

## **Escalator Step Installation and Maintenance**

**Course 210**

Transit Elevator/Escalator Maintenance Training Consortium

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# **Escalator: Step Installation and Maintenance**

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## **Participant Guide**

**Transit Elevator/Escalator Maintenance Training Consortium**

**COURSE 210**

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## REVISION INDEX

Any additions, deletions, or revisions are to be listed below.

Revision No.	Date	Section	Description of Change	Revision Author
1	09-09-2015		Final edits of 03-12-2012 version	Transportation Learning Center - Amri Jorner

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## HOW TO USE THE PARTICIPANT GUIDE

### Purpose of the Course

The purpose of the *Escalator-Specific: Step Installation and Maintenance Course* is to assist the participant in demonstrating proper safety procedures and a working knowledge of the functions of various escalator and elevator components, controls, and assemblies.

### Approach of the Book

Each course module begins with an outline, a statement of purpose and objectives, and a list of key terms. The *outline* will discuss the main topics to be addressed in the module. A list of *key terms* identifies important terminology that will be introduced in this module. *Learning objectives* define the basic skills, knowledge, and abilities course participants should be able to demonstrate to show that they have learned the material presented in the module. A list of *key terms* identifies important terminology that will be introduced in each course module. *Review exercises* conclude each module to assist the participants in reviewing key information.

# Module 1

## *GENERAL SAFETY PROCEDURES*

### Outline

- 1-1 Review of 200 and 208**
- 1-2 Moving Walks**
- 1-3 Barricades**
- 1-4 PPE for Step Removal/Replacement**
- 1-5 Local Safety Practices for Working Inside Equipment**
- 1-6 Local Safety Practices for Barricades and Signage**
- 1-7 Summary**

### Purpose and Objectives

The purpose of this module is to provide an overview for the apprentice with a conceptual understanding of escalators steps installation and maintenance safety practices.

Following the completion of this module, the participant should be able to complete the objectives with an accuracy of 75% or greater;

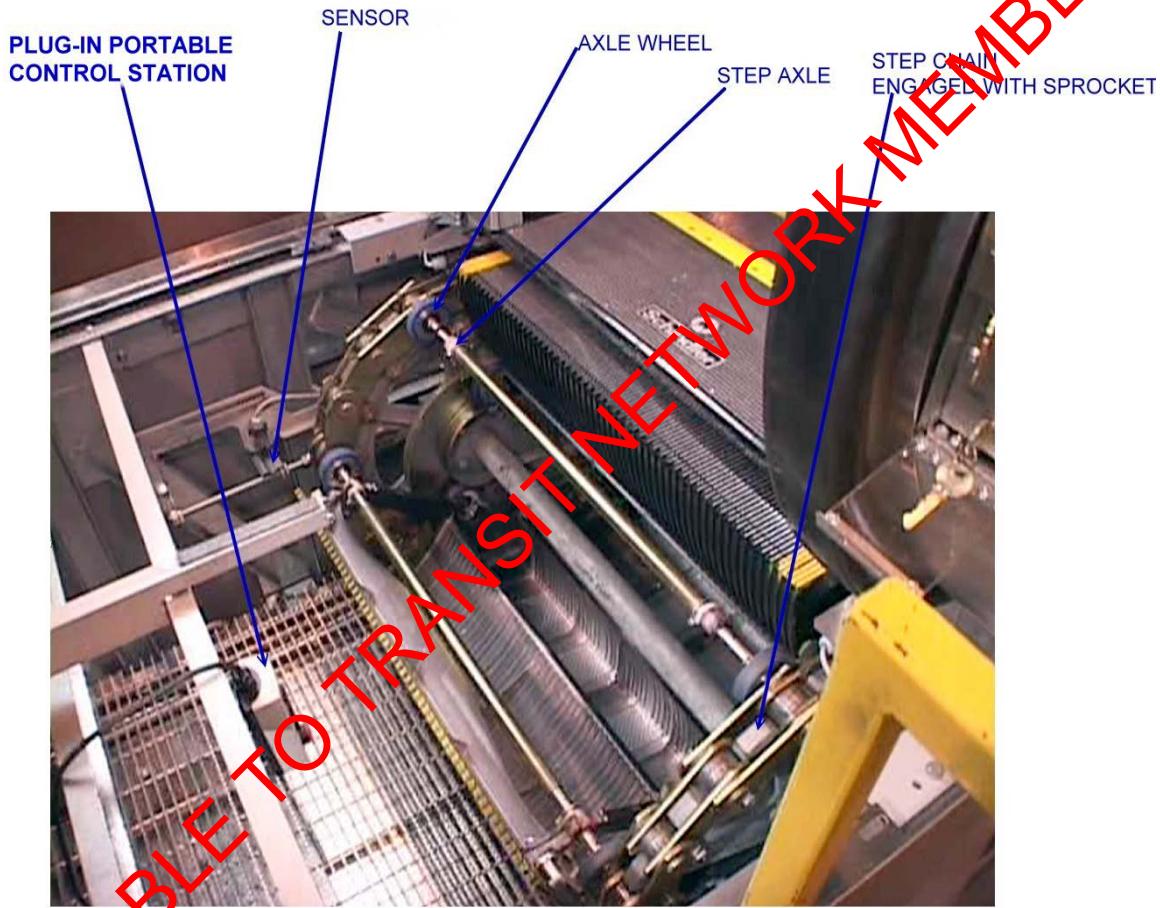
- Identify general safety practices
- Perform escalator maintenance using the safety practices learned in this module

### Key Terms

- ASME A17.1
- Elevator Industry Employees' Field Safety Handbook (EIEFSH)
- Personal Protective Equipment (PPE)
- Related agency Standard Operating Procedures and practices
- Transit Agency Safety Handbook

**ESCALATOR-SPECIFIC: STEP INSTALLATION AND MAINTENANCE  
MODULE 4: STEP BAND MAINTENANCE OVERVIEW**

- h. Damage to surface of rollers
7. Rust or reddish buildup is an indication of a lubrication problem:
- a. Lubrication not getting to the right spots
  - b. Insufficient lubrication
  - c. Wrong type of lubrication



*Figure 4.7 Lower End*

## 5-4 MODULAR STEP BAND

**Note:** Follow all local transit authority and OEM procedures.

1. Make the adjustments to the step chain on both the upper right and upper left sides.
2. See if the chain is transitioning properly on the drive gears (teeth) on each side.
3. Clean the chain using care (follow transit property procedure).
4. Follow the transit property's procedures and manufacturer's directions regarding the adjustments and alignment, as not all items will be adjusted on all systems.
  - a. Turnamatic tension (adjustment and alignment)
  - b. Track (adjustment and alignment)
  - c. Poly roller chains, where applicable
  - d. Drive chain tension (adjustment and alignment)
  - e. Measurement of chain stretching
  - f. Check the snap rings or fasteners on chain links

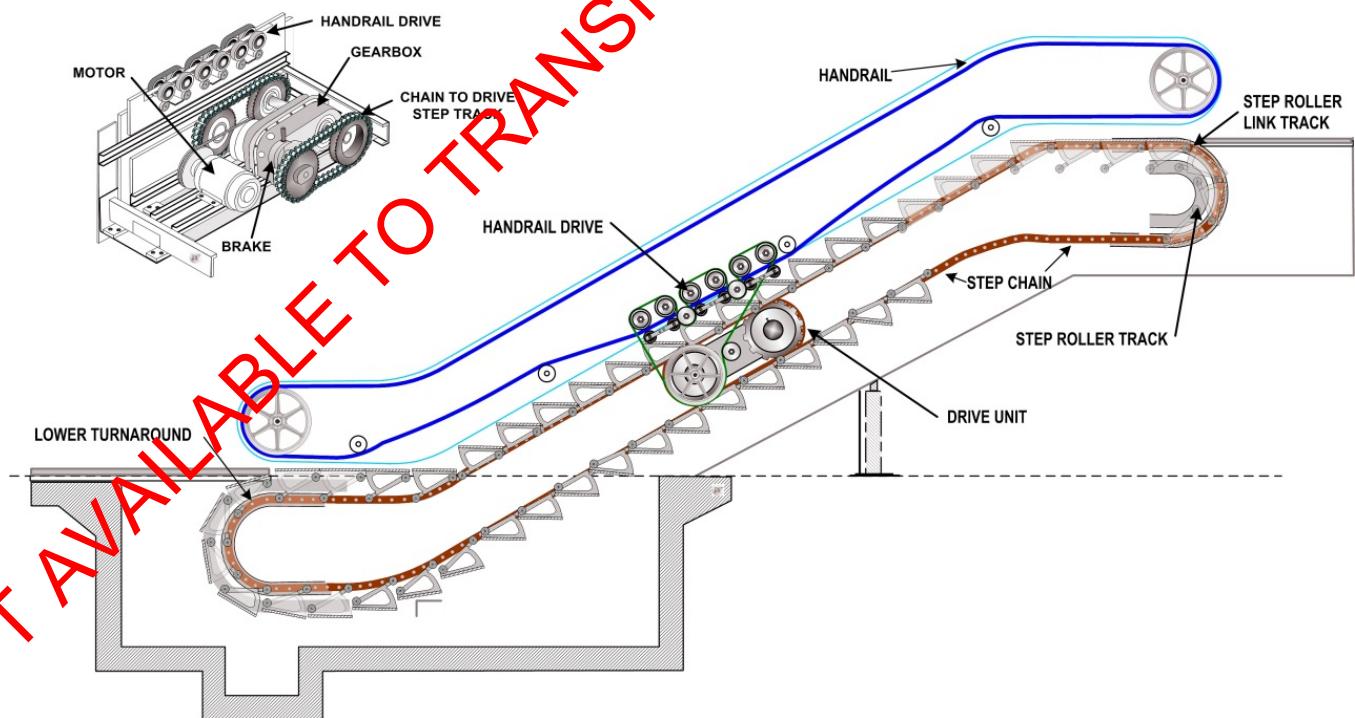


Figure 5.3 Modular Step Band