Chapter 2

K.L.G. IGNITER PLUG, TYPE 994/9

Note.—*This chapter applies to Goblin Mk. 2 aero-engines*

LIST OF CONTENTS

LIST OF ILLUSTRATIONS

DESCRIPTION

1. The K.L.G. igniter plug described in this chapter is the unscreened, mica-insulated plug, type 994/9.

2. Constructed in two sections, the plug comprises the body and the insulated centre assembly complete with gland nut. The insulated centre section is a complete unit which cannot be dismantled into its component parts.

3. The centre electrode is insulated by mica laminations, and the upper portion which protrudes from the gland nut has an additional protecting sleeve of mica washers. A steel gland, swaged on to the laminated mica wrappings ensures that the whole assembly is gas-tight. This insulated assembly is clamped into the body between a copper internal seating washer and the gland nut.

4. The mica insulation projecting from the steel gland at the lower end is tapered in a series of serrations towards the centre electrode and great care must be exercised when dismantling and cleaning to avoid damaging this insulation.

5. The earth electrode is formed on the lower end of the plug body and no adjustment is provided or necessary.

6. The hole in the body of the plug shown in fig. 1 allows air to flow around the centre electrode and out at the base of the plug, thereby preventing a build-up of carbon.

INSTALLATION

7. Provided that the K.L.G. igniter plugs are taken direct from the maker's wrappings and are externally in good condition, no functional test is necessary prior to assembly to the engine. After removing the threaded protector, examine each plug visually to ensure that there is no foreign matter in the body. Check the upper mica sleeve for damage and signs of grease. Any grease found should be removed.

8. Prior to installation slightly smear the plug body with graphite grease, and ensure that the appropriate K.L.G. washer Part No. B.1246 supplied with the plug is fitted between the shoulder on the plug body and the engine. Ensure that the plug is installed with the arrow (*fig.* 1) facing to the front of the engine, indicating that the vent hole is facing upstream of the combustion chamber.

SERVICING

9. The period at which the plugs should be removed from the engine for inspection is given in the Aircraft Servicing Schedule, and this period should always be strictly observed as the maximum time between inspections.

10. The value of the gap between the electrodes is 0·060 in. $\pm$ ·002 in.

11. The $\frac{3}{8}$ in. ring spanner supplied in the flight kit should be used when removing or installing plugs and care must be taken not to damage the upper mica sleeve. Unless it is intended to replace the plugs with another set of reconditioned plugs immediately, dummy plugs should be assembled temporarily to the engine to prevent the entry of foreign matter.

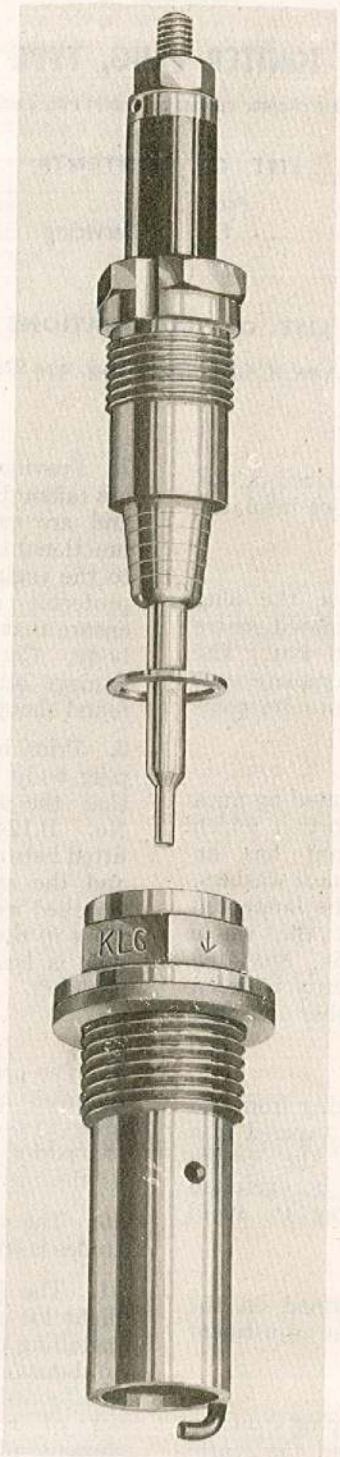

Fig. 1. Exploded view of K.L.G. igniter plug, type 994/9