

Fleet Safety Manual

7.B.5 - LOCKOUT AND TAGOUT

1 PURPOSE

- a) To ensure that persons working aboard Canadian Coast Guard (CCG) vessels are protected from accidental exposure to energized systems such as: electrical, hydraulic, pneumatic, water, gas, or steam pressure; vacuum; high temperature; cryogenic temperature; radio-frequency emissions; potentially reactive chemicals; stored mechanical energy or, equipment actuation while working on or near shipboard systems and equipment.

2 RESPONSIBILITIES

2.1 COMMANDING OFFICER

- a) The Commanding Officer shall ensure that this procedure is applied aboard the vessel.

2.2 CHIEF ENGINEER OR DELEGATE

- a) The Chief Engineer or delegate shall approve all lockouts and tagouts for energized systems and to ensure that each event is recorded using a Lockout/Tagout Record Sheet and that all records are logged in a register. The Chief Engineer shall consult with the Commanding Officer prior to locking out or disabling any energized system or equipment which affects the operational readiness or navigational safety of the vessel. The Commanding Officer shall also be notified when the locked-out system is re-energised.
- b) The Officer of the Watch shall document in the Deck log, all notifications regarding Lockouts/Tagouts affecting operational readiness when received.

2.3 DEPARTMENT HEADS

- a) The Department Heads shall ensure that maintenance routines used aboard the vessel for systems or equipment to be isolated includes all relevant information.

3 INSTRUCTION

3.1 SYSTEMS

- a) No person shall remove a lockout or tagout or re-energize a system or piece of equipment that has been locked out or tagged out without receiving the approval of the Chief Engineer or delegate.
- b) The energy-isolating device (circuit breaker, disconnect switch, flow control valve, blank flange, a block, or some similar device used to block or isolate energy) should provide the capability of being locked, or lock wired, in the de-energized or isolated position.
- c) Where the energy-isolating device cannot be securely locked, the system should be blanked with a physical break.
- d) An inspection shall be performed by the Chief Engineer, or their delegate, to ensure that isolation will be achieved by the planned lockout/tagout. Verifying depressurization by breaking a flanged connection, loosening valve bonnets, removing instrument tubing, or other similar actions shall be avoided unless no other means for identifying depressurization exists.
- e) Checks shall be performed during the period that the component or system is isolated to ensure that components remain in the isolated position.

3.2 LOCKS AND TAGS

- a) A lockout device is a device that uses a positive means to hold an energy-isolating device in the safe position and prevents the energizing of equipment. Hasps, chains, and other devices may be treated as lockout devices when used in combination with locks.
- b) An individual key is required for each specific lock and the person responsible for the maintenance of the system or equipment being locked out is to be the only person in possession of the key. "Master key" locks shall not be used as a lockout device. When equipment is locked out over a crew change the oncoming Chief Engineer shall be informed and be responsible for the lock and key.
- c) A tagout is a prominent warning device that can be securely fastened to an energy-isolating device to indicate that the energy-isolating device and the equipment being controlled must not be operated. When systems or equipment are being locked out, a tagout must be placed next to the lockout to indicate the date of the lockout, and the name of the individual who placed the lock and has the key. The tagout is not to be removed by anyone other than the person who placed the tagout or another person who has physically relieved the person who placed the tagout.
- d) Individual Lockout/Tagout Record forms shall be created which suit the needs of the site. A sample is available in Annex D - Forms of the Fleet Safety Manual (FSM).
- e) Lockout/Tagout Records shall be retained aboard for a period of 12 months.

- f) The Chief Engineer shall maintain a lockout/tagout register which shall provide ready reference to the status of systems or equipment locked or tagged out. This register shall include, at a minimum, the following information:
- Unique identifier number corresponding to the number on the lockout/tagout record
 - System or equipment affected
 - Date lockout/tagout opened
 - Person in charge of the work
 - Date lockout/tagout closed
 - Person responsible for closing the lockout/tagout.
- g) This register book, accompanied by all remaining OPEN lockout/tagout records shall form part of the Chief Engineer's changeover notes.

3.3 REMOVING LOCKOUTS AND TAGOUTS

- a) The person who is removing the lockout/tagout shall ensure that the machinery or system is operationally intact and that components within the lockout area are repositioned, if required, to permit safe operations.
- b) Components that could cause automatic operation of a circuit breaker or a motor- or air-operated valve when control power or pressure is restored are in a position such that automatic operation will not occur when the lockout/tagout is removed.

4 DOCUMENTATION

- Lockout Tagout Register
- Deck log entries
- Lockout/Tagout Record (Annex D - Forms)
- Site Specific Work Instructions