Chapter 61

WING TIP NAVIGATION LAMP, TYPE 80/10/0976 ◀ and DOWNWARD IDENTIFICATION LAMP, TYPE 80/10/2307 ▶

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Introduction

1. The wing tip navigation lamp, Thorn, Type 80/10/0976, is designed to meet the international requirements for navigation lamps, and can be utilized on either side of the aircraft by the use of the appropriate coloured glass screen. Similar in general construction to the Type A navigation lamps, they can be installed as a replacement for this type of lamp were high intensity navigation lighting requirements are necessary.

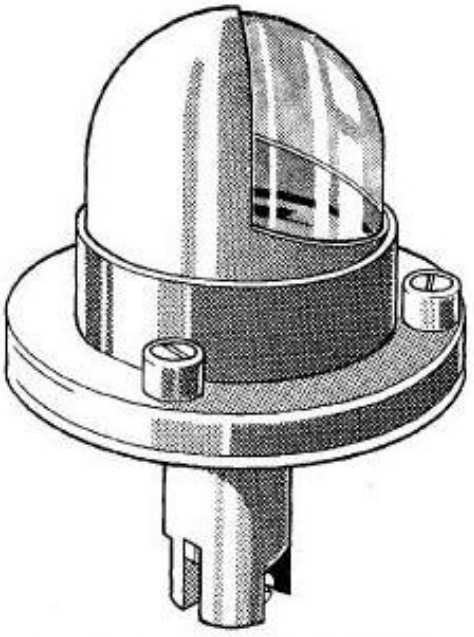

Fig. 1. Wing tip navigation lamp

◀ **2.** The Type 80/10/2307 downward identification lamp differs from the Type 80/10/0976 navigation lamp only in the shape of the reflector housing. This is cut away to provide 110 degree of light distribution for the navigation lamp, and 360 degree for the downward identification lamp, measured from the forward path of flight. ▶

DESCRIPTION

3. The lamp, which is shown in fig. 1, has a baseplate, a single contact lamp holder, and a reflector housing, secured together by four 6B.A. screws and locknuts. An 'O' ring located between the reflector housing and the baseplate seals the rear of the assembly. The dished reflector fits into the well of the reflector housing, located by a locating spigot which mates into a locating hole in the housing, and is sealed by a gasket between the lip of the housing and the flange of the reflector. A further gasket within the flange of the reflector seals the joint between the reflector and the front glass. The front glass is held in position by the aluminium cover which is secured to the baseplate by three self-locking fasteners.

4. The lamp is mounted to the airframe by four 6B.A. screws which pass through the baseplate, lampholder, and reflector housing. A flat circular gasket is provided, and is fitted between the lamp baseplate and the airframe to ensure a weatherproof joint ▶◀ Electrical connection is made by two 4B.A. terminals, which connect, one to the spring loaded centre contact, and one to the lampholder barrel.

SERVICING

5. The lamp should be functionally tested and inspected for freedom from damage and corrosion, whenever a filament lamp is renewed the sealing gaskets should be inspected for deterioration and renewed as required. The 'O' ring, and the baseplate sealing gasket should be periodically checked and renewed as required.

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Appendix 1

ANTI-COLLISION LAMP, GRIMES, TYPE G8400-3-24

LEADING PARTICULARS

Anti-collision lamp, Grimes, Type G8400-3-24	*Ref. No. 5CX/5433*
Lens, red glass	*Ref. No. 5CX/5541*
Filament lamp, Type 7079A-24, 28 volt 40 watt	*Ref. No. 5L/2641*
Motor, Globe Ind. Type C-25A-515	*Ref. No.*
Minimum permissible brush length	$\frac{1}{8}$ *in.*
Input voltage	28 *volt*
Speed of rotation (gear plate)	45 *r.p.m.*
Weight	2 *lb. (max.)*

1. This lamp is identical to that described and illustrated in the main chapter. A circuit diagram is given in fig. 1.

2. Servicing of the lamp should follow the instructions given in the main chapter.

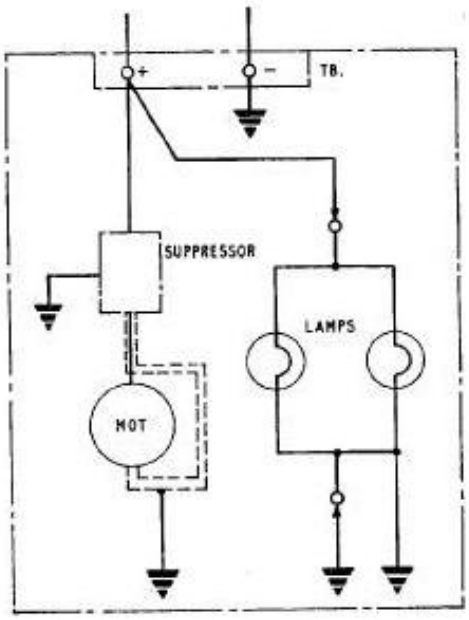

Fig. 1. Circuit diagram

Appendix 2

ANTI-COLLISION LAMP, GRIMES, TYPE G7740-3-24

LEADING PARTICULARS

Anti-collision lamp, Grimes, Type G7740-3-24	*Ref. No. 5CX/5398*
Lens, red glass	*Ref. No. 5CX/5541*
Filament lamp, Type 7079A-24, 28 volt 40 watt	*Ref. No. 5L/2641*
Motor, Globe Ind. Type C-25A-515	*Ref. No.*
Minimum permissible brush length	$\frac{1}{8}$ *in.*
Input voltage	28 *volt*
Speed of rotation (gear plate)	45 *r.p.m.*
Weight	1·5 *lb.*

1. The anti-collision lamp, Type G7740-3-24 is similar to that described and illustrated in the main chapter, but has some minor constructional differences. A circuit diagram is given in fig. 1.

2. Servicing of the lamp should follow the instructions given in the main chapter.

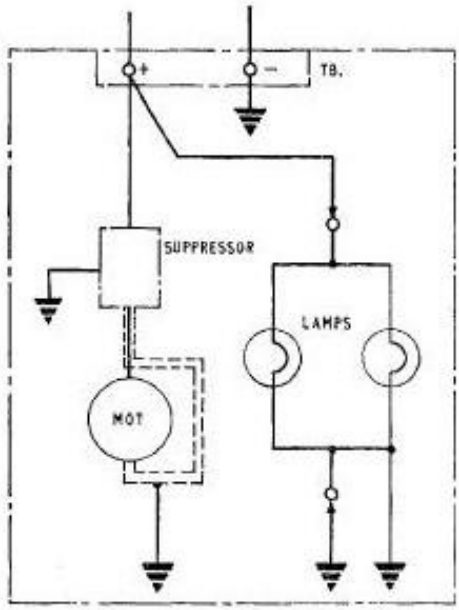

Fig. 1. Circuit diagram

Appendix 3

ANTI-COLLISION LAMP, GRIMES, TYPE G7740-8-24

LEADING PARTICULARS

Anti-collision lamp, Grimes, Type G7740-8-24	*Ref. No. 5CX/5332*
Lens, red glass	*Ref. No. 5CX/5541*
Filament lamp, Type 7079A-24, 28 volt 40 watt	*Ref. No. 5L/2641*
Motor, Globe Ind. Type C-25A-515	*Ref. No.*
Minimum permissible brush length	$\frac{1}{8}$ *in.*
Input voltage	28 *volt*
Speed of rotation (gear plate)	45 *r.p.m.*
Weight	1·5 *lb.* – 2 *lb.*

1. The anti-collision lamp, Type G7740-8-24 is similar to that described and illustrated in the main chapter but has minor constructional differences and incorporates a connector plug AN3102A-10SL-3P for electrical connection instead of the two-way terminal block. The connector is mounted on the base of mechanism cover. A circuit diagram is given in fig. 1.

2. Servicing of the lamp should follow the instructions given in the main chapter but it should be noted that before the base cover can be removed the four connector securing screws must be removed. When inspecting the lamp the connections to the pins of the connector should be checked for security of attachment and the pins inspected for signs of corrosion or burning. If corrosion or burning is evident the plug should be renewed.

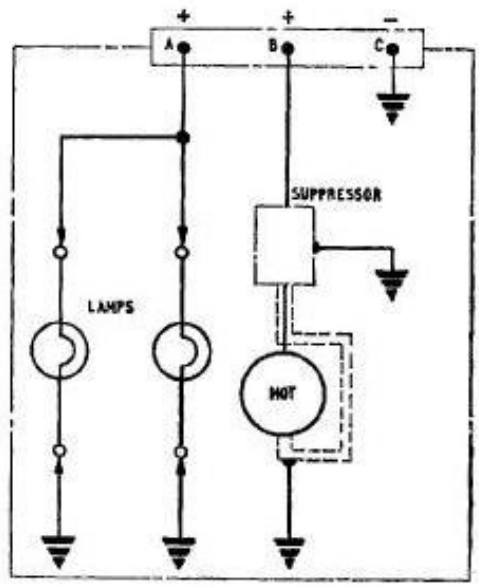

Fig. 1. Circuit diagram

Appendix 4

ANTI-COLLISION LAMP, GRIMES, TYPE G7740-24

LEADING PARTICULARS

Anti-collision lamp, Grimes, Type G7740-24	*Ref. No. 5CX/5763*
Lens, red glass	*Ref. No. 5CX/5541*
Filament lamp, Type G7079A-24, 28 volt 40 watt	*Ref. No. 5L/2641*
Motor, Globe Ind. Type C-25A-515	*Ref. No.*
Minimum permissible brush length	$\frac{1}{8}$ *in.*
Input voltage	28 *volt*
Speed of rotation (gear plate)	45 *r.p.m.*
Weight	1·5 *lb.* – 2 *lb.*

1. The anti-collision lamp, Type G7740-24, is similar to that described in the main chapter but has no mounting flange fitted. The lamp is normally installed in a cylindrical mounting tube, which is incorporated in the airframe structure. The lamp is secured within the tube by three screws and stiff-nuts; access to the nuts, for removal of the lamp, is gained by first removing the lamp lens. Connection to the lamp is made by means of a three pole plug A.N. 3102A-10SL-3P mounted on the base of the mechanism cover. A circuit diagram is given in fig. 1.

2. Servicing of the lamp should follow the instructions given in the main chapter, but it should be noted that before the base cover can be removed the four connector securing screws must be removed. When inspecting the lamp, the connections to the pins of the connector should be checked for security of attachment and inspected for corrosion, and signs of sparking or burning. Where damage to the plug is found the plug should be renewed.

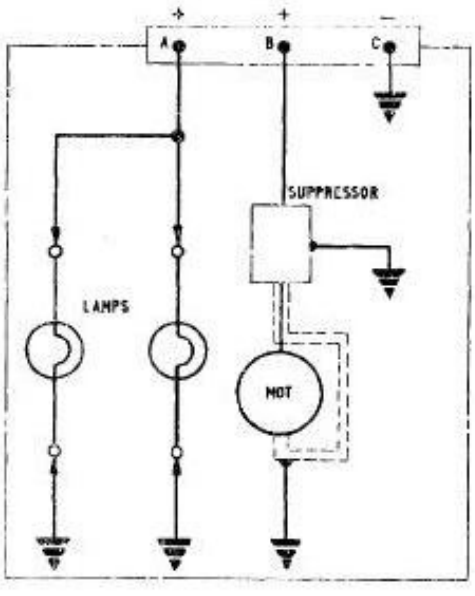

Fig. 1. Circuit diagram

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