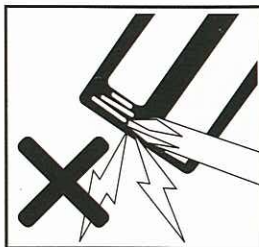
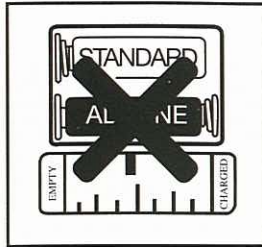




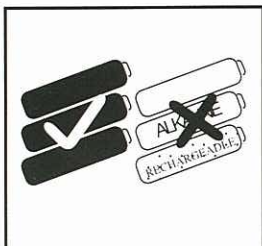
Batteries should be replaced by an adult.



The supply terminals are not to be short circuited.



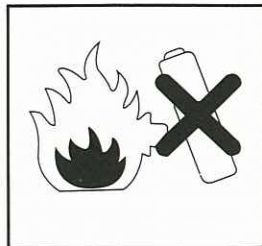
Non-rechargeable batteries are not to be recharged.



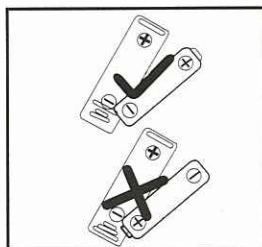
Only batteries of the same or equivalent type are to be used. Do not mix alkaline, standard (zinc carbon), or rechargeable (nickel cadmium) batteries.



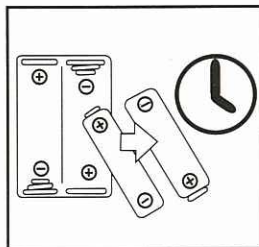
Replace the whole set of batteries at one time, do not mix old and new batteries.



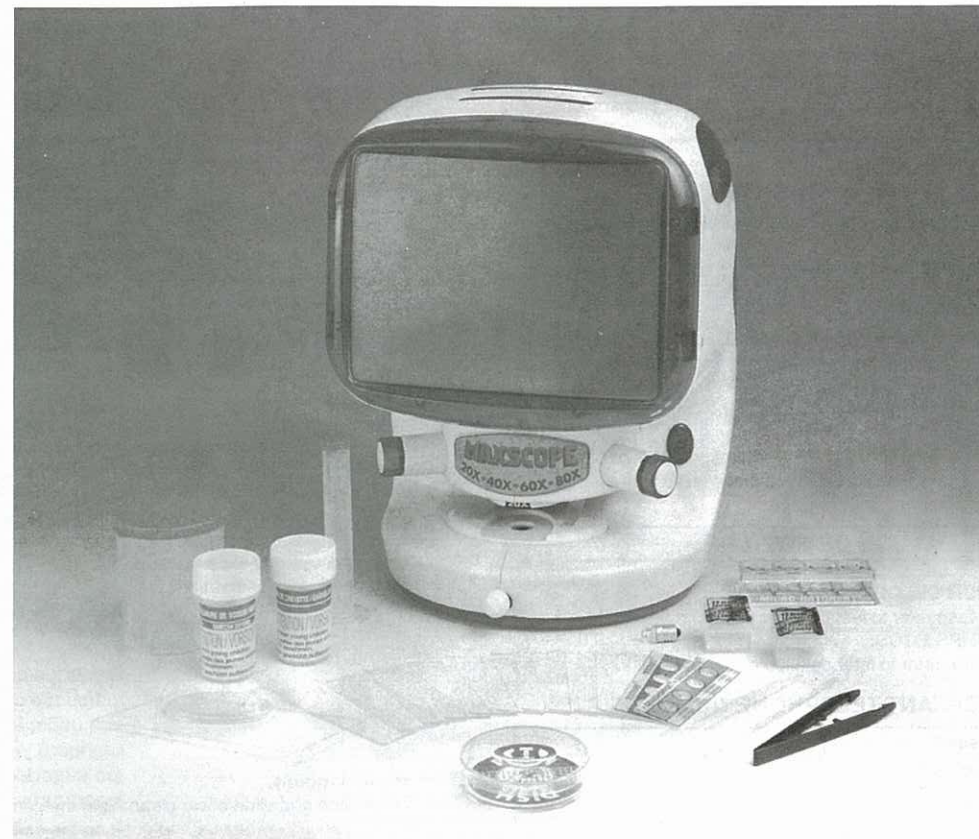
Never dispose of batteries in fire as this may cause them to explode.



Make sure battery is inserted with the correct polarity.



Remove dead batteries and all batteries from toys which are not going to be used for a long time. Otherwise the batteries may leak and cause damage.



MAXSCOPE SET

INSTRUCTIONS

WARNING! ONLY FOR USE BY CHILDREN OVER 10 YEARS OLD. NOT SUITABLE FOR CHILDREN UNDER 3 YEARS OF AGE, DUE TO SMALL PART. TO BE USED SOLELY UNDER THE STRICT SUPERVISION OF ADULTS THAT HAVE STUDIED THE PRECAUTIONS GIVEN IN THE EXPERIMENTAL SET.

CAUTION! Contains some chemicals which are classified as safety hazard. Read the instructions before use, follow them and keep them for reference. Do not allow chemicals to come into contact with any part of the body, particularly the mouth and eyes. Keep small children and animals away from experiments. Store the maxscope set out of reach of small children.

ADVICE FOR SUPERVISING ADULTS

- Read and follow these instructions, the safety rules and the first aid information. Keep them for reference.
- The incorrect use of chemicals can cause injury and damage to health. Only carry out those preparations which are listed in the instructions.
- This Maxscope set is for use only by children over 10 years old.
- Because children's abilities vary so much, even within age groups, supervising adults should exercise discretion as to which preparations are suitable and safe for them. The instructions should enable supervisors to assess any preparation to establish its suitability for a particular child.
- The supervising adult should discuss the warnings and safety information with the child or children before commencing the preparations. Particular attention should be paid to the safe handling of the chemicals in the bottles.
- To be used solely under the strict supervision of adults that have studied the precautions given in the experimental set.

EXPLANATION OF BOTTLES

SODIUM CHLORIDE (SALT)

Please refer to last page for usage.

SHRIMPS EGGS:

Please refer to later detailed explanation.

IMPORTANT TELEPHONE NUMBERS

Poison Center:	
Hospital:	
Fire Department:	
Doctor:	

SAFETY INFORMATION

- In case of eye contact: Wash the eye with plenty of water, holding the eye open if necessary. Seek immediate medical advice.
 - If swallowed: Wash the mouth with water, drink some fresh water. Do not induce vomiting. Seek immediate medical advice.
 - In case of inhalation - Move person to fresh air.
 - In case of skin contact and burns: Wash affected area with plenty of water for 5 minutes.
 - In case of a cut: Wash the cut with antiseptic solution (if not available, use clean water). Then put on a bandage. In case of any serious injury, you should get first aid treatment and inform a doctor as soon as possible.
- In case of doubt, seek medical advice without delay. Take the chemical together with the container with you. In case of injury, always seek medical advice.

CAUTION FOR HANDLING

- The vital part of the maxscope is the lens. Therefore, sufficient care must be taken in handling the lens.
- If the lens gets dirty or dusty; wipe the lens surface with a clean lens tissue or soft cotton cloth. Do not rub the

lens with a finger or dirty cloth, etc.

- After it is used, put a cover on the maxscope or put it back into the box for screening from dust.
- Maxscope should be stored in a moisture free place. Moisture buildup on the light causes a reduction in light intensity.
- When a maxscope is not used for a long period of time, remove the light source batteries.

HOW TO MAKE A PREPARED SLIDE

If the given sample is not thin and transparent, it cannot be observed by the videoscope as the light from the lamp does not pass through the sample. Fibres of pollen or wool, or salt will be easy to observe and do not need a cover glass. Clear samples are colored first with methylene blue, Eosin or other dyeing solutions available on the market.

1) Temporary mount

Wipe the slide and cover glass clean. Thin the sample, then pick it up with tweezers and put it on the centre part of the glass slide. Put one drop of water on the sample with a dissecting needle, and then gently put the slide cover on it, taking care not to trap any air bubbles. Remove any excess water with blotting paper. Now it is ready for observation.



2) Permanent mount

Wipe the slide and slide cover clean. Thin the sample, then pick it up with tweezers and put it on the centre part of the slide. Add one or two drops of gum media (or Canada balsam) solution with a dissecting needle and put a cover glass over it. Push down on the slide cover with tweezers or the like to fix it in place and leave to dry for about a day.

SAFETY RULES

- Do read these instructions before use, follow them and keep them for reference.
- Do keep young children and animals, and those who are not wearing eye protection away from the experimental area.
- Do clean all equipment after use.
- Do wash hands after carrying out preparations.
- Do not use any equipment which has not been supplied with the set.
- Do not eat, drink or smoke in the experimental area.
- Do not allow chemicals to come into contact with the eyes or mouth.
- Do not eat, drink smoke in the experimental area.
- Do not allow chemicals to come into contact with the eyes or mouth.
- Do not put foodstuffs in original Container. Dipose of immediately.
- Do make sure that all containers are fully closed and properly stored after use.

RAISING A FAMILY OF BRINE SHRIMPS

(NOT FOUND IN ALL SETS)

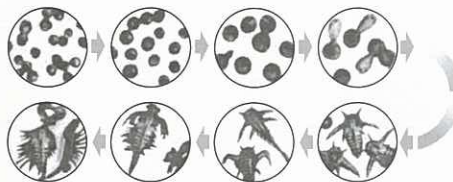
It is relatively easy to rear a batch of brine shrimps in the home laboratory. The tiny crustaceans are excellent specimens for the microscope studies, being similar in many ways to their bigger relatives, the lobsters, crabs, and crayfish. Furthermore, the brine shrimps enrich the diet of aquarium dwellers.

What makes the brine shrimp easy to raise is that its eggs hatch in a relatively short time, from twenty-four to forty-eight hours. The eggs are sold dried in small bottles or vials. Dried eggs remain alive for five years or more if they are stored in a cool dry place. Almost every aquarium shop carries a supply of the dried eggs of the brine shrimp.

In order to hatch eggs, first of all float them in a container of sea water. If sea water is unavailable, prepare a brine solution by adding two teaspoons of table salt to a quart of water.

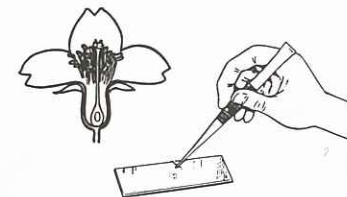
Sprinkle some brine shrimp eggs over salt solution and allow it to stand at room temperature (70-80°F/ 21-26°C) for a day or two. The eggs will hatch into the nauplius larvae which is the early life stage of most crustaceans. To bring the larvae to maturity, transfer a small number to another container, for if they are left to fend for themselves in the original culture they will begin to suffer from lack of oxygen and die off shortly.

Prepare some fresh brine solution and add a small quantity of yeast to serve as food for the developing larvae. With a pipette, transfer some of the new culture and allow them to grow to maturity. Examination of the culture at frequent intervals will reveal the entire life cycle of the brine shrimp, *Artemia salina*. Be sure to observe the dried eggs, hatching eggs, nauplius larvae, and the mature shrimp. When brine shrimps are fed to aquarium dwellers, they should be strained out of the brine solution with a piece of fine meshed cloth. It is wise to wash the brine shrimp with fresh water before introducing them to the aquarium as the sudden increase in salt content may be harmful to fish.



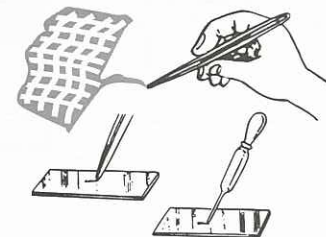
OBSERVATION OF POLLEN

With a pair of tweezers, take out a piece of filament from the flower. Slightly shake the filament such that a little amount of pollen fall onto the slide (too much pollen will make observation difficult). At last, you may want to put on the glass cover.



OBSERVATION OF FIBROUS TISSUE

Try to get a piece of worn fabric or a piece of thread. If the piece of fabric is torn or run, you may see some threads on its edge. Take a closer look. You will discover that each piece of thread can be separated into small pieces, which are called "filaments" or "fibres". Place a small quantity of fibres on a blank slide and drip one drop of water on it with the point of a pipette. You can put on the cover glass and observe under the microscope.

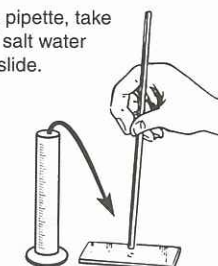


OBSERVATION OF SODIUM CHORIDE (SALT)

- Fill a cylinder with warm water until the water level reaches 1/4 of its height. Dissolve salt into the water. Add more salt until the salt does not dissolve anymore. Swirl the cylinder constantly while dissolving the salt.

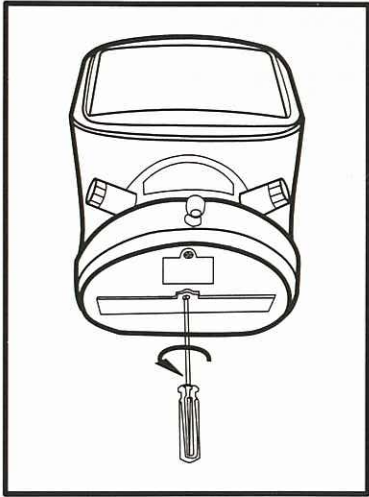


- With a small stick or a pipette, take out a small amount of salt water and drip it on a blank slide. Do not over drip.

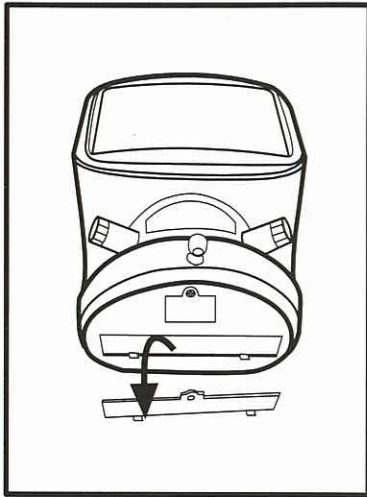


- Observe how crystals are gradually formed while viewing through the microscope.

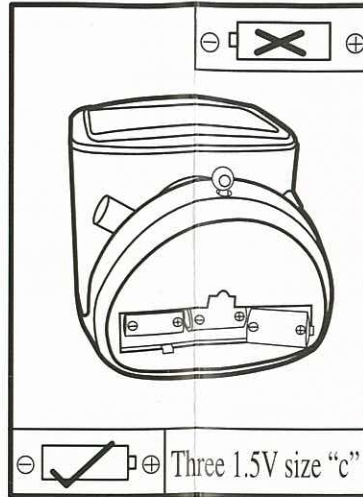
OPERATION



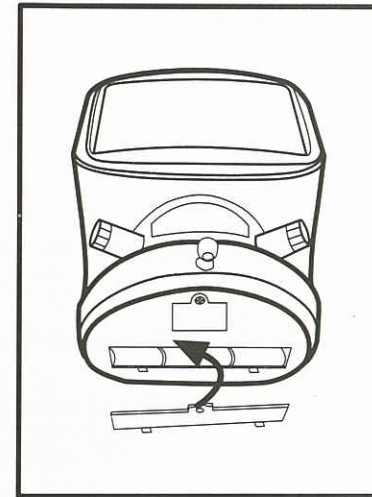
Unfasten the screw in a counter-clockwise direction.



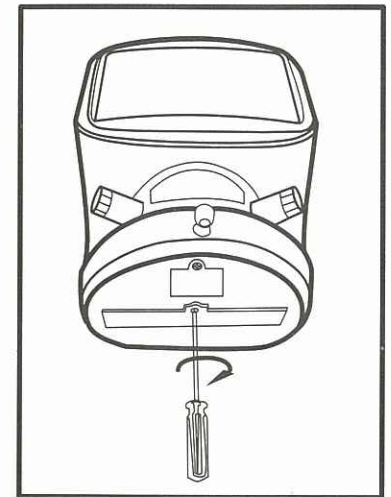
Remove the battery cover.



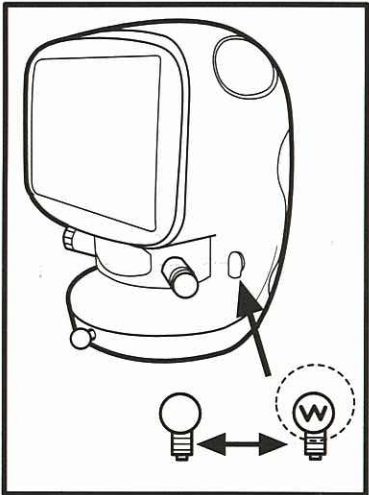
Insert three 1.5V size "C" batteries into the battery compartment. (Batteries not included) Make sure the positive (+) and negative (-) poles of the batteries match the corresponding markings inside the compartment.



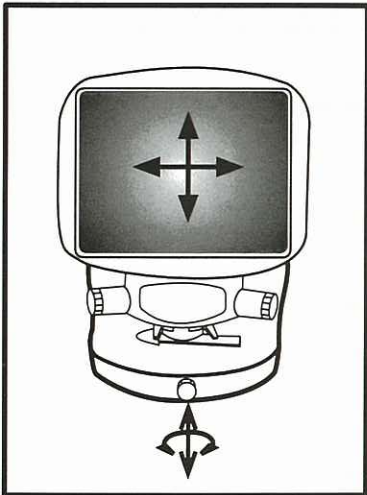
Close the battery cover.



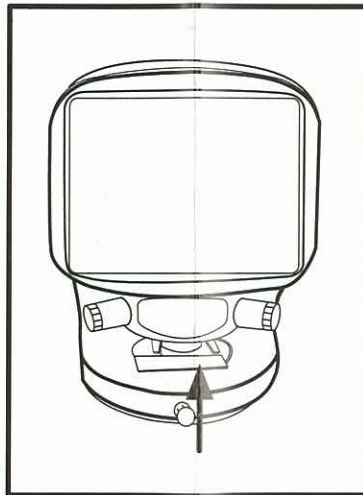
Fasten the screw in a clockwise direction.



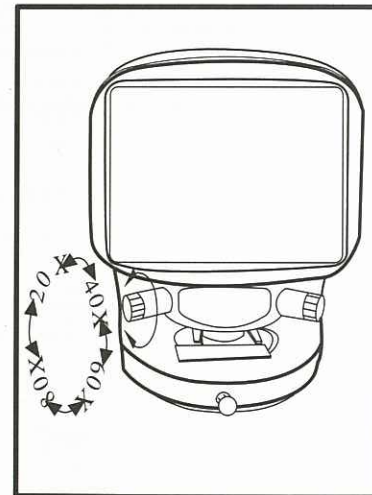
Press the ON/OFF button to turn on the light.



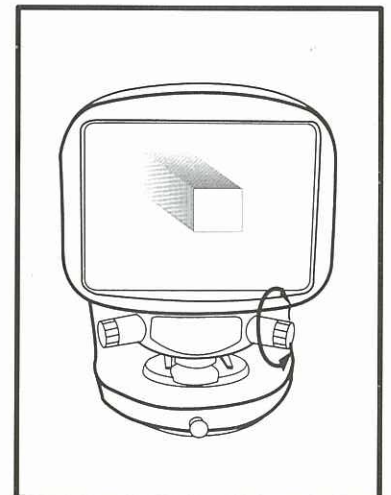
Rotate the bulb-positioning knob to adjust the illuminating area on the screen.



Insert a prepared slide under the stage clip.

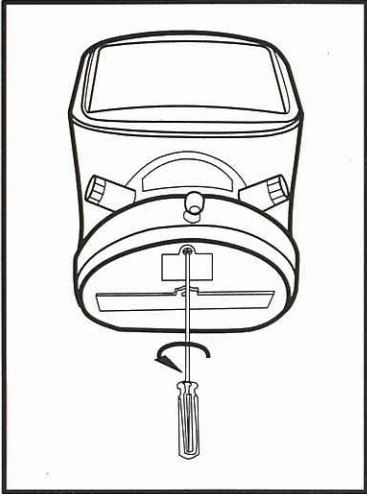


Select magnifying power by turning the POWER SELECTION KNOB

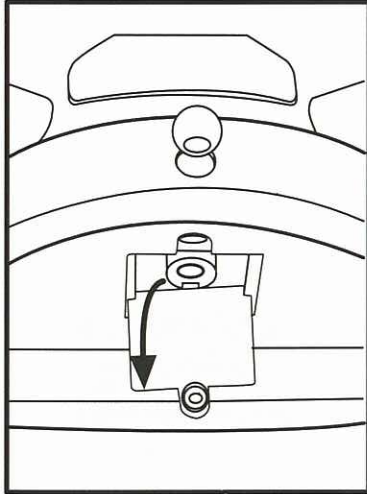


Get a clear image by adjusting the FOCUSING KNOB.

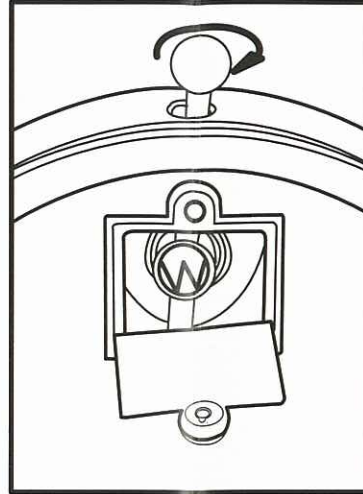
REPLACE BULB



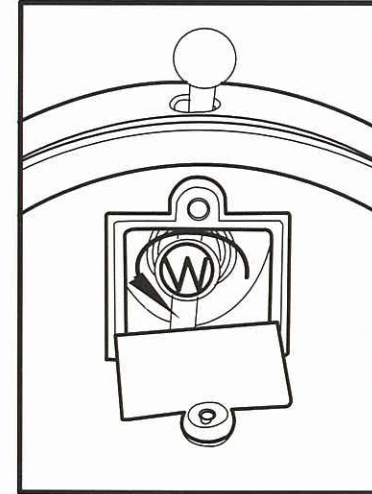
Unfasten the screw at the bulb compartment in a counter-clockwise direction.



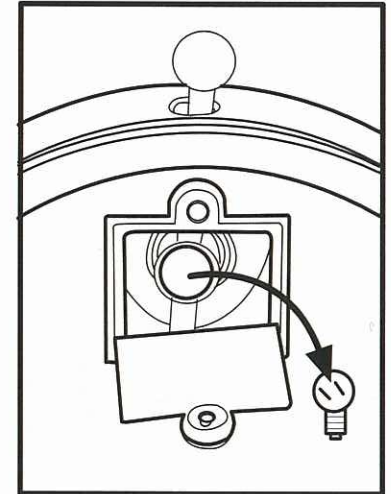
Open the bulb compartment cover.



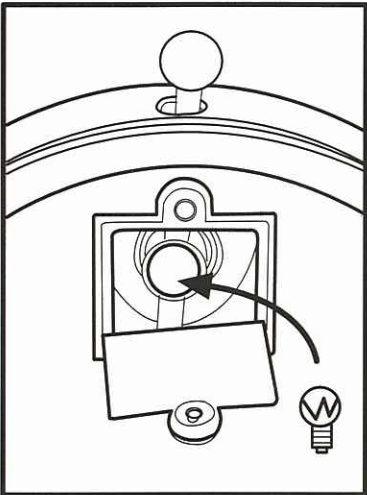
Rotate the bulb-positioning knob so that the bulb can be accessed.



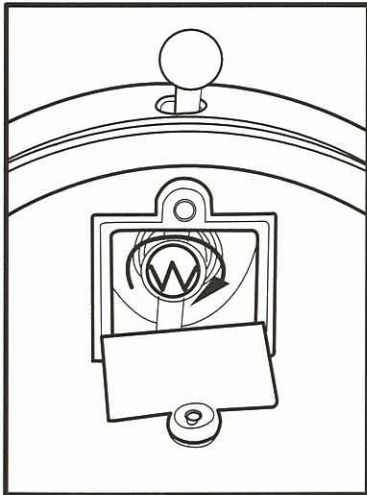
Unfasten the bulb in a counter-clockwise direction.



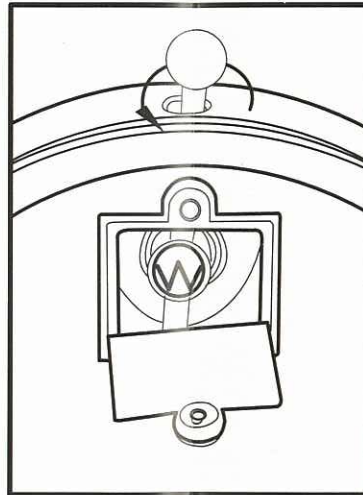
Remove the bulb.



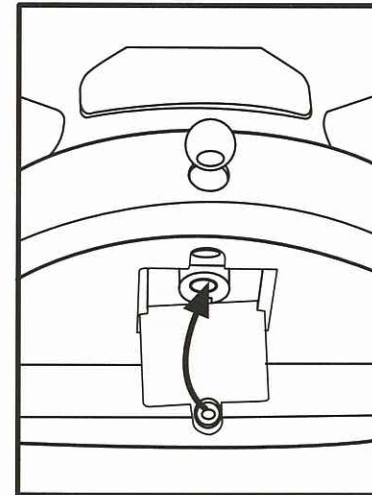
Place a new bulb into the bulb holder.



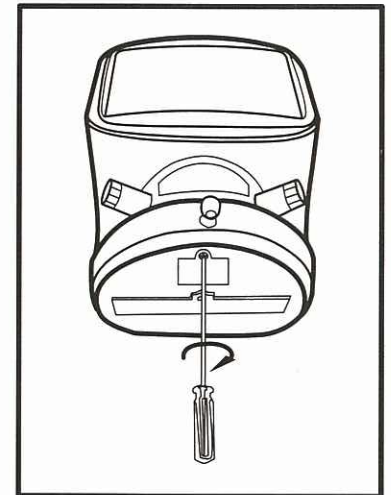
Fasten the bulb in a clockwise direction.



Turn the bulb upwards by rotating the bulb-positioning knob.



Close the bulb compartment.



Fasten the screw in a clockwise direction.