



Supplement to Certificate of Compliance

Certificate: 1466154

Master Contract: 221753

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
1466154	2003/09/09	Original: Medical Hose Assemblies Model HS-XXYZ-XXYYXX



Descriptive and Test Report

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REPORT: 1466154

PROJECT: 1466154

Edition 1: September 09, 2003; Project 1466154 – Toronto
Issued by Peter Cheung, P. Eng.

Contents: Pages – Pages 1 to 13
Photographs – Photos 1 to 4
Illustrations – Ills 1 to I-3

PRODUCTS

CLASS 8703 01 - ANAESTHETIC AND MEDICAL GAS EQUIPMENT - Connecting Assemblies

Medical Gas Low Pressure Connecting Hose Assemblies Model HS-XXYZ-XXYYXX (where X, Y, Z can be any letter or number as described in the report).

The test report shall not be reproduced, except in full, without the approval of CSA International.

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APPLICABLE STANDARDS

The product, as described in this report, complies with:

CAN/CSA-Z305.2-M88- Low-Pressure Connecting Assemblies for Medical Gas Systems

MARKINGS

Each assembly bears the following permanent markings provided by tag covered by transparent heat-shrinkable tubing:

- Submitter's name or CSA file number LH close to the CSA Mark;
- CSA Mark;
- "CSA STD Z305.2";
- Model designation (cat no);
- Date or date code (serial number);
- Inlet and outlet connectors are identified by the chemical or chemical symbol;
- Hose is colour coded per standard requirements.

ALTERATIONS

The units are marked as noted under "MARKINGS" above.

FACTORY TESTS AND QUALITY CONTROL

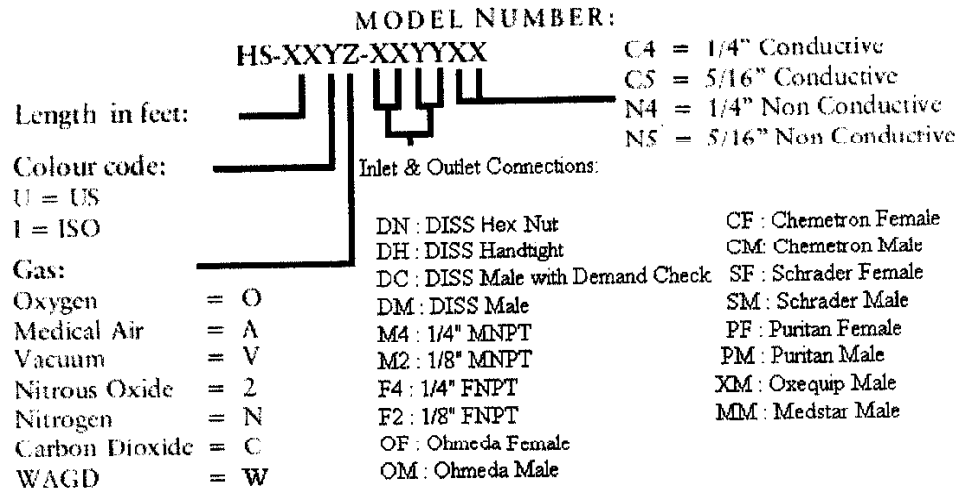
The following tests, required by Part II of Std Z305.2 are performed on each assembly at the conclusion of manufacture: These tests form a part of the quality control system to ensure that the product can be manufactured in accordance with the CSA requirements on a continuing basis.

Gas Specificity Test, Cls 5.5.6, 4.5;
Leakage Test, Cl 7.2 (Note: For vacuum test, positive pressure may be applied instead of negative pressure to allow bubble counts.)
Flow Pressure Drop Test, Cl 7.3

The manufacturer has a documented system of recall detailing the steps to be taken to ensure that defective units can be recalled, if necessary.

DESCRIPTION

DESCRIPTION



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Model: HS- XXYZ-XXYYXX

Type: Medical non-conductive hose assembly; Colored hose, 0.46 in OD (1/4" ID) and 0.560 in OD (5/16" ID)

Connectors: Refer to Designation above on different inlet, outlet, and type of connectors.

Hose: (CI 3.1.2)

Material: Inner tube 1 - clear non-conductive PVC, P/N 002-00900130; Inner tube 2 - Non DEHP PVC, P/N 001-01200122; Reinforcement - Two polyester yarn, DTEX P/N 021-11; Outer shell - standard PVC, P/N 001-01200122.

Colour: Coloured outer shell, clear inner tube.

Thickness of Outer Wall: 1mm

Thickness of Inner Wall: 1.50mm

Internal Diameter: 6.25mm and 7.81mm

External Diameter: 11.5mm and 14mm

Rated Burst Pressure: 1000PSI

Marking: Amvex Medical Hose Assembly (USE NO OIL) 200 PSI

Hose Attachment to Connectors: CI 3.2 Hose mounted on serrated nipple and clamped with brass ferrule. Ferrule thickness is 0.02 inches thick. 1/4 inch hose uses a 0.5 inch ID ferrule by 0.75 inch long. 5/16 inch hose uses a 0.575 inch ID ferrule by 1.0 inch long. (Note: All types of connectors have same mechanical and dimensional attachment of hose to connector.)

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TEST REPORT

The following tests were conducted at submitter facility on August 18, 2003 with satisfactory results:

Devices Tested: Model HS-06UN-DFDFC4, HS-06IO-DFDFC4 (Note: models -DFDFC4 is same as -DNDN for specific customer only, as per Amvex Corporation).

Temperature: 30C

Integrity of Assembly: Pressure: (Cls 4.1, 5.5.2)

Test Pressure: 500 psi

Result: Satisfactory

Occlusion Resistance: (Cls 4.2, 5.5.3)

Inlet Connection: Oxygen supply at 345 kPa (50 psi)

Outlet Connection: Flowmeter and control valve.

Gas Flow: 30 L/min.

Weight Applied: 14kg/cm²

Flow Rate: 30 L/min (Location 1), 30.4 L/min (Location 2), 30.5 L/min (Location 3), 30.5 L/min (Location 4), 30.5 L/min (Location 5)

Strength of Assembly: Tension: (Cls 4.3, 5.5.4)

Test Weight: 10 kg (22 lbs).

Result of Straight Impact Test: Satisfactory

Electrical Resistance: (Cls 4.4, 5.5.6) None

Gas Specialty: (Cls 4.4, 5.5.6) Satisfactory

Legibility: (Cls. 4.6, 5.5.7) Satisfactory

The following tests were conducted / submitted by Amvex Corporation and reviewed satisfactory results:

A) Device Tested: Model HS-06IV-DFDFC5

Temperature: 23C

Integrity of Assembly: Pressure: (Cls 4.1, 5.5.2)

Test Pressure: 500 psi

Result: Satisfactory

Occlusion Resistance: (Cls 4.2, 5.5.3)

Inlet Connection: Nitrous oxide supply at 345 kPa (50 psi)

Outlet Connection: Flow control valve plus flowmeter.

Gas Flow: 30 L/min.

Weight Applied: 14.0kg/cm² (180 lbf/in²)

Flow Rate: 30 L/min (Location 1), 31 L/min (Location 2), 31 L/min (Location 3), 31 L/min (Location 4), 30 L/min (Location 5)

Inlet Connection: Vacuum pump at 67.2 kPa (9.7 psi)

Outlet Connection: Flow control valve plus flowmeter.

Weight Applied: 14.0kg/cm² (180 lbf/in²)

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Flow Rate: (21.2 in Hg Location 1), (21.2 in Hg Location 2), (21.3 in Hg Location 3), (21.2 in Hg Location 4), (21.4 in Hg Location 5).

Strength of Assembly: Tension: (Cls 4.3, 5.5.4)

Test Weight: 10 kg (22 lbs).

Result of Straight Impact Test: Satisfactory

Electrical Resistance: (Cls 4.4, 5.5.5) None

Gas Specialty: (Cls 4.4, 5.5.6) Satisfactory

Legibility: (Cls. 4.6, 5.5.7) Satisfactory

B) Devices Tested:

HS-06UO-CFCMC4 (Six feet, 1/4 inch Oxygen gas conductive hose, Inlet Connector: Chemetron Female; Outlet connector: Chemetron Male;)

HS-06UO-OFOMC4 (Six feet, 1/4 inch Oxygen gas conductive hose, Inlet Connector: Ohmeda Female; Outlet connector: Ohmeda Male;)

HS-06UO-PFPMC4 (Six feet, 1/4 inch Oxygen gas conductive hose, Inlet Connector: Puritan Female; Outlet connector: Puritan Male;)

HS-06UO-SFSMC4 (Six feet, 1/4 inch Oxygen gas conductive hose, Inlet Connector: Schrader Female; Outlet connector: Schrader Male;)

Strength of Assembly: Tension: (Cls 4.3, 5.5.4)

Test Weight: 10 kg (22 lbs).

Result of Straight Impact Test: Satisfactory

Gas Specialty: (Cls 4.4, 5.5.6) Satisfactory

Legibility: (Cls. 4.6, 5.5.7) Satisfactory

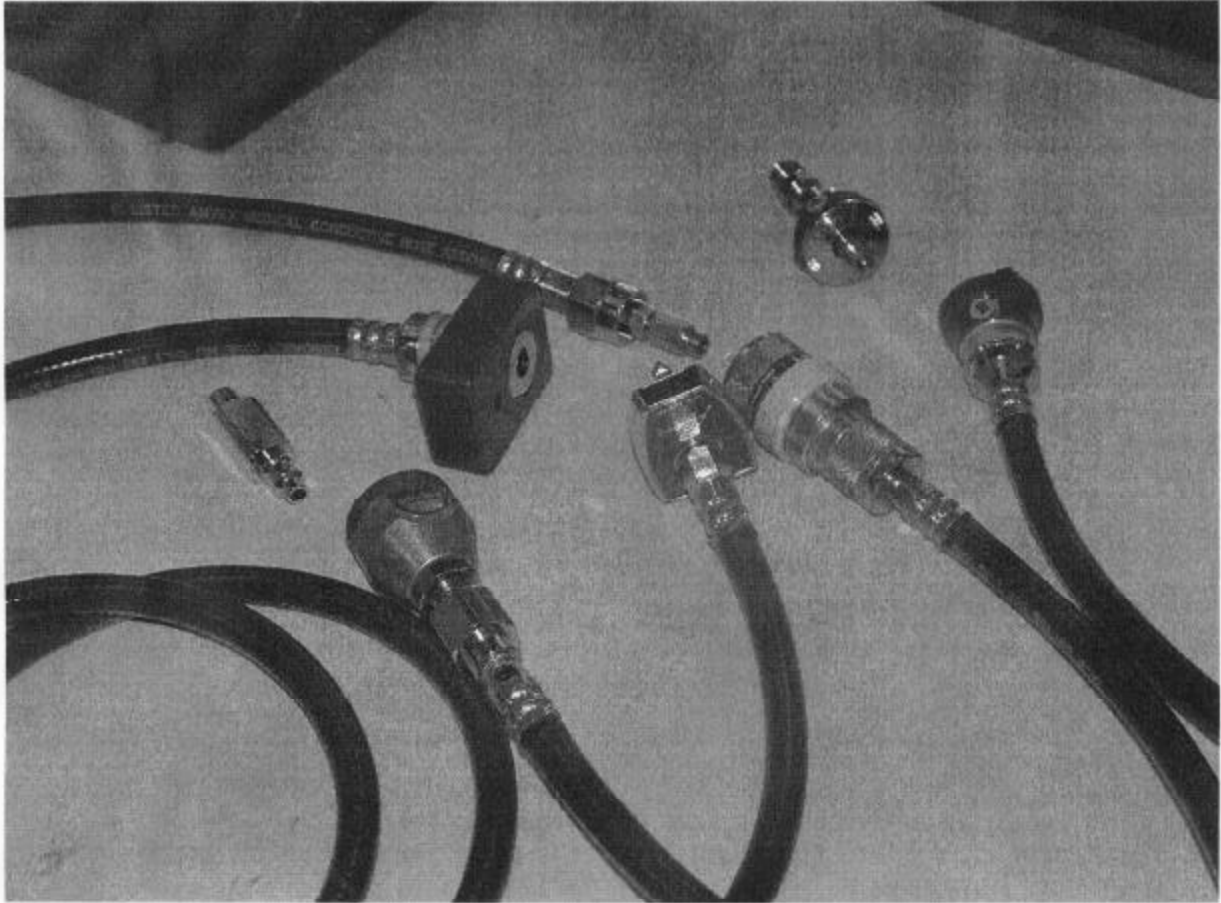


FIG 1



FIG 2

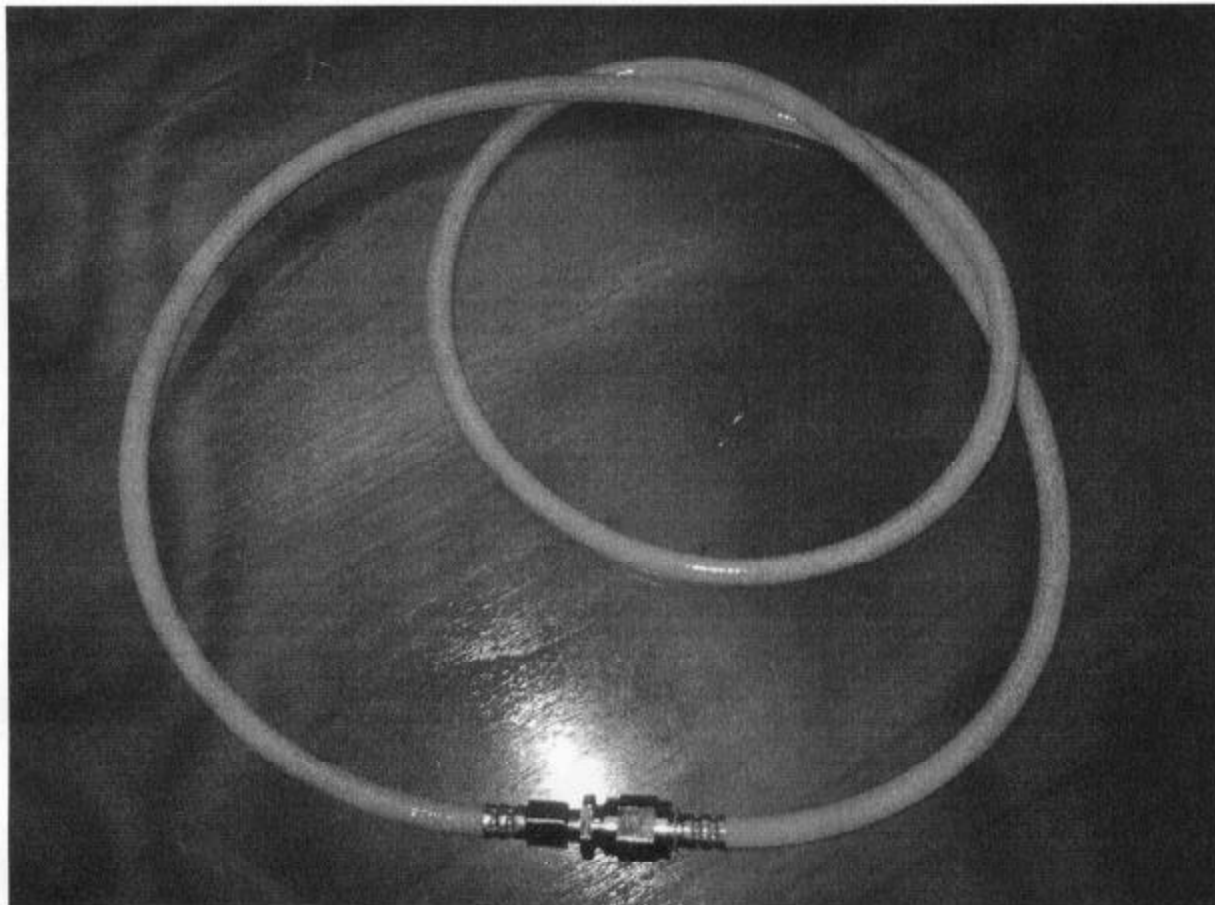


FIG 3

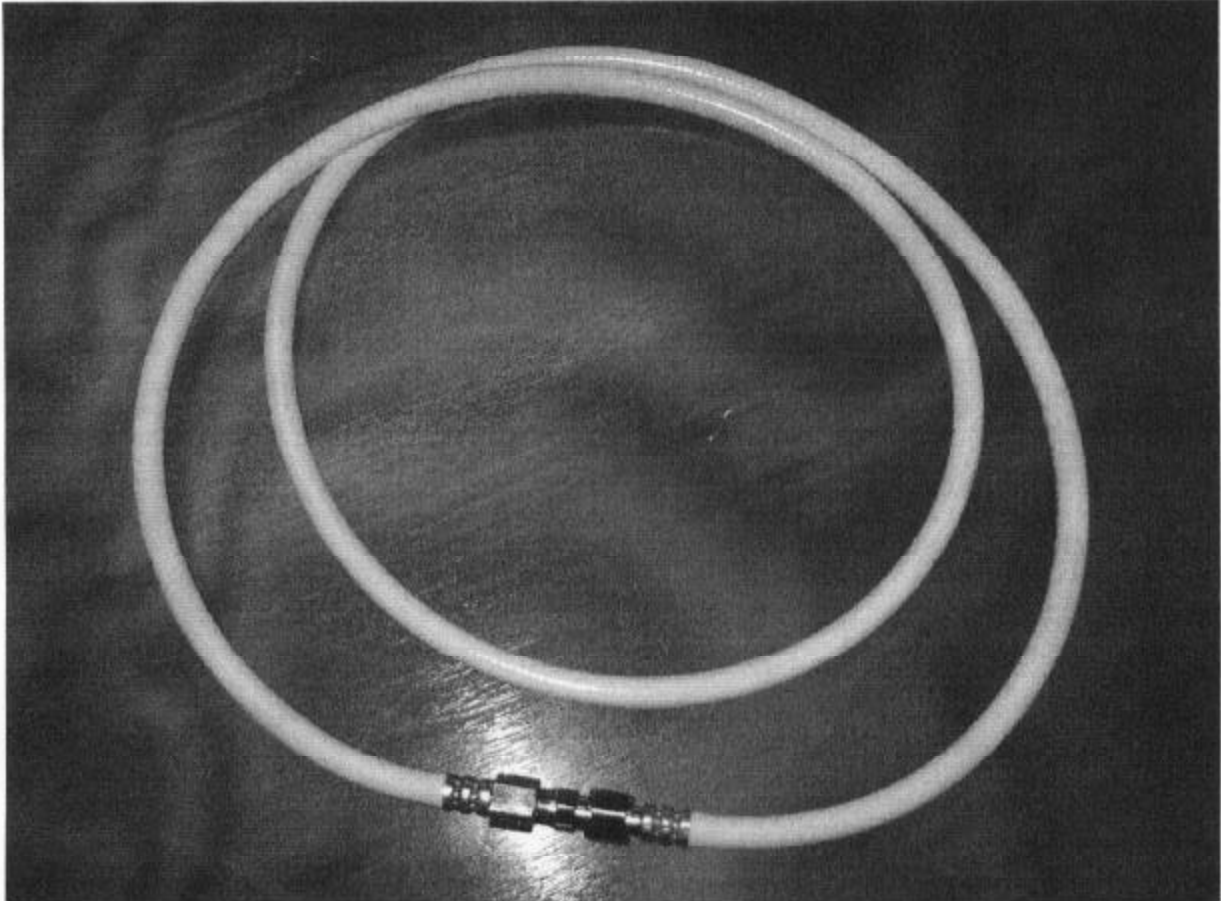


FIG 4



FIG 5

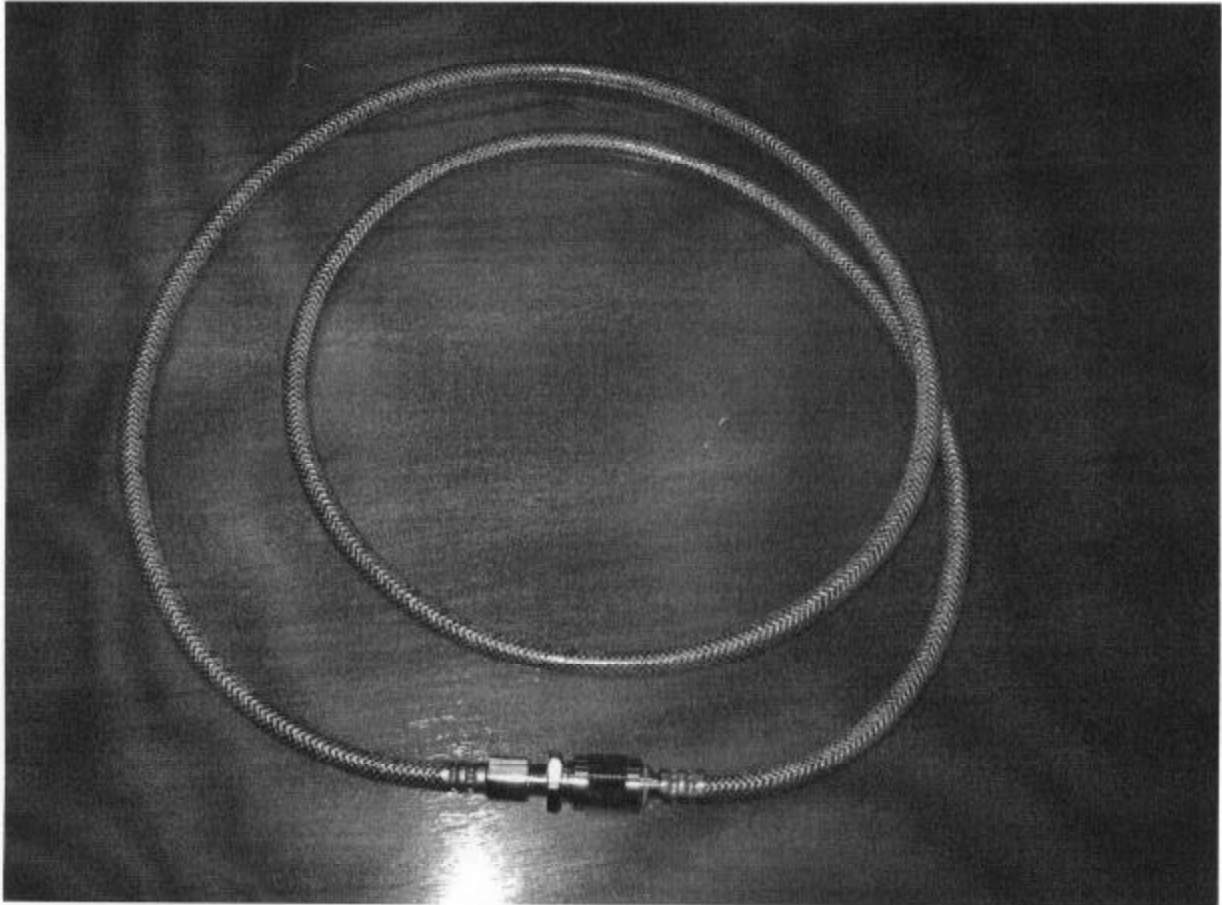


FIG 6

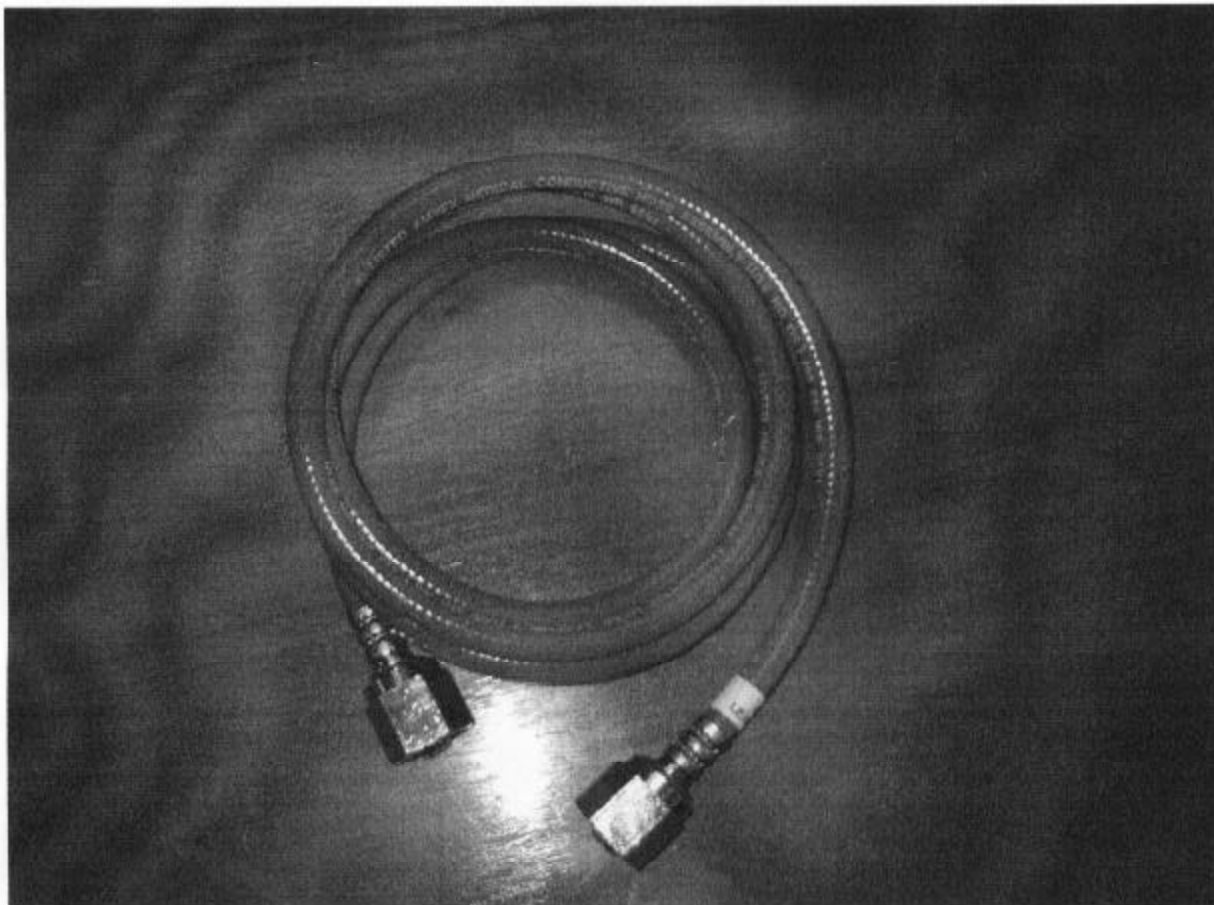


FIG 7