

IONIZING RADIATION

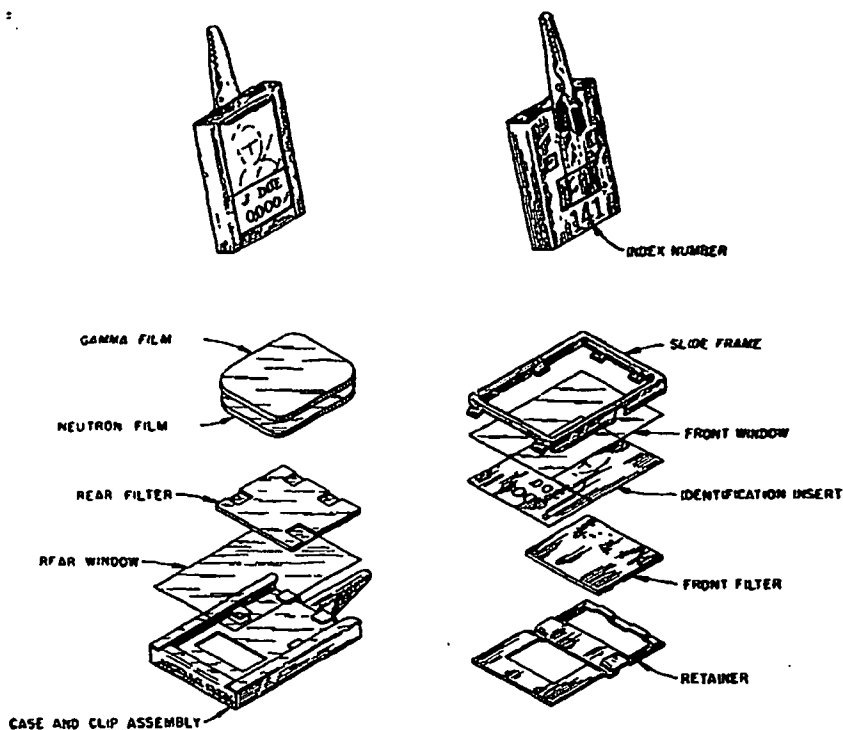


Fig 42-14 Exploded view of a radiation film badge Front view is at upper left, rear view at upper right

placed at regular intervals determined by the radiation level in the area. Pocket dosimeters (several types including pocket alarms are available commercially) may be worn to indicate exposure during any part of the film badge period. The film badge is read to establish the validity of a discharged dosimeter. The pocket dosimeters should be read and reset by means of a charger at the end of each partial period they are used to measure. (Fig. 42-13 shows three types of radiation detection devices. Fig. 43-14 gives an exploded view of a radiation film badge.)

Management may have film badges and dosimeters serviced, films developed, and exposure records maintained as a part of plant operations. Depending upon the work load, it may prove more economical and provide better control and protection for a plant to purchase this service. Several ex-

cellent film badge service companies are available. In either case, all monitoring records should be retained by management. Legal counsel will advise on what steps should be taken to ensure that such records will be admissible in court cases.

It is not wise to allow a person to work alone with large quantities of radioactive materials or on the off-shift since adequate help will not be available to cope with spills, losses of material, or injuries involving radioactivity.

Adequate rules covering special clothing, bathing facilities, and protective equipment are required. Wearing contaminated clothing outside the control limits must be prohibited. If there is danger of ingestion of radioactive material, then smoking and eating should be limited to "clean" areas.