

**OPERATION
AND
MAINTENANCE
OF
GRIMES LANDING LIGHT
MODEL ST-250**



**GRIMES MANUFACTURING CO.
URBANA, OHIO**

ST-250

GRIMES LANDING LIGHT

OPERATION AND MAINTENANCE INSTRUCTIONS

Grimes Airplane Landing Lights are designed for the highest possible efficiency of light with the smallest size and weight practical. Considerable saving in weight and size is accomplished by the fact that it is not necessary to burn an airplane landing light continuously. The intermittent burning gives time for the light and lamp to cool. Only in case of emergency should the lights be burned longer than three minutes at a time. Burning them longer than this length of time may cause the light to smoke the reflector and cut down the efficiency. Practically all of the light in the beam is reflected light and only a very clean reflector will give good light.

CLEANING REFLECTOR

Reflectors are silver plated and very easily scratched if any other material than cotton is used in cleaning. We recommend that the reflector be washed out with a piece of cotton saturated with kerosene and thoroughly dried with cotton. If this fails to brighten the reflector it may be necessary to have it re-silvered. A very nominal charge is made for this service if returned to the factory. The inside of the reflector should not be touched with the hands after cleaning.

CHANGING LAMP

These 315 candle power, 15 amp. lamps are very efficient and are rated as 50-hour lamps. This does not mean they will not light after fifty hours, but after burning this length of time the glass starts to discolor and cuts down the efficiency. The heat absorption of an old lamp may cause the glass to

blister. We recommend that a new lamp be installed when they start to darken than after they have burned out. Lamps are carried in stock by all aircraft jobbers or can be ordered direct from the factory.

In replacing gaskets, care should be taken to see that they do not wrinkle, as this sometimes causes the lens to crack.

ADJUSTMENT OF LIGHT

The lamps are pre-focused to give the best possible beam of light and are not adjustable. However, the angle at which the light opens may be adjusted. Lights leaving the factory are set to open 73 degrees which degree was found to meet most requirements, however, they are adjustable between 65 and 80 degrees. Most pilots prefer that the beam be parallel with the ground when the plane is at rest. To change this angle, it is necessary to remove the light, put it in the open position and loosen the two screws under the motor. This will allow the power unit to slide either direction desired.

OILING

Very little oiling is necessary on the average plane. However, if the lights are used every day we recommend 10 or 15 drops of Pyroil in the gear box and a small amount of cup grease in the arm slide twice a year.

There has been very little mechanical trouble with these lights but if they should in any way fail, we recommend that they be returned to the factory for repair. No charge other than for worn out parts or breakage is made for this service.

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