Group 5 MISCELLANEOUS INSTRUMENTS

LIST OF CONTENTS

Introduction

1. This group contains a description of the various instruments installed in this aircraft which cannot be included with those in the other groups of this chapter. The necessary servicing information required to maintain these instruments in an efficient condition is also included. For a general description of the aircraft's instrument installation as a whole, reference should be made to Group 1 of this chapter. Detailed information on the standard components used will be found in the relevant Air Publications which are quoted in the appropriate paragraphs of this group.

DESCRIPTION

OXYGEN REGULATOR AND PRESSURE GAUGE

2. The Mk. 17B or Mk. 17 demand regulator is located at the forward end of the cockpit starboard shelf and is used to control the oxygen installation. The controls consist of an ON/OFF valve, an air cut-off lever and an emergency toggle switch, together with a combined flow and blinker indicator. The operation of the regulator is fully automatic and, once turned on, supplies oxygen in accordance with the pilot's demand from sea level to 50,000 ft. The Mk. 3 oxygen pressure gauge is situated at the bottom of the starboard instrument panel just above the regulator. It is provided to indicate the contents of the oxygen cylinders. The oxygen system is described in detail in Sect. 3, Chap. 10 of this volume, and a full description of the regulator and pressure gauge will be found in A.P.1275A, Vol. 1.

HYDRAULIC PRESSURE GAUGES AND WARNING LAMP

3. The hydraulic pressure gauges are all mounted on the port side of the cockpit and consist of a brake pressure gauge and two air pressure gauges for the undercarriage and flap emergency system, together with a gauge for the brake accumulator. The brake pressure gauge is a Dunlop ACO 9719 triple unit, which is located at the forward end of the cockpit port shelf and indicates the pressure applied to each brake and that available in the hydraulic system. The undercarriage and flap emergency air pressure gauges are Mk. 14KK type instruments, which are situated at the rear portion of the cockpit port shelf. The gauge indicating the pressure in the brake accumulator is a Mk. 14LL instrument, which is also located on the rear portion of the cockpit port shelf and is provided with a label indicating that the brakes will not operate at a pressure below 1,500 lb. per sq. in. A warning lamp to indicate hydraulic system failure is also provided, and this is mounted on the port instrument panel. The hydraulic system and the emergency air system are both described in Sect. 3, Chap. 6 of this volume, while the hydraulic failure warning lamp circuit is covered in Group D2 of Sect. 5, Chap. 1 also of this volume. Information on the Mk. 14 series of gauges will be found in A.P.1275A, Vol. 1.

ANTI-'G' SYSTEM PRESSURE GAUGE

4. A gauge to indicate the pressure in the anti-'g' air bottles is located on a bracket attached to the fuselage structure above the cockpit starboard shelf. It is a Mk. 14KK instrument, which is fully described in A.P.1275A, Vol. 1. The anti-'g' system is described in Sect. 3, Chap. 13 of this volume.

ALIGHTING GEAR INDICATOR AND WARNING LAMP

5. These are both mounted on the port instrument panel and a full description, together with a routing and theoretical diagram of the circuit is given in Group D8 of Sect. 5, Chap. 1 of this volume.

WARNING LAMPS AND INDICATORS

6. Apart from the warning lamps and indicators described in the groups of this chapter, various other lamps and indicators are also provided, and descriptions of these, together with routing and theoretical diagrams of the circuits, will be found in the appropriate groups of Sect. 5, Chap. 1 of this volume.

◀ **Fatigue meter**

6A. An electrically-operated Type 2B fatigue meter may be fitted, to special order only (Mod. 494), on a mounting plate attached to the port rear face of the main spar in the centre fuselage. This meter obtains its electrical supply from terminal 5 of T.B.26 located on interspar rib D and is protected by a 1 amp. fuse also located on this rib. ▶

SERVICING

7. The necessary servicing required to maintain the oxygen regulator and the pressure gauges described in this group in an efficient condition and the Standard Serviceability Tests which should be applied, including the equipment to be used and the method of conducting the tests, is contained in the appropriate chapters of A.P.1275A, Vol. 1.

REMOVAL AND ASSEMBLY

8. Once access has been obtained the removal of the components described in this group should present no unusual difficulties, but care must be taken to observe the safety recommendations given in Sect. 3, Chap. 6, 10 and 13 to ensure that no damage to the aircraft or injury to personnel occurs when carrying out these operations.