

Chapter 10

A.V.S. AND ANTI-G SUIT CONNECTORS

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Introduction

1. This chapter describes the various fittings and adapters required to make the connection from the hoses on the A.V.S. and anti-g suits to the oxygen mask and pressure jerkin hose assemblies described in Chapters 8 and 9.

DESCRIPTION**A.V.S. connectors (fig. 1)**

2. The A.V.S. connector Mk. 1 (Ref. 6D/2113) terminates the length of $\frac{5}{8}$ in. dia. anti-kink hose on the Mk. 2A air ventilated suit. It is provided with a knurled clamping ring which engages the A.V.S. bush on the fighter type P.E.C.s on the following assemblies:—

- (1) Oxygen mask hose assembly Mk. 1
- (2) Pressure jerkin hose assembly Mk. 2
- (3) Pressure jerkin hose assembly Mk. 6

This connector incorporates the valve to the A.V.S. supply source which opens when the parts of the P.E.C. are mated. ◀ A rubber sealing ring is retained by a shoulder on the body of the connector and ensures an airtight connection when the clamping ring is screwed on to the P.E.C. ▶

3. The A.V.S. connector Mk. 2 (Ref. 6D/2217) terminates the length of the $\frac{5}{8}$ in. dia. anti-kink hose on the Mk. 2A air ventilated suit. It is designed to mate with the naval type A.V.S. valve chamber on the fighter type P.E.C.s on the following assemblies:—

- (1) Oxygen mask hose assembly Mk. 4
- (2) Pressure jerkin hose assembly Mk. 5

4. The A.V.S. quick-release plug (Dunlop) (Ref. 6D/2234) is the standard termination of the $\frac{5}{8}$ in. anti-kink hose on the air ventilated suit when a P.E.C. is not provided. It is designed to couple directly with the A.V.S. quick-release socket (Dunlop) (Ref. 27VA/3445) installed in the aircraft. This A.V.S. connector is used in conjunction with the following assemblies:—

- (1) Oxygen mask hose assembly Mk. 7
- (2) Pressure jerkin hose assembly Mk. 9

Anti-g suit connectors (fig. 1)

5. The anti-g suit connector Mk. 1 (Ref. 6D/2114) terminates the length of $\frac{1}{2}$ in. dia. anti-kink hose on the Mk. 5A anti-g suit when used in the true anti-g role. It is provided with a

knurled clamping ring which engages the anti-g bush on the fighter type P.E.C.s used on the following assemblies:-

- (1) Oxygen mask hose assembly Mk. 1
- (2) Oxygen mask hose assembly Mk. 4
- (3) Pressure jerkin hose assembly Mk. 2
- (4) Pressure jerkin hose assembly Mk. 5

The connector incorporates a cross-pin which opens the anti-g supply valve when the two halves of the P.E.C. are mated.

6. The anti-g suit connector Mk. 2 (Ref. 6D/2170) terminates the length of $\frac{1}{2}$ in. dia. anti-kink hose on the Mk. 5A anti-g suit when used as a protective pressure garment only. It is a bayonet socket type fitting designed to engage the anti-g demand E.O. and Y-piece assemblies used on the following:-

- (1) Pressure jerkin hose assembly Mk. 4
- (2) Pressure jerkin hose assembly Mk. 6
- (3) Pressure jerkin hose assembly Mk. 7
- (4) Pressure jerkin hose assembly Mk. 9

The connector incorporates a probe which opens the valve in the hose assembly fittings when coupled.

A.V.S. hose assemblies (fig. 2)

7. These A.V.S. connectors all incorporate a short length of $\frac{1}{8}$ in. dia. anti-kink hose and a special adapter (Pt. No. JC1669/178D) to connect the $\frac{7}{8}$ in. dia. hose to the $\frac{3}{8}$ in. dia. hose on the Mk. 2A air ventilated suit.

8. A.V.S. hose assembly Mk. 1 (Ref. 6D/◀ 2171 ▶) connects the hose of the Mk. 2A A.V.S. to the bomber type P.E.C.s on the following assemblies:-

- (1) Oxygen mask hose assembly Mk. 2
- (2) Pressure jerkin hose assembly Mk. 3

The end fitting of this assembly is an A.V.S. connector Mk. 4 which incorporates the valve to the A.V.S. supply source. This valve opens when the two halves of the P.E.C. are mated.

9. A.V.S. hose assembly Mk. 2 (Ref. 6D/2174)

connects the hose of Mk. 2A A.V.S. to the MSC3 type P.E.C.s used on the assemblies:-

- (1) Oxygen mask hose assembly Mk. 3
- (2) Oxygen mask hose assembly Mk. 5
- (3) Pressure jerkin hose assembly Mk. 4
- (4) Pressure jerkin hose assembly Mk. 7

The end fitting of this assembly is an A.V.S. connector Mk. 6 (Ref. 6D/2126) which fits into the socket on the front end of the MSC3 type P.E.C. It incorporates a sliding sleeve which is pressed in when the two halves of the P.E.C. are mated, opening the valve to the A.V.S. supply.

10. A.V.S. hose assembly Mk. 3 (Ref. 6D/◀ 2262 ▶) connects the hose of the Mk. 2A A.V.S. to the fighter type P.E.C.s. The end fitting (A.V.S. connector Mk. 6) is almost identical with A.V.S. connector Mk. 1 (Ref. 6D/2113) except for the diameter of the anti-kink thread shank $\frac{7}{8}$ in. dia. instead of $\frac{3}{8}$ in. dia.) and it is used in conjunction with the same assemblies, namely:-

- (1) Oxygen mask hose assembly Mk. 1
- (2) Pressure jerkin hose assembly Mk. 2
- (3) Pressure jerkin hose assembly Mk. 6

Servicing

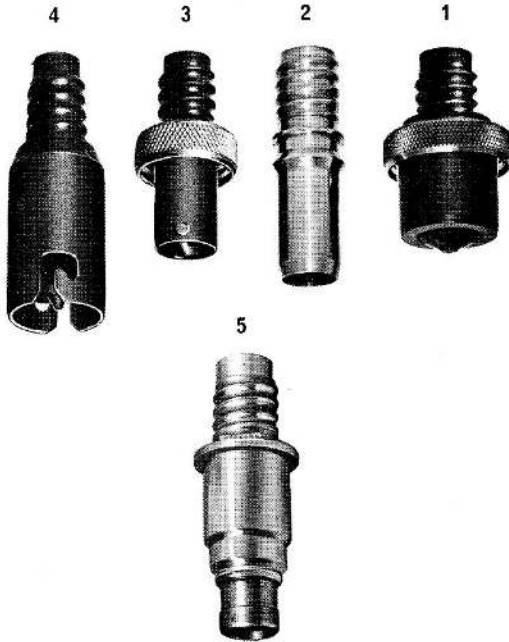
11. No servicing of the connector fittings themselves ◀ except renewal of the sealing rings (Ref. No. 6D/), ▶ is to be undertaken. Fit a replacement if faulty. The $\frac{7}{8}$ in. dia. anti-kink hose on the A.V.S. hose assemblies may be renewed as required.

◀ Re-connecting a hose

12. When a hose has been removed or has pulled off, it may be re-connected under the following conditions:-

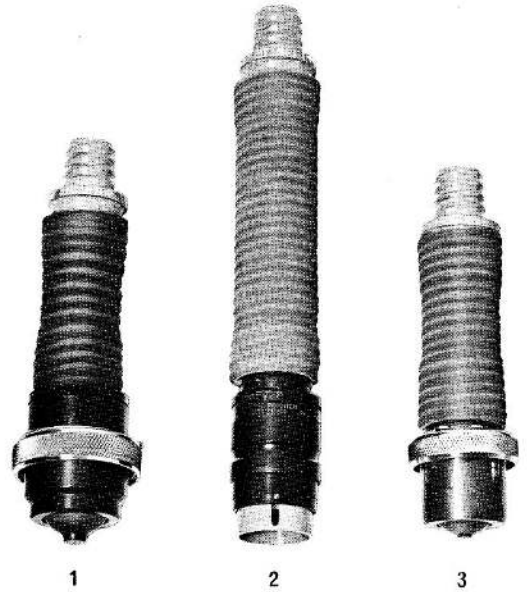
- (1) The hose remains serviceable in all respects.
- (2) The length used for the original connection is cut off.
- (3) After having been shortened, the hose remains long enough for its original purpose. ▶

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- 1 A.V.S. CONNECTOR MK. 1
- 2 A.V.S. CONNECTOR MK. 2
- 3 ANTI-G SUIT CONNECTOR MK. 1
- 4 ANTI-G SUIT CONNECTOR MK. 2
- 5 A.V.S. QUICK-RELEASE PLUG (DUNLOP)

Fig. 1. A.V.S. and anti-g suit connectors



- 1 A.V.S. HOSE ASSEMBLY MK. 1
- 2 A.V.S. HOSE ASSEMBLY MK. 2
- 3 A.V.S. HOSE ASSEMBLY MK. 3

Fig. 2. A.V.S. hose assemblies

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