



## Risk Element

- Exposure to the danger of electrical shock;
- Eye injury;
- Burn injury (Electrical);
- Danger to third parties;
- Burn out of Solenoid Coil.

## Precautions to Eliminate/reduce Risk

Use of proper test equipment suitable maintained.

- Adequate training to assess risk;
- Permit to work must be completed prior to working;
- Wear correct protective personal equipment;
- Effectively cordon off working area and post warning notices;
- Dummy Striker tubes to be fitted;
- Final system check prior to closing the permit to work.

## Action in an Emergency

- Switch off and isolate electrical supply;
- Remove injured person(s) from danger area (if without risk);
- Render first aid;
- Raise the alarm.

## Safe Working Method

**NOTE: All electrical work must be carried out by an authorised competent person.**

- Contact the chief engineer or nominated person to gain permission and to advise of work to be carried out;
- A Permit to Work must be completed and adhere to any rules printed thereon, over and above these procedures;
- All Health & Safety rules must be obeyed;
- Arrange for isolation of any plant alarms, i.e. if they are likely to be affected by the isolation requirement;
- Cordon off area within which work is being carried out to prevent the entrance of unauthorised personnel, should "live testing", be a requirement;
- Ensure that by isolating any equipment 'danger' is not caused to others as a result;
- Ensure that any tools required for the task in hand are in good condition and suitable for the purpose;
- After isolating has been carried out checks should be made using single purpose mains tester to establish equipment has been disconnected properly. (The test equipment in question must comply with Health & Safety Regulation guidelines).
- Prior to testing, mains testers should be tried on a known "live" circuit to establish correct working;
- To allow safe working, isolators when switched off should be 'locked off' and suitably labelled. If the removal of fuse links is the only available safe method of isolation, then personnel must ensure that the links stay in their possession until the work is completed;
- If the coil has to be removed or disconnected, the terminal ends must be adequately terminated and insulated;
- Where a solenoid coil is removed, a Dummy Striker Tube must be fitted to the solenoid coil to prevent the coil overheating when energised;
- On completion of works, personnel must ensure that all test equipment, solenoid magnets, dummy striker tubes or protection guards are removed and the system is reinstated back to its original state;
- On completion of work check all items isolated are operating and warning notices are removed;
- Ensure work area is clear of any obsolete equipment etc.;
- Complete Permit to Work process;
- Report back to Supervisor or nominated person.