



SERVICE BULLETIN

SUBJECT: REPOSITIONING OF OXYGEN REGULATORS.

1. Planning Information:

A. Effectivity:

(1) Aircraft Affected:

N22B-7

(2) Spares Affected:

None.

B. Reason

Embodiment of S/B N22-25-1, Crew Seat Re-location to avoid propeller plane, necessitates modification to the lower instrument panel to give increased leg room. This in turn requires re-location of the instruments associated with options G62, G68 and G71.

C. Description

Instruments associated with options G62, G68 and G71 are re-located.

D. Compliance

On compliance of S/B N22-25-1.

E. Approval

The rework described herein has been approved by the D.O.T. Designated Engineering Representative of the Government Aircraft Factory.

F. Manpower

Approximately 16 hours with a crew of 2 men are required to accomplish this modification.

- (3) Position loose-assembled parts and, using the two rivet holes drilled out in step (2) as a guide, drill three No. 30 holes in the stiffening flange 1C/N-10-643.
- (4) Remove panel N22-35-1-5 from the strut (to provide access) and attach the strut to the stiffening flange, using rivets MS20470AD4-5.
- (5) Attach the card holder (Ref. Fig. 1A) to the panel.
- (6) Install panel N22-35-1-5.

NOTE: Before installing the R.H. panel (N22-35-1-6), cut the mounting flange (Ref. Fig. 2) to provide clearance for the low-pressure gauge.

- G. Refer to Fig. 1A and install the high-pressure gauge, the oxygen regulator and the switches.
- H. Refer to Fig. 2 and install the low-pressure gauge, the oxygen regulator and the switch.
- I. Connect new wire L164A22 between terminal 1 of TB36 and the post light for the low-pressure oxygen gauge.
- J. Reconnect existing high-pressure pipe to the high-pressure gauge.
- K. Connect the following new low-pressure pipes:
 - (1) 1J/N-71-50, between the CREW OXYGEN shut-off valve and the L.H. oxygen regulator.
 - (2) 1K/N-71-50, between the L.H. and R.H. oxygen regulators.
 - (3) 1Z/N-71-45 and 1Y/N-71-50, between the CABIN OXYGEN shut-off valve and the low-pressure gauge. Use straight connector A400-6 to join the two pipes. Use elbow 400-2-2 to connect pipe 1Y/N-71-50 to the low-pressure gauge.

NOTE: Use the two new clamps MS21919D6-4 with existing two clips (one each side of the straight connector A400-6 on the aircraft centreline) to support the pipes.

- L. Reconnect oxygen system electrical services.
- M. Check for correct operation of the oxygen system and for leaks.
- N. This Service Bulletin incorporates the intent of modification N133 and 134.

C. Remove switches on the lower instrument panels. Remove and discard the following:

- a. L.H. and R.H. lower instrument panels.
- b. Oxygen pipes 1B/N-71-45, 1C/N-71-50, 1D/N-71-50 and 1H/N-71-50.
- c. Wire L100C22 between low-pressure gauge post light and TB35.

NOTE: Unless stated otherwise the following instructions, written for the L.H. side, apply to both sides.

CAUTION: IF MODIFYING AN INSTALLED PANEL, ENSURE THAT SERVICES BEHIND THE PANEL ARE NOT DAMAGED DURING REWORK.

D. Refer to Fig. 1A and rework the L.H. instrument panel 1/N-80-185 by cutting away the section indicated and relocating the receptacle as shown.

E. Refer to Fig. 1B and assemble and install panel 1A/N-71-118 as follows:

NOTE: Panel 1A/N-71-118 (L.H.) and panel 1B/N-71-118 (R.H.) are both mounted outboard of their associated oxygen regulator. Panel 1B/N-71-118 does not have provision for mounting an oxygen gauge.

- (1) Attach diaphragm N22-35-1-3 to panel 1A/N-71-118, using two bolts AN3-4A.
- (2) Drill out the three rivets on the vertical flange of the shock mounting.
- (3) Attach panel 1A/N-71-118 to shock mounting, using existing screws MS27039-1-07.
- (4) Rivet diaphragm N22-35-1-3 to shock mounting, using rivets AGS2050-424BS.
- (5) Relocate terminal block TB35 to position shown on Fig. 1A.

F. Refer to Fig. 1C and assemble and install panel N22-35-1-7, as follows:

- (1) Loose-assemble panel N22-35-1-5 to strut N22-35-1-7, using attaching parts supplied.
- (2) Drill out the two rivets at the end of the existing stiffening flange 1C/N-10-643.

G. Material-Price and Availability

The kit required to accomplish this modification shall be procured through the operators local distributor. Kit Part No. N22-35-1 is classified "no charge" and a "no charge" purchase order must be placed upon the distributor within 90 days to receive this offer. Distributors are to place a "no charge" purchase order on G.A.F. through the normal procurement method. Purchase orders are to quote the Service Bulletin number and the aircraft serial number.

H. Tooling-Price and Availability

None.

I. Weight and Balance

No change.

J. References

I.P.C., Chapter 39-10-01.

K. Publications Affected

I.P.C., Maintenance Manual, Wiring Diagram Manual.

2. Accomplishment Instructions

WARNING: ENSURE ALL ELECTRICAL POWER IS OFF AND THAT THE BATTERY IS DISCONNECTED.

STRICT SAFETY PRECAUTIONS MUST BE OBSERVED WHEN DISMANTLING, REWORKING OR ASSEMBLING THE OXYGEN SYSTEM.

CAUTION: ELECTRICALLY GROUND (EARTH) THE AIRCRAFT.

- A. Close the oxygen shut-off valves in the forward baggage compartment.
- B. In the cockpit relieve residual pressure in the oxygen system. Disconnect, remove and retain the following:
 - a. High-pressure gauge.
 - b. Low-pressure gauge.
 - c. Both oxygen regulators.
 - d. Card holder (L.H. lower instrument panel only).

3. Material Information

A. Parts Required per Aircraft

(1) One each Kit Part No. N22-35-1-1 is required per aircraft.

| <u>New Part No.</u> | <u>Qty. Per -1 Kit</u> | <u>Nomenclature</u> | <u>Old Part No.</u> |
|---------------------|------------------------|---------------------|---------------------|
| L164A22 | 1 | Cable | LL100G22 |
| N22-35-1-3 | 1 | Diaphragm Assy - LH | - |
| N22-35-1-4 | 1 | Diaphragm Assy - RH | - |
| N22-35-1-5 | 1 | Panel Assy - LH | 1/N-80-96 |
| N22-35-1-6 | 1 | Panel Assy - RH | 1/N-80-97 |
| N22-35-1-7 | 1 | Strut Assy - LH | - |
| N22-35-1-8 | 1 | Strut Assy - RH | - |
| 1A/N-71-118 | 1 | Panel - LH | 1/N-80-96 |
| 1B/N-71-118 | 1 | Panel - RH | 1/N-80-97 |
| 1J/N-71-50 | 1 | Pipe | 1C/N-71-50 |
| 1K/N-71-50 | 1 | Pipe | 1D/N-71-50 |
| 1L/N-71-50 | 1 | Pipe | 1H/N-71-50 |
| 1Y/N-71-45 | 1 | Pipe | 1B/N-71-45 |
| 1Z/N-71-45 | 1 | Pipe | - |
| 45/N-00-160 | 2 | Placard | 45/N-00-160 |
| AGS2050-424BS | 6 | Rivet | - |
| AN3-4A | 4 | Bolt | - |
| AN960D10 | 2 | Washer | - |
| AN960 D10L | 4 | Washer | - |
| AN960-10L | 4 | Washer | - |
| A400-2-2 | 1 | Elbow | - |
| A400-6 | 1 | Connector | - |
| MS20426AD2-4 | 2 | Rivet | - |
| MS20470AD4-5 | 12 | Rivet | - |
| MS21042L3 | 4 | Stiffnut | - |
| MS21042-3 | 2 | Stiffnut | - |
| MS21919D6-4 | 2 | Clamp | - |
| MS35207-262 | 4 | Screw | - |

(2) Parts to be modified and reidentified by the operator.

| <u>Old Part No.</u> | <u>Nomenclature</u> | <u>New Part No.</u> |
|---------------------|-----------------------|---------------------|
| 1/N-80-184 | Instrument Panel - RH | 2/N-80-184 |
| 1/N-80-185 | Instrument Panel - LH | 2/N-80-185 |

B. Parts Required to Modify Spares

None.

C. Removed Parts

| <u>Part No.</u> | <u>Nomenclature</u> | <u>Recommended Disposition</u> |
|-----------------|-----------------------|--------------------------------|
| 1/N-80-96 | Instrument Panel - LH | Scrap |
| 1/N-80-97 | Instrument Panel - RH | Scrap |
| 1B/N-72-45 | Pipe | Scrap |
| 1C/N-71-50 | Pipe | Scrap |
| 1D/N-71-50 | Pipe | Scrap |
| 1H/N-71-50 | Pipe | Scrap |
| A400-1-2 | Connector | Hold as spares. |

D. Special Tools and Equipment Required

None.

PREPARED BY:


GOVERNMENT AIRCRAFT FACTORIES,

POST DESIGN SECTION

APPROVED:



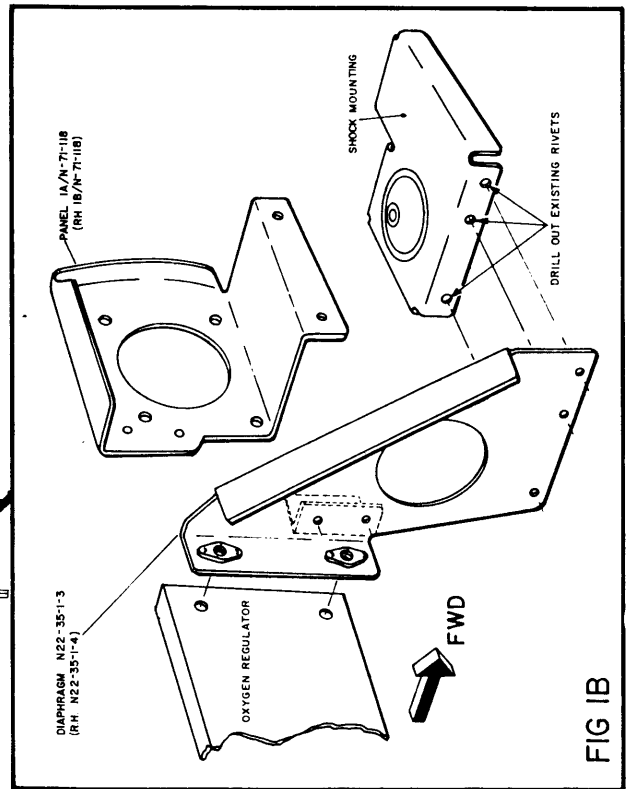
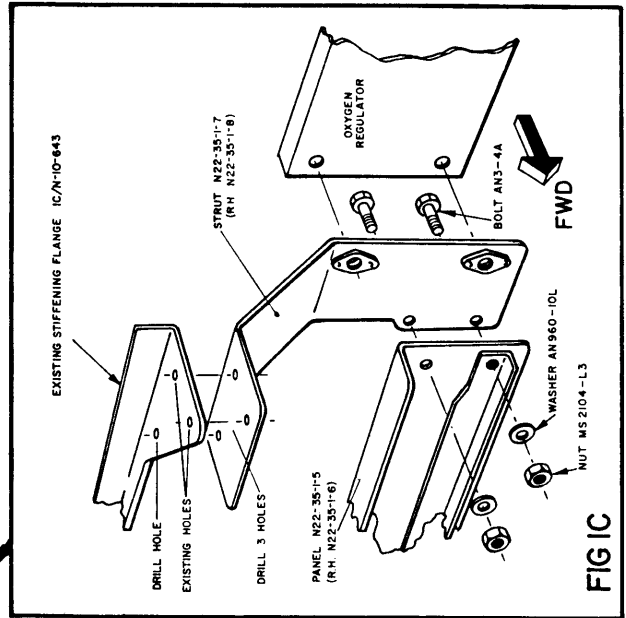
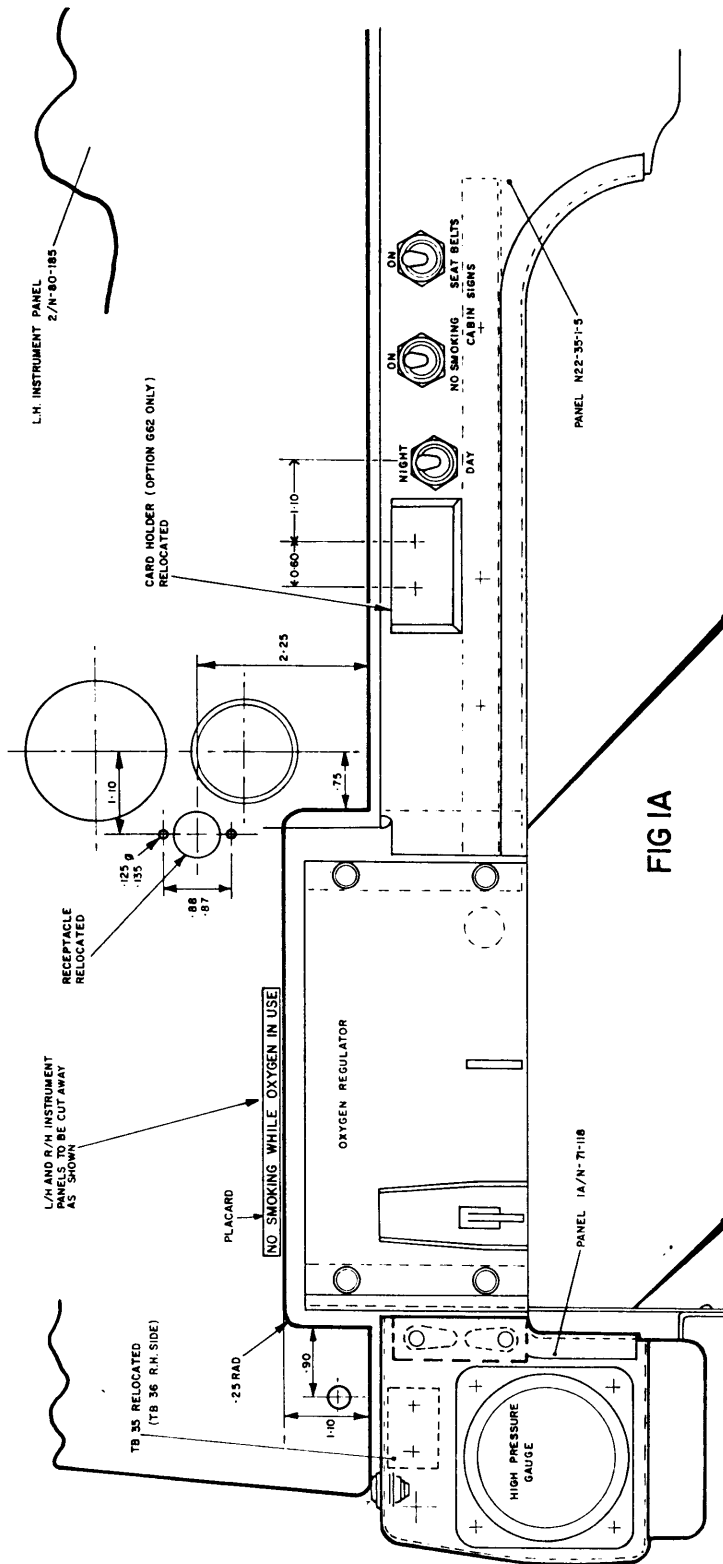


FIGURE 1 LH INSTRUMENT PANELS ASSEMBLY REWORK

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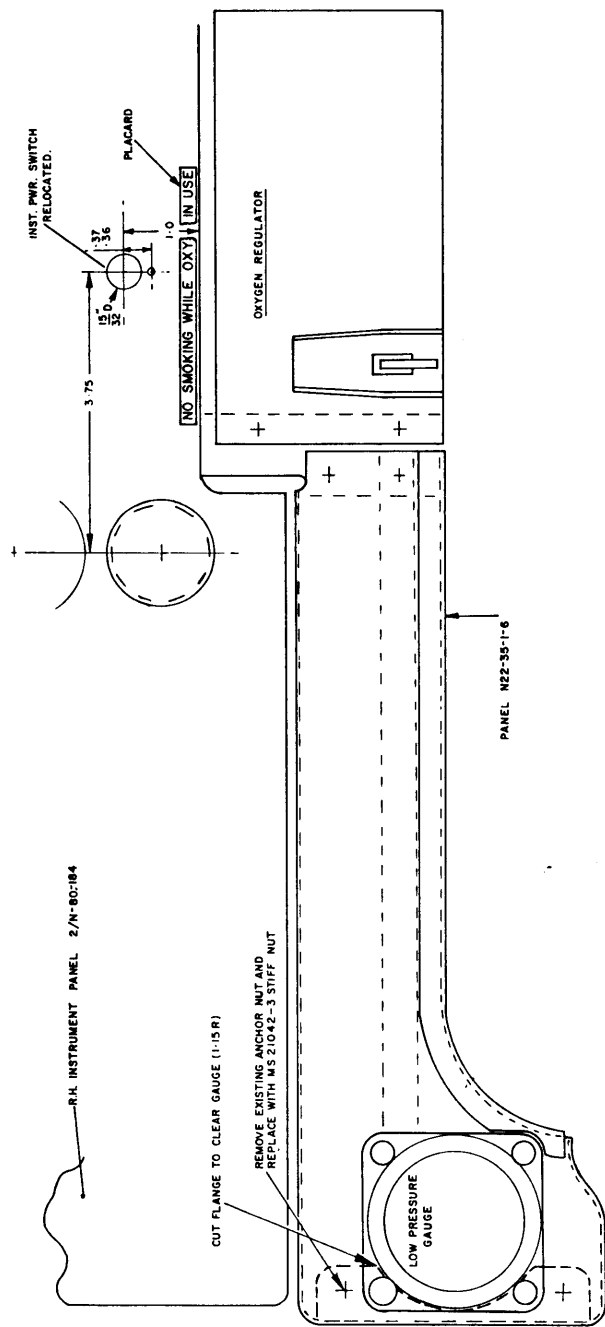


FIGURE 2 RH INSTRUMENT PANELS ASSEMBLY REWORK