Nomad
SERVICE BULLETIN

Reference No 227

TRANSMITTAL LETTER
FOR
SERVICE BULLETIN NMD-35-02 Rev 2

OXYGEN - CABIN SUPPLY PIPE - ADDITION OF PROTECTIVE SLEEVE (Mod N689)

Reason

1. To replace with silicone tubing, the PVC tubing installed in accordance with Service Bulletin NMD-35-02. The silicone tubing will provide electrical insulation without corrosion risk.

2. Revision 2 amends material availability information (page 4).

Instructions

3. Remove Service Bulletin NMD-35-02 Rev 1 dated 5 Nov 90 from Service Bulletin binder and insert the attached Service Bulletin NMD-35-02 Rev 2, dated 23 Apr 91. Annotate the Service Bulletin Index accordingly.

Revision Status

Original	17 Nov 89
Revision 1	5 Nov 90
Revision 2	18 Apr 91

J. **References**

Defect Report.

Maintenance Manual G71B, G71C and R72.

K. **Publications Affected**

Maintenance Manual - G71B, G71C and R72.

Illustrated Parts Catalogue - G71B, G71C and R72.

2. **ACCOMPLISHMENT INSTRUCTIONS**

WARNING

BEFORE ANY COMPONENT OF THE OXYGEN SYSTEM IS REMOVED OR INSTALLED AND WHILE WORK IS IN PROGRESS, THE PRECAUTIONS LISTED IN THE MAINTENANCE MANUAL SUPPLEMENT FOR THE APPROPRIATE VARIATION OF OPTION G71 OR R72 ARE TO BE OBSERVED.

A. Disconnect aircraft battery and external power connection to the aircraft.

B. Set BATTERY Switch on overhead console to OFF.

C. Close oxygen cylinder valve, crew outlet shut-off valve, and cabin outlet shut-off valve.

D. Open the hinged cabin trim panel to gain access to the electrical power panels on the left side of the aircraft. Remove the fuse and circuit breaker mounting panel immediately aft of Frame 132 on the left side of the aircraft.

E. On Oxygen pipe PN 1A/N-71-117 (Ref IPC, Option G71B, Fig 1, page 2, item 37 and similarly for Options G71C and R72), measure the length of metal pipe from the end of the flexible hose to the rear face of the coupling nut at the tee-union, and cut a piece of clear silicone tube, 3/8 inch inside diameter, to this length. Notch the ends of the silicone tubing as shown at Figure 1.

F. Remove oxygen pipe PN 1A/N-71-117 by loosening the hose clamp securing the flexible hose to the pipe, easing the flexible hose off the beaded end of the pipe, and releasing the coupling nut at the tee-union.

G. Remove the PVC tubing installed in accordance with the original issue of this Service Bulletin.

H. Inspect the pipe for signs of damage, corrosion or burning due to contact with the exposed terminals of components on the rear of the fuse panel. Pipes showing damage must be replaced.

I. Clean the pipe with a suitable oxygen degreasing agent, such as MEK or acetone, and slide the silicone tubing over the beaded end, and along the pipe until it touches against the rear face of the coupling nut.

NOTE

Check bore of silicone tubing for cleanliness before sliding over the pipe.

Nomad
SERVICE BULLETIN

OXYGEN - CABIN SUPPLY PIPE
ADDITION OF PROTECTIVE SLEEVE (MOD N689)

1. **PLANNING INFORMATION**

A. **Effectivity**

(1) Aircraft Affected

All N22-Series and N24-Series aircraft with oxygen outlets in the passenger cabin (Customer Options G71B, G71C, or R72) whose log books do not already record compliance with this Service Bulletin revision.

(2) Spares Affected

None

B. **Reason**

To replace with silicone tubing, the PVC tubing installed in accordance with this Service Bulletin at original issue. The silicone tubing will provide electrical insulation without corrosion risk.

C. **Description**

The oxygen pipe behind the panel is protected by installing an insulating sleeve over it (Ref Fig 1).

D. **Compliance**

Either, within the next 100 hrs TIS or 3 months from the date of this Revision; whichever occurs first.

E. **Approval**

This modification is approved pursuant to CAR 35 and conforms with type certification requirements.

F. **Manpower**

1.5 Manhours.

G. **Material - Price and Availability**

The materials required are to be obtained from operator's stock or procured from local sources (Ref Para 3).

H. **Tooling - Price and Availability**

None required.

I. **Weight and Balance**

None.

Page No	1	2	3	4	5
Rev No	2	2	2	2	Deleted

J. Re-assemble the pipe to the flexible hose and the tee-union, but do not fully tighten the hose clamp or the coupling nut.

K. Temporarily assemble the fuse panel, and check the alignment of pipe PN 1A/N-71-117 ensuring that it has adequate clearance from the back of the fuse panel to allow movement of the fuse holders when replacing fuses. If necessary, the pipe may be moved to give more clearance after loosening the pipe coupling fittings at each end of the tee-union on the vertical pipe assembly behind Frame 132.

L. When satisfactory adjustment has been made, tighten the coupling nut onto the tee-union, and tighten the hose clamp on the flexible hose. Ensure that the silicone tube is held between the rear face of the coupling nut and the end of the flexible hose, without looseness, or movement along the pipe.

M. Apply suitable leak test compound to all joints or couplings which have been reconnected or disturbed.

N. Check that the crew outlet shut-off valve is closed then open the cylinder valve and the cabin outlet shut-off valve.

O. Check all joints or couplings which have been reconnected or disturbed for leaks, and fix where necessary.

P. Purge the cabin oxygen system.

Q. Close the cabin outlet shut-off valve and the cylinder valve.

R. Refit the fuse and circuit breaker panel and close the hinged trim panel.

S. Reconnect aircraft battery and restore external power supply as required.

3. MATERIAL INFORMATION

The following represents one aircraft set of parts, which can be obtained from operator's stock or from ASTA General Aviation. Price on application.

New Part No	Qty	Description	Old Part No	Instruction/Disposition
NMD-35-02-2	150 mm (6 in) approx	Silicone tubing, 3/8 in ID, MIL-R-5847 Class 1, Hardness Durometer 50		

4. RECORDING ACTION

Record compliance with Service Bulletin NMD-35-02 Rev 1 in the Airframe Log Book.

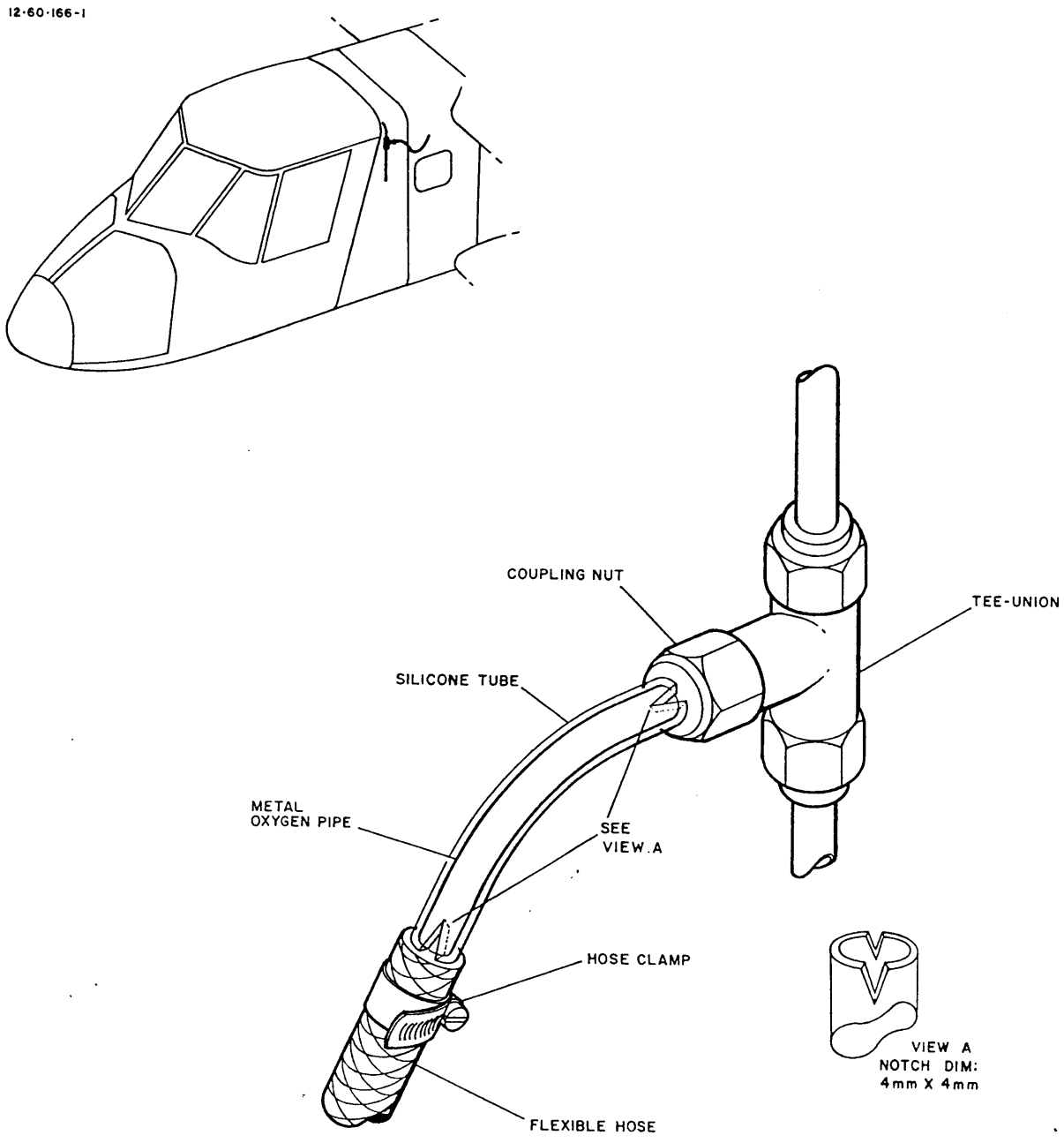

Figure 1 Installation of Protective Sleeve