

necessary for test (see 2.7.6.4). The instructions shall be permanently legible with characters a minimum of 3 mm (0.125 in.) in height.

**8.6.1.5 Code Data Plate.** The Code data plate shall comply with Section 8.9.

### **8.6.1.6 General Maintenance Methods and Procedures**

**8.6.1.6.1 Making Safety Devices Inoperative or Ineffective.** No person shall at any time make inoperative or ineffective any device on which safety of users is dependent, including any electrical protective device, except where necessary during tests, inspections (see Sections 8.10 and 8.11), maintenance, repair, and replacement, provided that the installation is first removed from normal operation.

Such devices shall be restored to their normal operating condition in conformity with the applicable requirements prior to returning the equipment to service (see 2.26.7 and 8.6.1.6).

**8.6.1.6.2 Lubrication.** All parts of the machinery and equipment requiring lubrication shall be lubricated with lubricants equivalent to the type and grade recommended by the manufacturer.

Alternative lubricants shall be permitted when intended lubrication effects are achieved.

All excess lubricant shall be cleaned from the equipment. Containers used to catch leakage shall not be allowed to overflow.

### **8.6.1.6.3 Controllers and Wiring**

(a) The interiors of controllers and their components shall be cleaned when necessary to minimize the accumulation of foreign matter that can interfere with the operation of the equipment.

(b) Temporary wiring and insulators or blocks in the armatures or poles of magnetically operated switches, contactors, or relays on equipment in service are prohibited.

(c) When jumpers are used during maintenance, repairs, or testing, all jumpers shall be removed and the equipment tested prior to returning it to service. Jumpers shall not be stored in machine rooms, control rooms, hoistways, machinery spaces, control spaces, escalator/moving walk wellways, or pits (see also 8.6.1.6.1).

NOTE [8.6.1.6.3(c)]: See Elevator Industry Field Employees' Safety Handbook for recommended minimum jumper control procedures.

(d) Control and operating circuits and devices shall be maintained in compliance with applicable Code requirements (see 8.6.1.1.2).

(e) Substitution of any wire or current-carrying device for the correct fuse or circuit breaker in an elevator circuit shall not be permitted.

**8.6.1.6.4 Painting.** Care shall be used in the painting of the equipment to make certain that it does not interfere with the proper functioning of any component. Painted components shall be tested for proper operation upon completion of painting.

**8.6.1.6.5 Fire Extinguishers.** In jurisdictions not enforcing NBCC, Class "ABC" fire extinguishers shall be provided in elevator electrical machine rooms, control rooms, and control spaces outside the hoistway intended for full bodily entry, and walk-in machinery and control rooms for escalators and moving walks; and they shall be located convenient to the access door.

**8.6.1.6.6 Workmanship.** Care should be taken during operations such as torquing, drilling, cutting, and welding to ensure that no component of the assembly is damaged or weakened. Rotating parts shall be properly aligned.

**8.6.1.6.7 Signs and Data Plates.** Required signs and data plates that are damaged or missing shall be repaired or replaced.

**8.6.1.7 Periodic Tests.** The frequency of periodic tests shall be established by the authority having jurisdiction as required by 8.11.1.3.

NOTE: Recommended intervals for periodic tests can be found in Nonmandatory Appendix N.

**8.6.1.7.1** Periodic tests shall be witnessed by an inspector employed by the authority having jurisdiction or by a person authorized by the authority having jurisdiction. The inspector shall conform to the requirements in 8.11.1.1.

**8.6.1.7.2 Periodic Test Record.** A periodic test record for all periodic tests containing the applicable Code requirement(s) and date(s) performed, and the name of the person or firm performing the test, shall be installed to be readily visible and adjacent to or securely attached to the controller of each unit in the form of a metal tag or other format designated by and acceptable to the authority having jurisdiction. If any of the alternative test methods contained in 8.6.4.20 were performed, then the test tag must indicate alternative testing was utilized for the applicable requirement.

**8.6.1.7.3** No person shall at any time make any required safety device or electrical protective device ineffective, except where necessary during tests. Such devices shall be restored to their normal operating condition in conformity with the applicable requirements prior to returning the equipment to service (see 2.26.7).

**8.6.1.7.4** All references to "Items" and "Parts" are to Items in ASME A17.2.

**8.6.1.7.5 Devices Not Covered in (16) Section 8.6.** When any device on which the safety of users is dependent is installed that is not specifically