Group C.6

EMERGENCY FUEL PUMP (CODE EF)

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ILLUSTRATION

TABLE

TABLE 1

Equipment Type and Air Publication reference

Equipment Type	Air Publication
Fuel pump isolating switch C.W.C. Type XD.779, No.3	A.P.4343C, Vol.1, Book 1, Sect.1
Warning lamp, Type A	A.P.4343E, Vol.1, Book 4, Sect.18
Engine-driven fuel pump isolating solenoid, Type X.17131/13	A.P.4281A, and A.P.4321G and J, Vol.1

Introduction

1. This Group contains the description and operation of the emergency fuel pump circuit, together with the information required to maintain the equipment in an efficient condition. Routeing and theoretical circuit diagrams are also included. For a general description of the aircraft's electrical system, reference should be made to Groups A.1, A.2 and A.3. Detailed information on the standard items of equipment used will be found in the Air Publications listed in Table 1.

DESCRIPTION

Emergency fuel pump

2. This circuit controls the solenoid-operated isolating valve of the fuel pump in the event of failure of either portion of the duplex engine-driven fuel pump of the engine fuel system. The circuit is required as a safety measure due to the fact that the two portions of the pump are connected in parallel in the engine fuel system, and should one portion of the pump or its barometric pressure control fail, the other portion of the pump, if not isolated, will go into 'no stroke' condition, so causing subsequent engine failure. The isolating valve is integral with the upper portion of the pump and is controlled by a ISOLATED/NORMAL switch located on the forward portion of the cabin port shelf. A warning lamp, also mounted on this shelf illuminates to indicate when the two portions of the pump are isolated from each other. The switch is provided with a locking guard and is also retained in the NORMAL position by a single strand of locking wire, which if found broken, serves to indicate to the ground crew that the emergency isolating facilities have been used.

Operation

3. The circuit is supplied from the engine starter master switch and is operative immediately this switch is placed in the ON position. The operation of the circuit will be apparent once reference is made to the diagram given in fig.1.

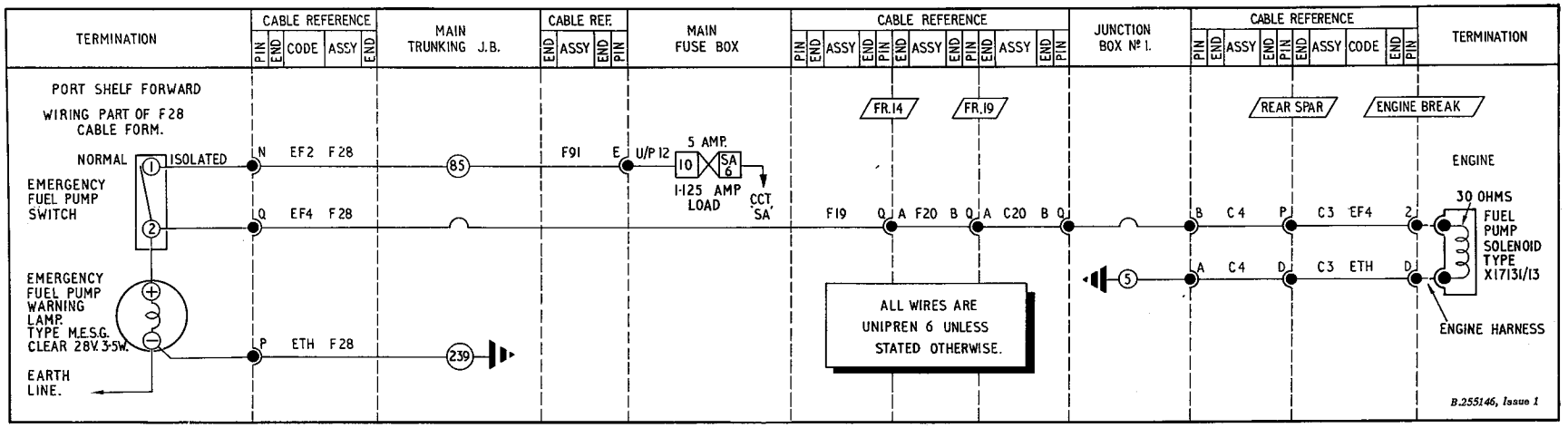

Fig. 1. Emergency fuel pump

SERVICING

General

4. For general servicing of the aircraft electrical system, reference should be made to Group A.1. All the components should be kept clean and the warning lamp filament checked for serviceability. A Table giving the type of filament used will be found in Group A.1.

REMOVAL AND ASSEMBLY

General

5. Once access has been obtained, the removal and assembly of the electrical components forming the emergency fuel pump circuit, should present no difficulties. The removal of the forward portion of the cabin port shelf, which carries the isolating switch and warning lamp, is fully described in Group A.2, while location and access to all the equipment is indicated in Group A.3.