# **ELEVATOR MECHANIC SERIES**

		Occ.	Work	Prob.	Last	Effective
Code No.	Class Title	Area	Area	Period	Action	Date
2073	Elevator Mechanic Helper I	15	170	6 mo.		
2584	Elevator Mechanic	14	170	6 mo.		
1644	Elevator Mechanic Foreman	14	170	6 mo.		

## <sup>1</sup>Promotional Line: 89 and 203

## Series Narrative

Employees in this series support, perform or supervise the inspection, maintenance, and repair of freight or passenger elevators, conveyors, hoisting machines, and other related equipment (such as generators, motors, and pumps). Their work is performed in accordance with diagrams, sketches, operation manuals, and manufacturer's specifications. They use hand and power tools (such as drills, wrenches, and screwdrivers) and precision measuring and testing instruments (such as test lamps, ammeters [an instrument used to measure electric currents] and a voltmeter [an instrument used to measure voltage]).

## DESCRIPTIONS OF LEVELS OF WORK

## Level I: Elevator Mechanic Helper I

Employees at this level assist in inspecting, adjusting, and repairing elevators and related equipment (such as generators, cables, control panels, motors, and hoisting machines). Their work is performed in the presence of and is directly supervised by an Elevator Mechanic.

An Elevator Mechanic Helper I typically –

- 1. inspects and adjusts elevators and related components (such as generators, motors, exciters, voltage regulators, floor selectors, interlocks, limit switches, floor control switches, and elevator buttons) for efficient operation
- 2. inspects and replaces defective elevator parts (such as relay contacts, bearings, brakes, drum sleeves, cables, guide rails, counterweights, buffers, and cable sheaves)
- 3. inspects elevator door installation for plumbness, lap, and working action; adjusts car hoistway and mechanical installation for alignment and clearance
- 4. cleans elevator parts (such as cables, motor, and switches) using scrapers and cleaning compound; lubricates elevator parts (such as gears, pulleys, bearings, and cables) using rags, brushes, and a grease gun

2073

<sup>&</sup>lt;sup>1</sup>See the Index of Classes to determine which promotional line(s) each class is in. See the Promotional Line List to determine the composition of each promotional line.

5. moves and raises elevator components to gain access to and remove defective parts, using hoists, dollies, rollers, wire ropes, and cable slings

- 6. disassembles defective parts for inspection and assembles repaired parts (such as locks, gears, safety devices, and cables) under direct supervision
- 7. performs other related duties as assigned

### Level II: Elevator Mechanic

Employees at this level perform skilled work involving the inspection, maintenance, repair, and servicing of elevators and related equipment. They work under direct supervision from a designated supervisor.

An Elevator Mechanic typically –

- 1. inspects, repairs, adjusts, and services elevators, conveyors, hoisting machines, and motors, including generators, exciters, voltage regulators, floor selectors, interlocks, limit switches, floor control switches, and buttons
- 2. repairs or replaces relay contacts, bearings, brakes, drum sleeves, cables, guide rails, counterweights, buffers, and cable sheaves
- 3. cleans, oils, and greases elevator equipment
- 4. assists in performance and acceptance tests of such equipment
- 5. performs other related duties as assigned

### Level III: Elevator Mechanic Foreman

Employees at this level are immediately responsible for the repair and maintenance of elevators, electric motors, and related equipment. They work under general supervision from a designated supervisor.

An Elevator Mechanic Foreman typically -

- 1. provides skilled service in the repair and maintenance of elevators, using customary tools of the craft
- 2. directs the work of personnel assigned
- 3. verifies and approves material requisitioned by employees supervised
- 4. approves time cards
- 5. maintains shop records
- 6. diagnoses defects in elevator equipment, electric motors, starters, elevator electronic equipment, and related equipment
- 7. directs and supervises corrective measures to make necessary repairs

<u>1644</u>

## <u>2584</u>

- 8. assists engineers in the preparation of estimates for repairs, remodeling, or replacement of elevator equipment and electric motors
- 9. supervises performance and acceptance tests for such equipment
- 10. performs other related duties as assigned

#### MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO:

#### Level I: Elevator Mechanic Helper I

2073

### CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

#### None

1. Must be currently registered with the Office of the State Fire Marshall in accordance with the Elevator Safety and Regulation Act [225 ILCS 312 et.seq.]

#### PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

- 1. Ability to use basic test equipment (such as voltmeter, tachometer, ammeter, and testing lamp)
- 2. Ability to use equipment to move and raise elevator cars for maintenance (such as hoists, dollies, rollers and cable slings)
- 3. Ability to adjust, inspect, and maintain freight and passenger elevators and other related equipment (such as generators, cables, motors, and hoisting machines)
- 4. Ability to use small hand and power tools (such as drills, wrenches, and screwdrivers)
- 5. Ability to clean and lubricate elevator parts and equipment
- 6. Ability to disassemble and assemble elevator parts (such as locks, gears, and cables)
- 7. Ability to replace defective elevator parts (such as brakes, bearings, and buffers)
- 8. Ability to follow oral and written instructions
- 9. Manual dexterity

#### Level II: Elevator Mechanic

2584

#### CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. (A) Experience sufficient to qualify as a journeyman elevator mechanic, with a minimum of five (5) years of training and experience in the trade, three (3) years of which were in service-maintenance work

- (B) Three (3) years of work as an Elevator Mechanic Helper at the institution to be served
- 2. Must possess a current Elevator Mechanic's license from the Office of State Fire Marshall in accordance with the Elevator Safety and Regulation Act [225 ILCS 312 et.seq.]

## PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

- 1. Ability to service, repair and maintain elevators and related equipment
- 2. Ability to analyze, interpret, and make repairs and adjustments using wiring diagrams, charts, detailed drawings, and specifications of elevator and related equipment installations

Level III: Elevator Mechanic Foreman

1644

## CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

- 1. Experience sufficient to qualify as a journeyman elevator mechanic, with a minimum total of five (5) years of training and experience in the trade
- 2. Three (3) years of additional experience in service-maintenance work in the trade
- 3. Must possess a current Elevator Mechanic's license from the Office of State Fire Marshall in accordance with the Elevator Safety and Regulation Act [225 ILCS 312 et.seq.]

## PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

- 1. Ability to analyze, interpret, and make repairs and adjustments using wiring diagrams, charts, detailed drawings, and specifications of elevators and related equipment installations
- 2. Ability to service, repair, and maintain elevators and related equipment
- 3. Supervisory ability