

ELECTRICAL HAZARDS

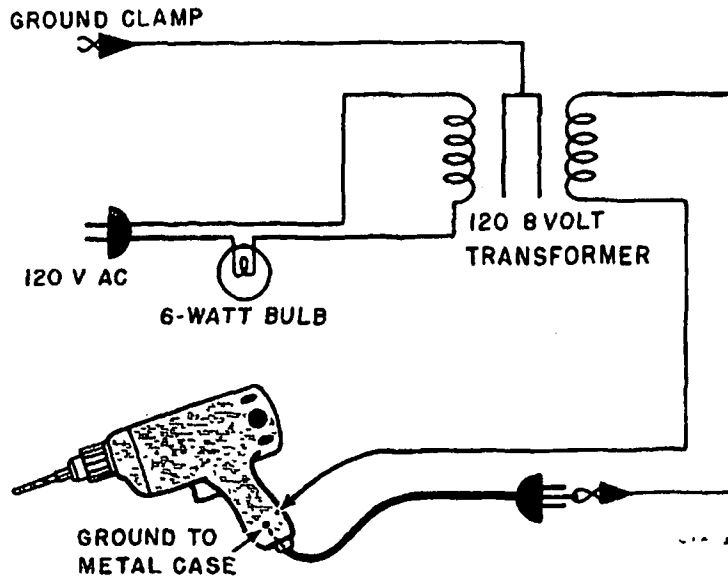


Fig 31-6. A simple low-voltage test unit with an indicating light bulb. The diagram shows a continuity test between the ground prong of the plug and the ground wire connection to the metal shell

Courtesy Self Insurers Service, Inc.

Leading manufacturers of electrical equipment often maintain staffs of engineers to guide buyers in the purchase of explosion-proof fittings. Because of the highly technical nature of this field, competent engineers should always be consulted for these needs.

Only fittings which have undergone exhaustive tests and meet the requirements of the Underwriters' Laboratories, Inc., for use in hazardous locations should be used (Fig 31-7). They must be of durable material, provide thorough protection, and be finished to be totally resistant to atmospheric conditions.

Explosion-proof fittings should be installed not only on new work but also on old wiring systems where alterations are being made or new equipment is being installed. Observing code requirements will minimize dangers that might result from using ordinary fittings in hazardous locations.

These fittings are made of durable cast material, with roomy interiors for wiring and splices, and they are capable of with-

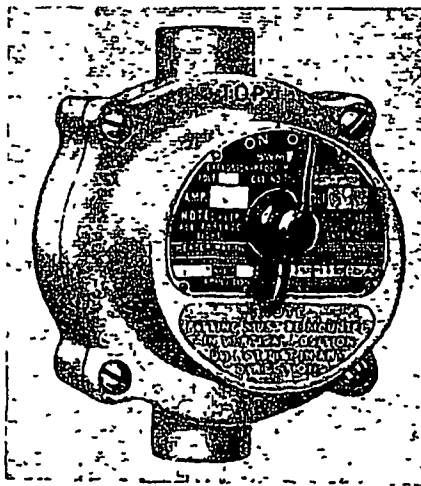


Fig. 31-7. An explosion-proof and dust-tight mercury switch which makes and breaks the circuit when the switch tilts the tube inside the mechanism.

Courtesy The Appleton Electric Company