. TAPE MUST OVERLAP PREVIOUS WINDING IN ORDER TO ADHERE PROPERLY. PRESS FIRMLY TO ENSURE PROPER FUSION.

(2) BOND NMC700-3 TUBE RACK TO DOOR, TO DIMENSIONS SHOWN, USING EA9311 A/B ADHESIVE. (SEE DOUGLAS PROCESS STANDARD (DPS) 1.07-66, TYPE 6.)

(3) INSTALL 425 TAPE ON OXYGEN MASK HOLDER AS SHOWN. (SEE DPS 1.091.)

(4) CONFIGURATION IV - FILL GAP BETWEEN OXYGEN MASK HOLDER AND RAISED SURFACE OF DOOR WITH SILASTIC 140 SILICONE ADHESIVE. (SEE DPS 1.07-2, TYPE 7.)

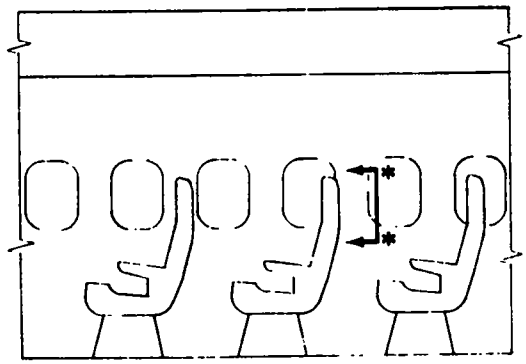
(5) INSTALL P133UA TAPE ON DOOR AS SHOWN. CUT TAPE AS REQUIRED FOR PPOPER FIT. (SEE DPS 1.091.)

GROUP II
CONFIGURATIONS I THRU VI, EXCEPT AS NOTED

(6) REMOVE 4282 TAPE FROM NMC700-3 TUBE RACK AND COMPARTMENT DOOR.

(7) BOND NMC700-3 TUBE RACK TO COMPARTMENT DOOR, TO DIMENSIONS SHOWN, USING EA9311 A/B ADHESIVE. (SEE DPS 1.07-66, TYPE 6.)

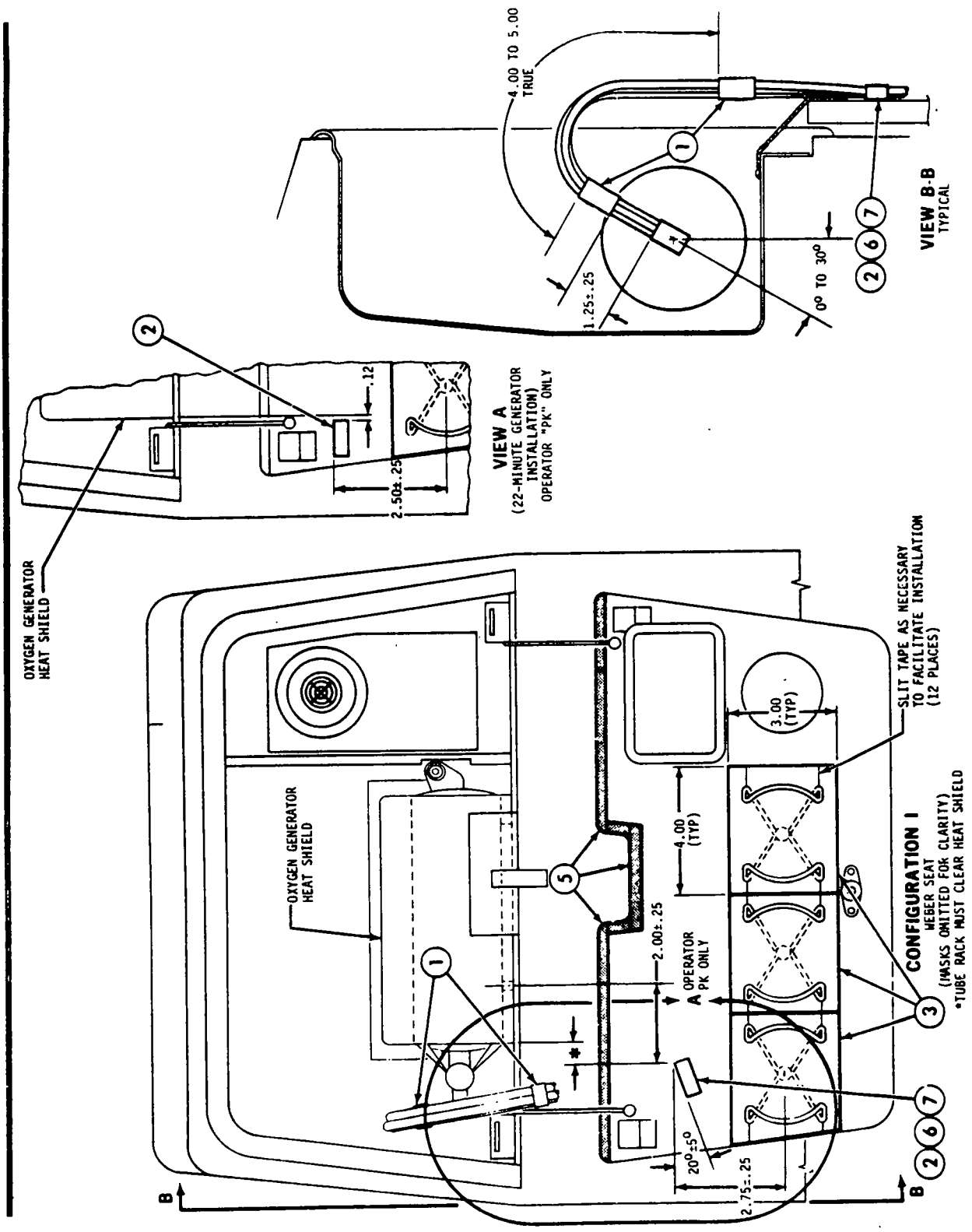
NOTE: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES	
ANGLES	±0°30'
3 PLACE DECIMAL	± .015
2 PLACE DECIMAL	± .03



*-*TYPICAL FOR CONFIGURATIONS I THRU VI

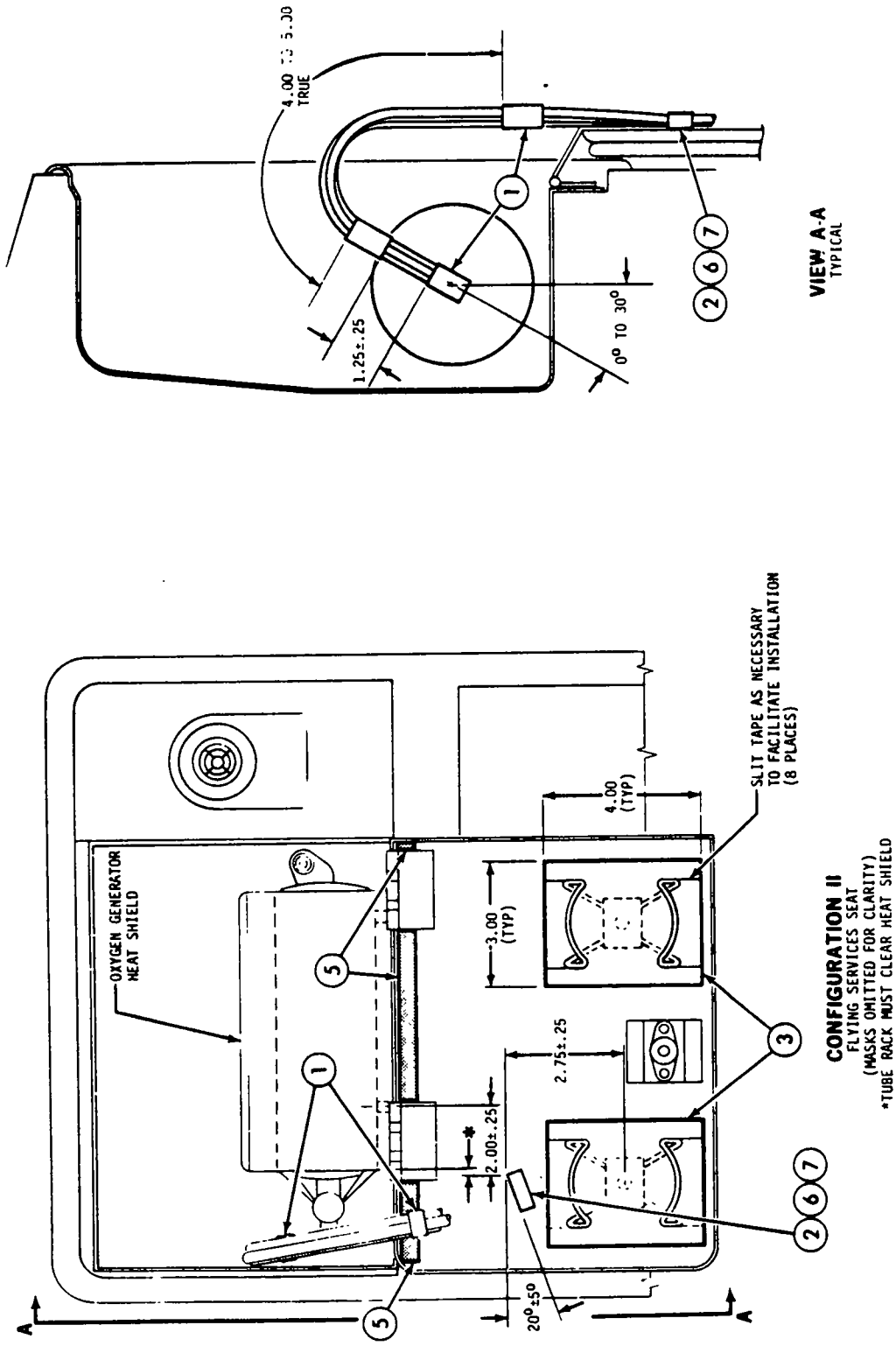
PASSENGER SEAT BACK OXYGEN COMPARTMENT - MODIFICATION

FIGURE 1 (SHEET 1 OF 8)

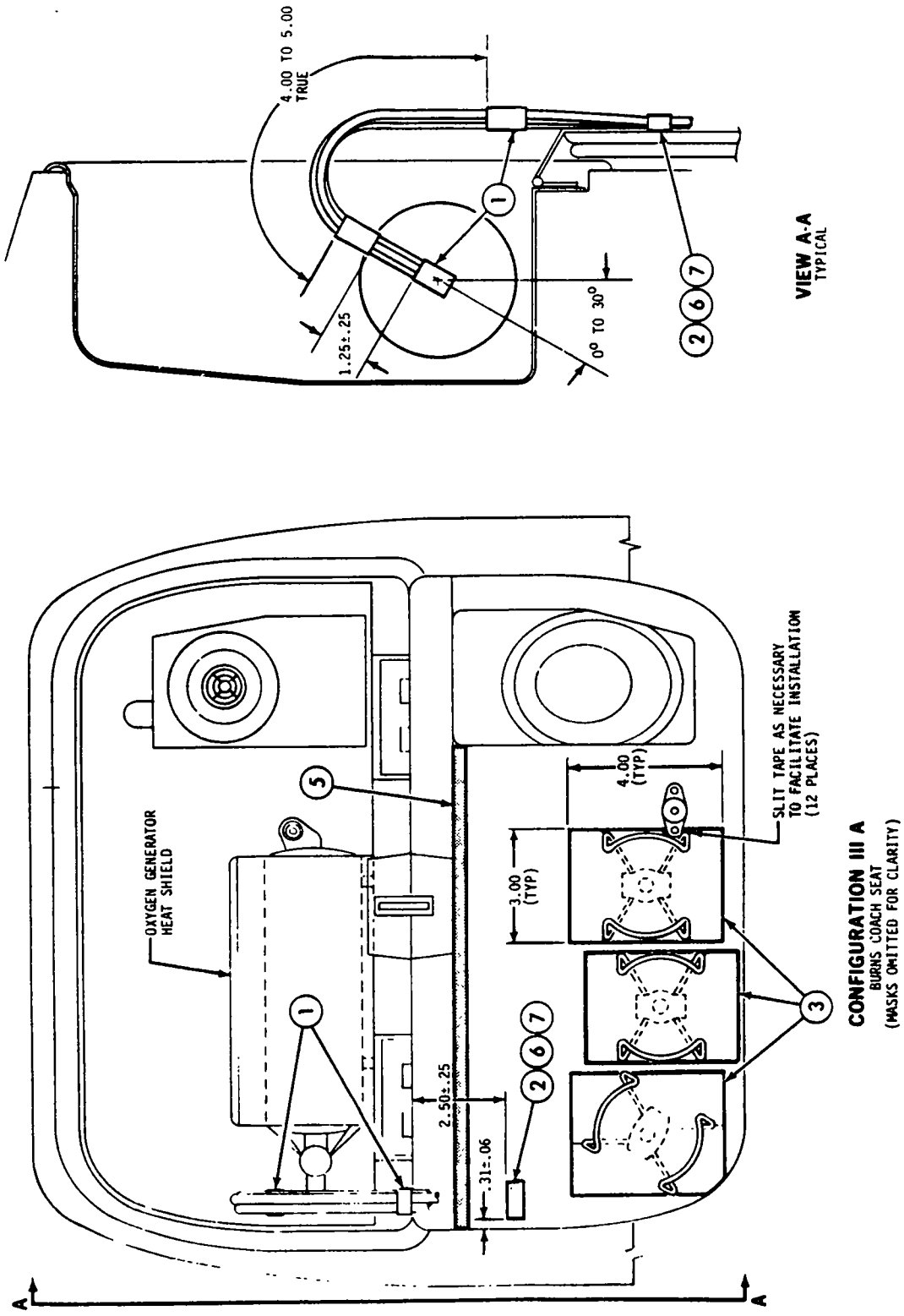


PASSENGER SEAT BACK OXYGEN COMPARTMENT - MODIFICATION

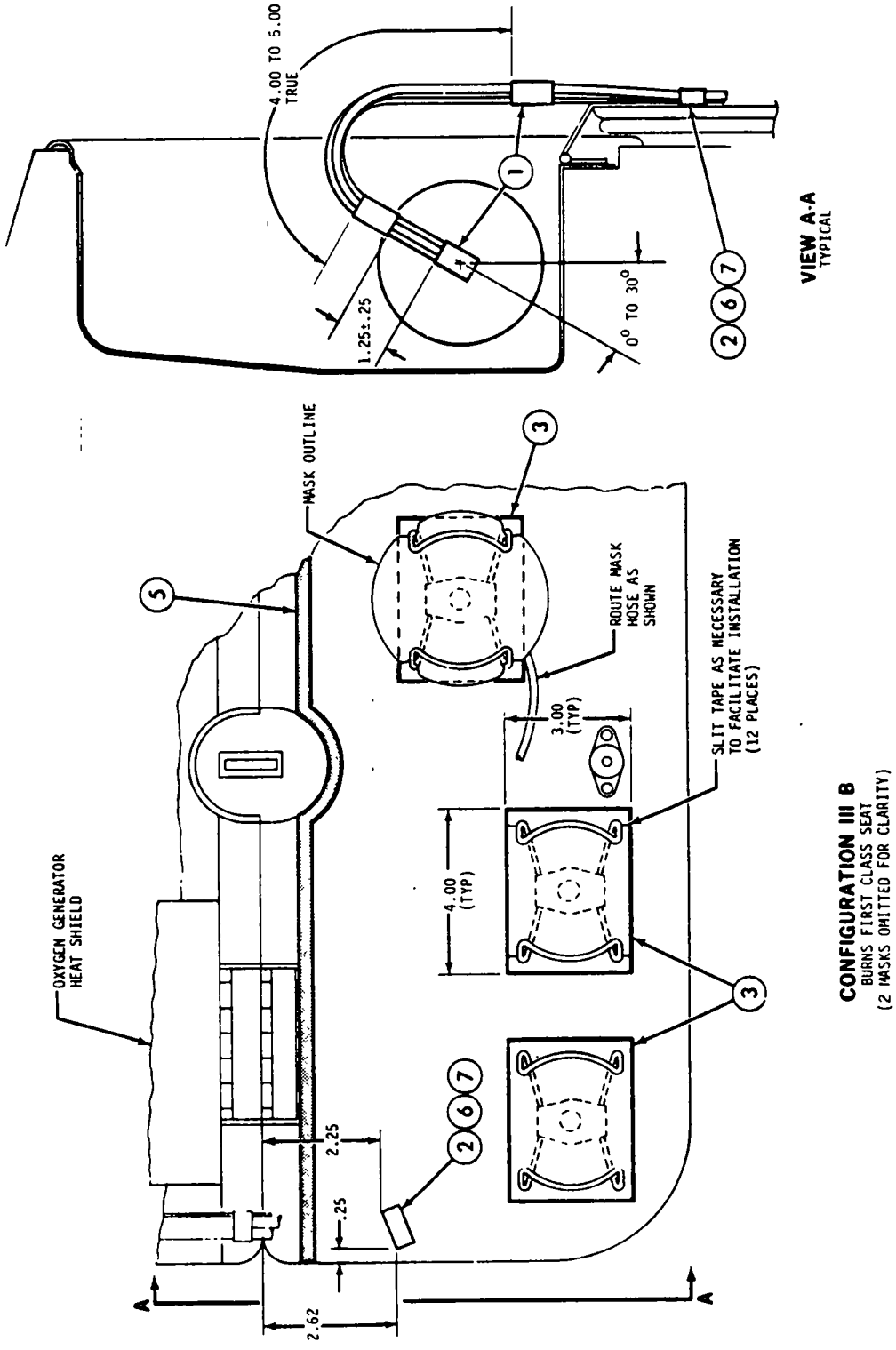
FIGURE 1 (SHEET 2 OF 8)



PASSENGER SEAT BACK OXYGEN COMPARTMENT - MODIFICATION

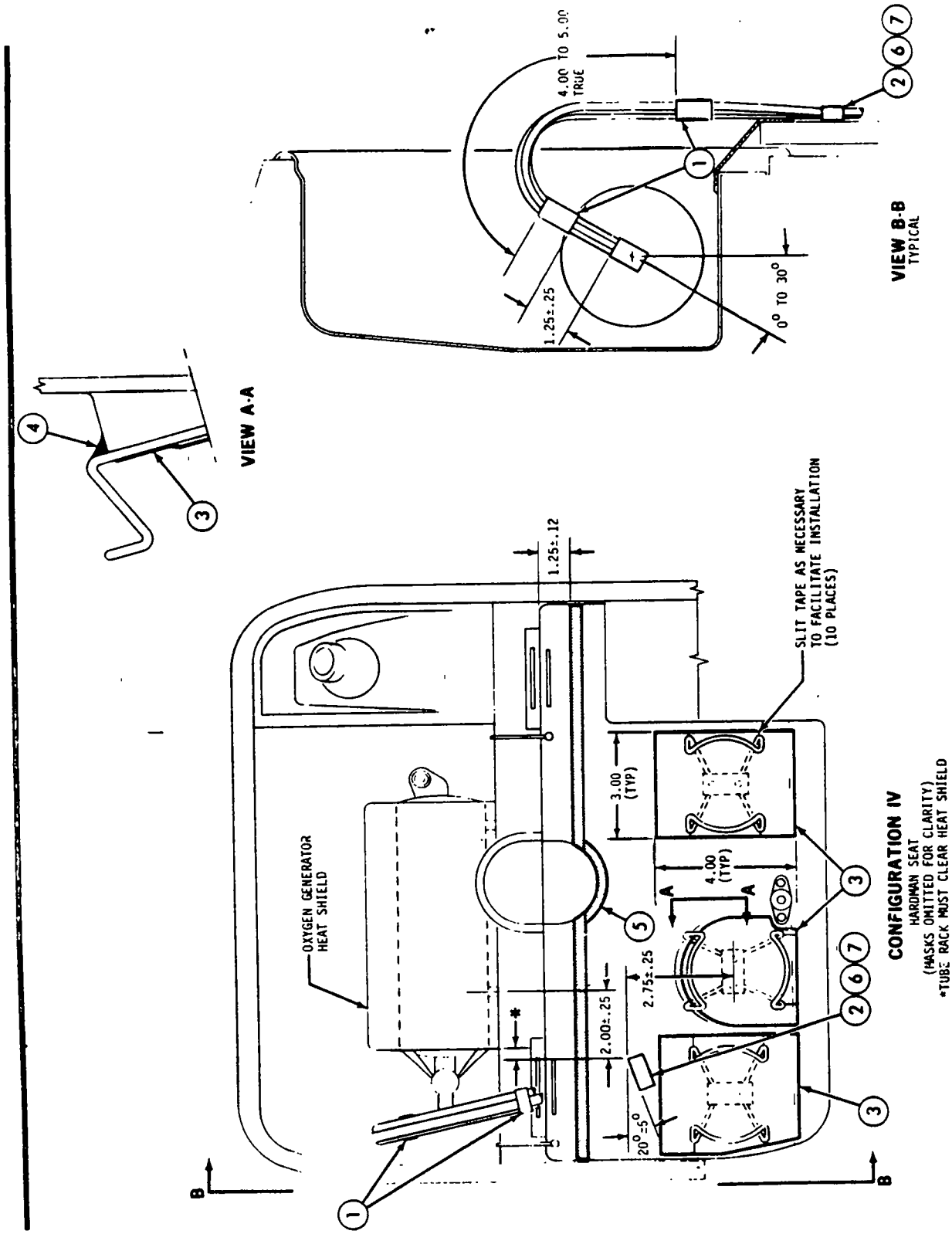


PASSENGER SEAT BACK OXYGEN COMPARTMENT - MODIFICATION

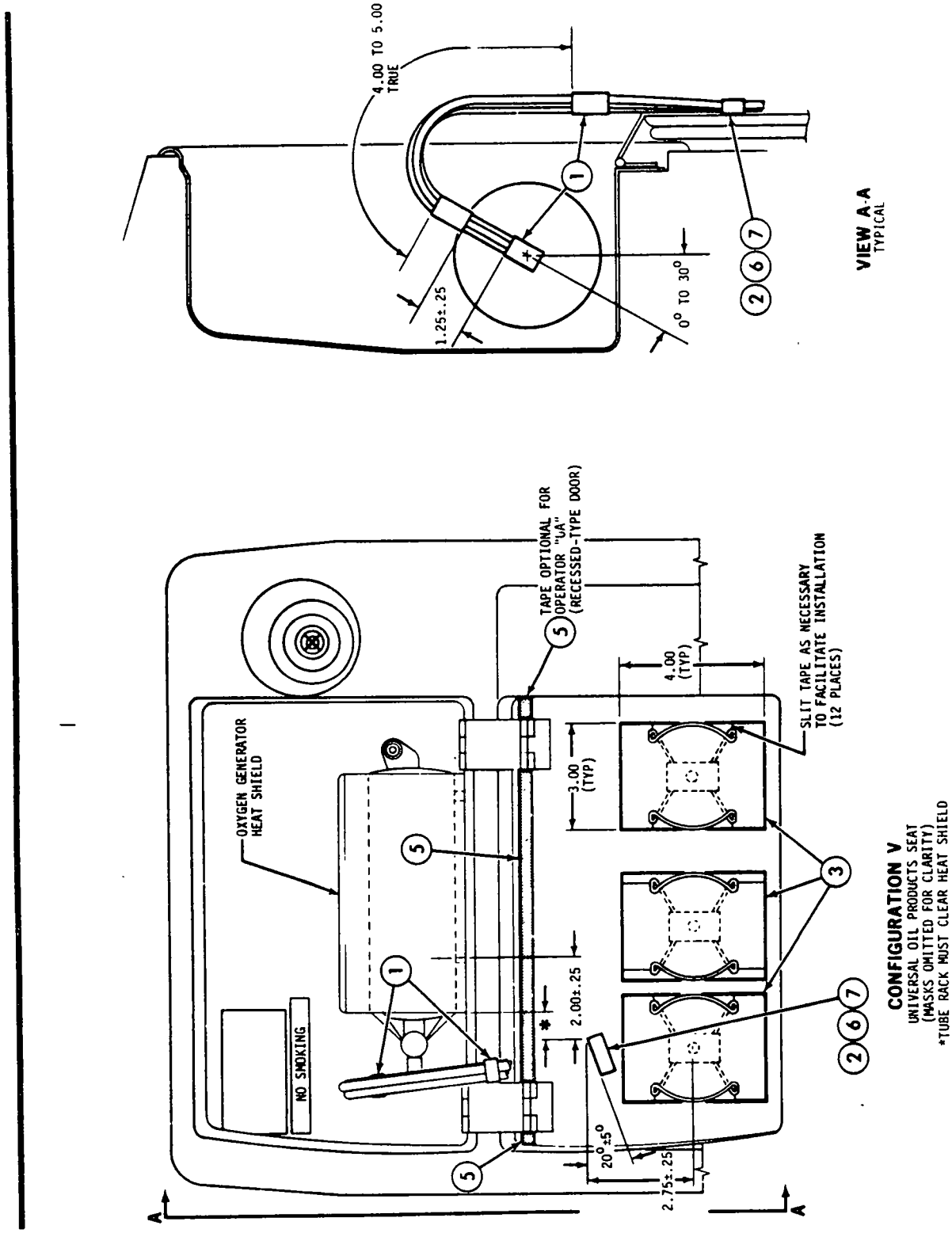


PASSENGER SEAT BACK OXYGEN COMPARTMENT - MODIFICATION

FIGURE 1 (SHEET 5 OF 8)

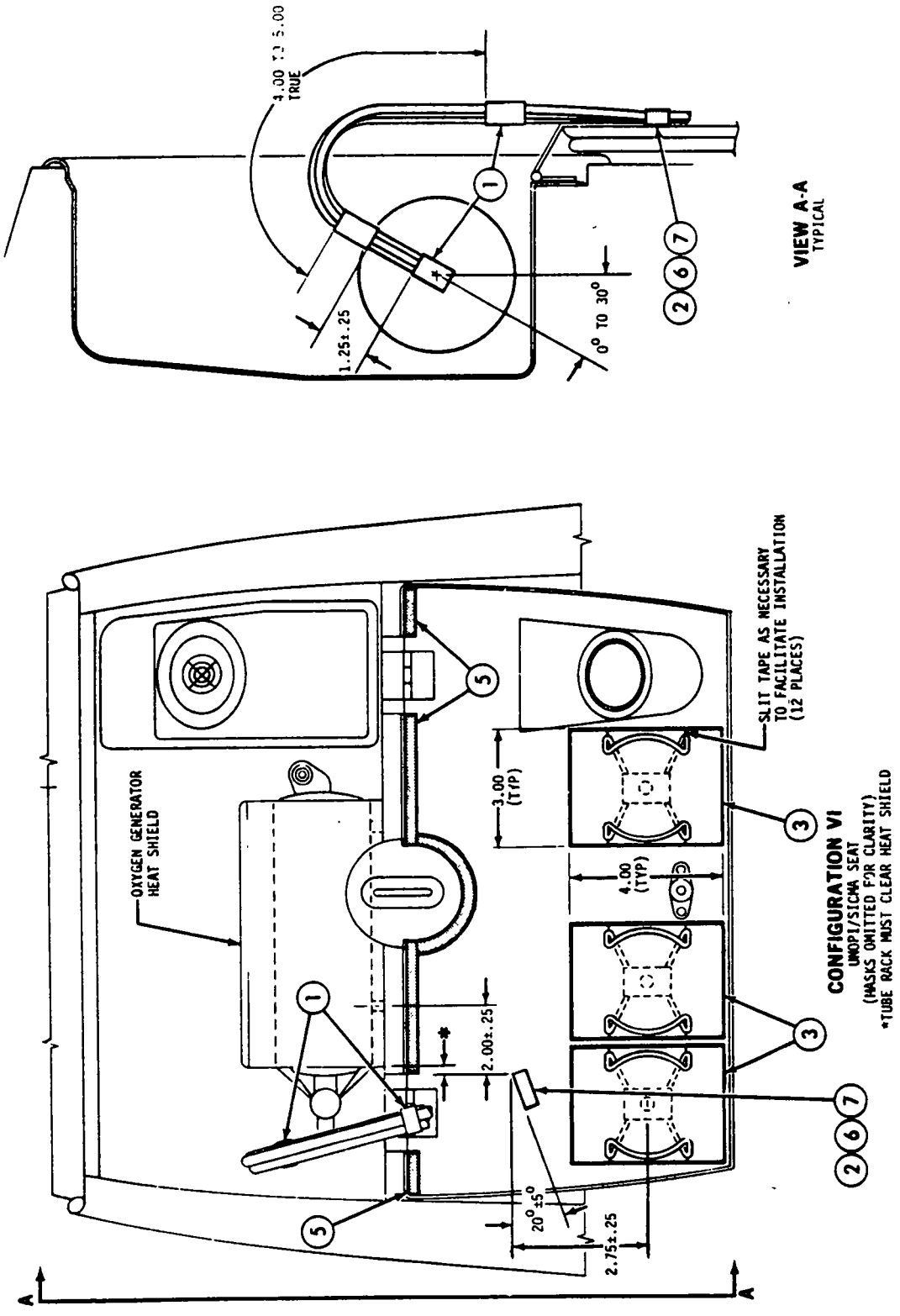


PASSENGER SEAT BACK OXYGEN COMPARTMENT - MODIFICATION



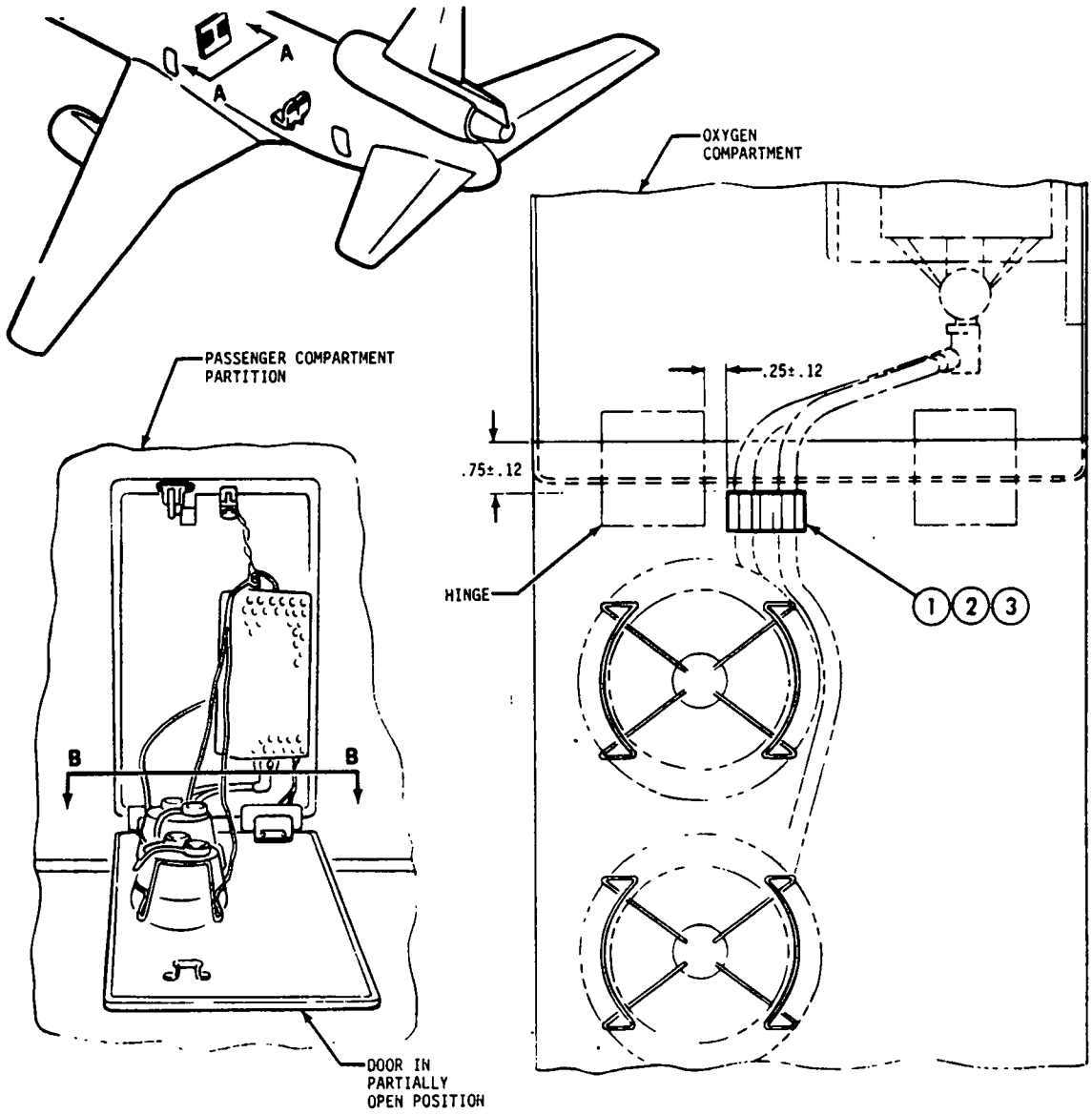
PASSENGER SEAT BACK OXYGEN COMPARTMENT - MODIFICATION

FIGURE 1 (SHEET 7 OF 8)



PASSENGER SEAT BACK OXYGEN COMPARTMENT - MODIFICATION

FIGURE 1 (SHEET 8 OF 8)



VIEW A-A
LOOKING FORWARD
PASSENGER COMPARTMENT PARTITION

VIEW B-B
DOOR SHOWN FULLY OPEN

GROUP I
CONFIGURATION VII

NOTE: INSTRUCTIONS ARE TYPICAL FOR ALL PASSENGER COMPARTMENT PARTITION INSTALLATIONS.

CAUTION: WHEN BONDING PART TO OXYGEN DOOR IN PASSENGER COMPARTMENT PARTITION, PREPARE FAYING SURFACES BY SANDING WITH A MEDIUM GRIT SANDPAPER TO REMOVE SURFACE GLOSS. REMOVE SANDING DUST USING CLEAN DRY CLOTH. DO NOT USE CLEANING SOLVENTS WHERE REFERENCED IN APPLICABLE DOUGLAS PROCESS STANDARDS (DPS).

(1) BOND NMC700-3 TUBE RACK TO DOOR, TO DIMENSIONS SHOWN, USING EA9311 A/B ADHESIVE. (SEE DPS 1.07-66, TYPE 6.)

CAUTION: DOOR FULL OPEN POSITION REQUIRED FOR MODIFICATION.

GROUP II
CONFIGURATION VII

(2) REMOVE 4282 TAPE FROM NMC700-3 TUBE RACK AND OXYGEN COMPARTMENT DOOR.

(3) BOND NMC700-3 TUBE RACK TO DOOR, TO DIMENSIONS SHOWN, USING EA9311 A/B ADHESIVE. (SEE DPS 1.07-66, TYPE 6.)

CAUTION: DOOR FULL OPEN POSITION REQUIRED FOR MODIFICATION.

PASSENGER COMPARTMENT PARTITION OXYGEN COMPARTMENT - MODIFICATION

3. Material Information:

A. The basis for the following material data is per passenger seat back oxygen compartment and passenger partition oxygen compartment.

Part and materials to be procured from operator's stock or sources indicated.

NOTE: FSCM indicates Federal Supply Code for Manufacturers.

Part/Material	Qty Group I Configuration I, III, V, and VI	Qty Group I Configuration II	Qty Group I Configuration IV	Qty Group I Configuration VII	Qty Group II Configuration I thru VII	FSCM	Supplier
*EA9311 A/B Adhesive or equivalent	3 Oz	3 Oz	3 Oz	3 Oz	3 Oz	33564	Hysol Division of Dexter Corporation 2850 Willow Pass Road Pittsburg, California 94565
NMC700-3 Tube Rack	1	1	1	1		12113	Union Plastics Corporation Pli-O-Seal Division 7119 Fair Avenue North Hollywood, California 91605
P-2650 Tape, Self Fusion **(1-inch wide, .010-inch thick) or equivalent	1 Ft	1 Ft	1Ft			99742	Johnson and Johnson Company Permacel Division New Brunswick, New Jersey 08901
P133UA Tape, Urethane Foam, (3/8-inch wide, 1/4-inch thick) or equivalent	2 Ft		2 Ft			29246	Arlon Products, Incorporated 19200 Laurel Park Road Compton, California 90220
P133UA Tape, Urethane Foam (3/8-inch wide, 3/8-inch thick) or equivalent		2 Ft					
Silastic 140, Silicone Adhesive or equivalent			3 Oz			Not Available	Dow Corning Corporation 3033 West Mission Road Alhambra, California 91803
425 Tape (3-inch wide) or equivalent	1 Ft	1 Ft	1 Ft			26066	Minnesota Mining and Manufacturing Company Industrial Tape Division 6023 South Garfield Avenue Los Angeles, California 90040

*Specify kit size in quarts or gallons
**Tape 1/2-inch wide, .020-inch thick, previously specified, is acceptable.

B. The basis for the following material data is per spares.

None.

ABA
HDW