

Brinsea

- 1) Clear when candled - probably infertile (or very early death) when candled at 1/3 of the incubation period
- 2) Fertile with red blood vessels - after 1/3 of the incubation period
- 3) Red or black staining - early death when candled at 1/3 of the incubation period
- 4) Embryo with red blood 'ring' - early death when candled at 1/3 of the incubation period
- 5) Dark outline with ill defined detail - late death (1/2 or 2/3 of the incubation period)
- 6) Live embryo with bill in air sack - due to hatch in 24-48 hours

EGG-LUME & COOL-LUME CANDLING LAMPS

USER INSTRUCTIONS

Specifications

	Standard	High Intensity	Cool-lume
Weight (ounces)	8.2	20 (inc. transformer)	20 (inc. transformer)
Dimensions (inches)	7.7 x 2 x 2	7.7 x 2 x 2	11.6 x 2 x 2
Power consumption (Watts)	15	12	12
Bulb voltage (Volts)	115	12	12

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Introduction

The Egg-lume is a scientifically designed purpose made lamp for inspecting the embryo development during incubation. Three versions are available; Standard, High Intensity and Cool-lume. The standard unit is a low cost lamp running directly from 110/115v mains supply. The bulbs for this unit are cheap and readily available.

The High Intensity Egg-lume and the Cool-lume (patent applied for) use a low voltage 12v tungsten Halogen reflector lamp to give an exceptionally high brightness beam which enables greater detail to be seen. The extremely high light intensity facilitates inspection of eggs with dense, dark shells. In the case of the Cool-lume, this beam is then focused down a solid, transparent acrylic cone which not only increases the light intensity but eliminates the risk of heat affecting the egg which is ideal for small or high value eggs. The low voltage lamps in the high intensity Egg-lume and Cool-lume have much more rugged filaments and will last longer and stand rougher handling. Both units are provided with a transformer mounted in the special mains plug supplied.

Caution – the very high light intensities of these units (particularly the High Intensity and Cool-lume units) can cause damage to eyes. Never look directly into the light source.

Instructions for use

- 1 All types of Egg-lume are designed for intermittent use only. Continuous use for more than 15 minutes may cause overheating. The push button switch should never be taped or tied down.
- 2 Eggs may be examined for fertility after about 7 days. Infertile eggs will appear clear and can be rejected. Hold the Egg-lume close against the large end of the egg so that the soft nose cone excludes all light except that which is directed through the shell. Darken the room to improve clarity.
- 3 Usually checks for fertility and air sack estimates can be done without removing eggs from the incubator trays. For closer examination of embryo structures it is best to pick up the eggs and inspect from different angles. Do not overheat the egg by holding the lamp close for too long, particularly with very small eggs.
- 4 Air space estimation can be made using the chart on the next page. If the airspace is too small reduce humidity and visa versa.
- 5 Replacement bulbs are available from the supplier, direct from Brinsea Products or from local shops in the case of the Standard Egg-lume. Please specify if the bulb is for the Standard or High Intensity Egg-lume or Cool-lume.

6. To change bulbs: pull off the outer cone cover (Cool-lume units only) and undo the screws fastening the two halves of the lamp together to expose the bulb connection.

DISCONNECT THE MAINS SUPPLY BEFORE DISMANTLING THE PRODUCT.

Illustration of airspace growth

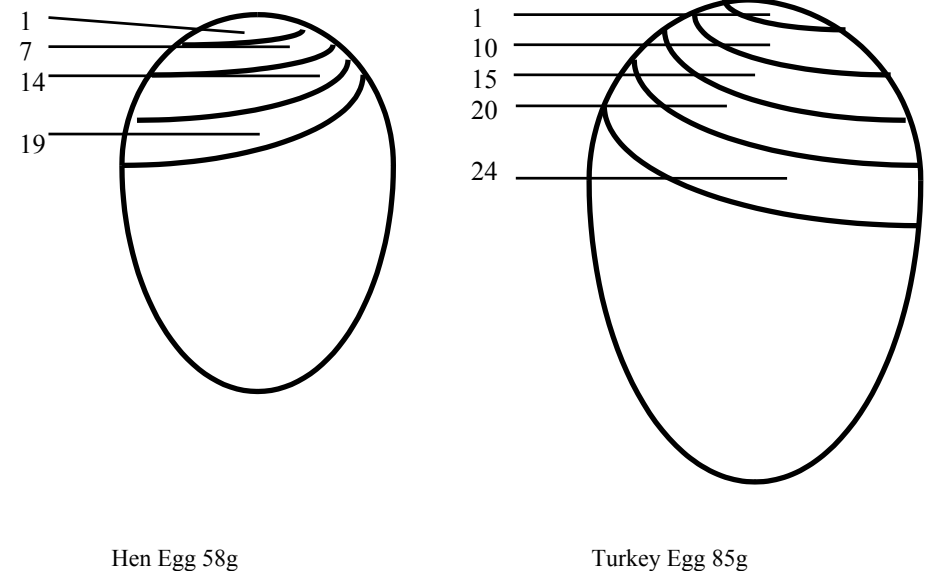


Diagram shows extent of airspace development throughout incubation (in days)