DEFINING WHICH TASKS CAN BE DONE BY A FIRE ALARM TECHNICIAN

In 1989 at a meeting of the Task Group on the Quality of Servicing of Fire Alarm systems, a question arose as to what types of work or tasks should a person undertake who is servicing fire alarm systems. To respond to that question the CFAA and the Office of the Fire Marshal developed a guideline that some have labelled the "CAN DO" list. This guide and the principles behind it may be of assistance to those involved in the fire alarm service industry. The guide is divided into two parts: PART A - CAN DO and PART B - CANNOT DO.

A qualified individual who has successfully completed training through a recognized training program such as the Canadian Fire Alarm Association Technology Program or the Electrical Trade Skills Updating Program, Fire Alarm and Protection Systems or equivalent should be able to perform the tasks in Part A. These tasks are primarily maintenance and testing activities. Performance of some of these tasks may require consulting the manufacturers equipment manuals or literature for instructions on the correct replacement parts. The tasks may also require special tools or test equipment to correctly conduct tests or maintenance.

The tasks in PART B have an impact on the design of the fire alarm system. Even apparently minor changes to the fire alarm equipment as described in this group of activities may have serious repercussions on the performance of the system or approval of the ULC listing for the equipment. Undertaking any of the activities tested in this group therefore requires added caution. This does not mean that these tasks cannot be performed by qualified fire alarm service personnel but there are conditions. There must be specific instructions from the manufacturer, manufacturers' representative or listing agency and these changes must be documented in writing. In these cases, the manufacturer is assuming more control and more responsibilities in ensuring that the changes do not affect the reliability of the equipment or exceed the design capability of the system.

Undertaking some of the tasks listed in this Part B will impact or result in changes to the approved fire alarm system. Prior to undertaking tasks listed in items (a) through (f) in Part B, consultation and concurrence should be obtained from others such as the building owners and the Authority Having Jurisdiction as it could affect the approvals that were originally provided for protection of life and property in the building or may affect the Fire Safety Plan that was approved. These changes will require the approval of the building owner and the Authority Having Jurisdiction (AHJ). The AHJ is usually the Chief Fire Official of the Municipal Fire Department or the Building Department.

In Ontario proposed changes to the Fire Code were developed by the Office of the Fire Marshal, the fire service, CFAA and the electrical trade. These changes when enacted would require anyone conducting annual tests or making repairs to fire alarm Systems to have successfully completed one of the two training programmes referenced above.

A. CAN DO
(a) Test and inspection as required in Fire Code (ULC Standard CAN/ULC-S536)and provide the records of testing.
(b) Replace fire detectors and signals with the comparable type. Manual pull stations, heat detectors, smoke detectors, alarm bells, speakers.

(c) Test and verify audible and visual signals and fire detectors that have been relocated within the same fire zone.

(d) Replace fuses, lamps, plug in modules, relays or batteries with identical replacements as defined by the fire alarm manufacturer maintenance literature.

(e) Clean and tighten battery connections and replenish battery electrolyte.

(f) Adjust the charging rate of battery chargers per the fire alarm maintenance literature.

(g) Complete and sign test documentation of testing conducted by himself or herself.

B. CANNOT DO

(a) Change the types of fire detectors or alarm signals or add or remove detectors or signals.

(b) Make changes to any programming function within the control panel. These include:
- diode panels,
- jumper connections,
- internal program switches or dip switches,
- replacement of programmable switches,
- replacement of programmable semi conductor chips,
- alteration of input-output control,
- alteration of operational control software.

(c) Make adjustments to adjustable timers or time delay components.

(d) Make alterations to detection circuits or connect auxiliary equipment to the fire alarm system.

(e) Disconnect circuits to a Central Station, fire department or monitoring station.

(f) Delete, disconnect or bypass field circuit wiring, modules, circuit boards or modules.

(g) Substitute parts, repair circuit boards, or repair chassis faults.

(h) Make alterations to cable connections within the control unit.

(i) Tasks that are not specified in PART A