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Elevator – Car and Landings
Instructor’s Guide

Icons Used In This Guide

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<th>REVIEW slides</th>
<th>INDIVIDUAL ACTIVITY</th>
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<td>CLASSROOM ACTIVITY</td>
<td>Multimedia</td>
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<tr>
<td>SMALL GROUP ACTIVITY</td>
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Agenda

<table>
<thead>
<tr>
<th>Topic #</th>
<th>Topic Title</th>
<th>Duration</th>
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<tr>
<td>1</td>
<td>Overview</td>
<td>30 Minutes</td>
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<tr>
<td>2</td>
<td>Inspection - Car</td>
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<td>3</td>
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<td>120 Minutes</td>
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<tr>
<td>4</td>
<td>Inspection - Landing</td>
<td>30 Minutes</td>
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<tr>
<td>5</td>
<td>Safety Devices</td>
<td>30 Minutes</td>
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<tr>
<td>6</td>
<td>Signage</td>
<td>30 Minutes</td>
</tr>
<tr>
<td>7</td>
<td>Lighting</td>
<td>20 Minutes</td>
</tr>
<tr>
<td>8</td>
<td>Field Trip</td>
<td>120 Minutes</td>
</tr>
<tr>
<td>9</td>
<td>Summary</td>
<td>40 Minutes</td>
</tr>
</tbody>
</table>

Total Time: 480 Minutes
Overview

Purpose
The purpose of this module is to:

Provide the participant with an overview of inspection and maintenance of transit elevator car and landings.

Objectives
At the end of this lesson, the transit elevator/escalator trainee will be able to:

• Identify the areas and components on the top of the car, which require inspection.
• Identify the areas and components in the interior of the car, which require inspection.
• Perform a car inspection.
• Identify the areas and components at the landings, which require inspection.
• Perform a landing inspection.
• Perform an operational test on all safety devices on the Underside.
• Perform an operational test on all safety devices on the Car Top.
• Perform an operational test on all safety devices on the Landing.
• Perform an operational test on all safety devices inside Car.
• List and identify typical signage.
• Describe instances when signage would require repair and/or replacement.
• List the lights at the landing, which require inspection.
• List the lights in the interior of the car, which require inspection.
• Perform an operational test on regular interior lights.

Materials

Mandatory
Make sure you have the following

• PowerPoint Presentation
• Coursebook
• Quizzes
• Pencils
• Paper

Optional
You may also want the following for optional activities:

• Chalk board with chalk, large paper with marker, etc.
• Internet connection
• Lab, simulator or out of service elevator
• Elevator Maintenance
• ASME A17.1.
Welcome to the course on the inspection and maintenance of elevator cars and landings. **Advance**

In your own words:
Welcome to the course on the inspection and maintenance of elevator cars and landings. **Advance**

Riders depend on us. Ensuring that correct and effective signage is in place, as well as properly operating equipment is critical for the operation of transit system vertical transportation. **Advance**

**Materials Needed**

- PPT slides 1, 2
# Elevator – Car and Landings

## Instructor’s Guide

**Module Length:** 480 min  
**Time remaining:** 480 min  
**This section:** 30 min (8 slides)  
**Section start time:** ________  
**Section End Time:** ________

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
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<tbody>
<tr>
<td>In your own words:</td>
<td>Today we will</td>
<td>✓ PPT slides 3, 4</td>
</tr>
<tr>
<td></td>
<td>• Identify the areas and components on the top of the car, which require inspection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identify the areas and components in the interior of the car, which require inspection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Perform a car inspection</td>
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<tr>
<td>Advance</td>
<td></td>
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<tr>
<td></td>
<td>• Identify the areas and components at the landings, which require inspection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Perform a landing inspection</td>
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</tr>
<tr>
<td></td>
<td>• Perform an operational test on all safety devices on</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ the Underside</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ the Car Top</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ on the Landing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ inside Car</td>
<td></td>
</tr>
</tbody>
</table>

### Instructor’s Notes

- REVIEW module objectives

- [Outline](#)
  - Identify the areas and components on the top of the car, which require inspection
  - Identify the areas and components in the interior of the car, which require inspection
  - Perform a car inspection
  - Identify the areas and components at the landings, which require inspection
  - Perform a landing inspection
  - Perform an operational test on all safety devices on
    - the Underside
    - the Car Top
    - on the Landing
    - inside Car

---

**Transit Elevator/Escalator Consortium**
### Elevator – Car and Landings

*Instructor’s Guide*

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| REVIEW module objectives | In your own words: Today we will  
- List and identify typical signage  
- Describe instances when signage would require repair and/or replacement  
- List the lights at the landing, which require inspection  
- List the lights in the interior of the car, which require inspection  
- Perform an operational test on regular interior lights | ✓ PPT slide 5 |

### Instructor’s Notes

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**Advance**
**Elevator – Car and Landings**

*Instructor’s Guide*

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| REVIEW | In your own words:  
Let's take a look at some of the key words we will be defining as move through this module:  
• Auto-dialer  
• Emergency escape hatch  
• Hall Call Station  
• Operating panel  
• Position Indicator  
• Safety carrier  
*Advance* | ✓ PPT slide 6 | |

### Instructor’s Notes

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### Elevator – Car and Landings

**Instructor’s Guide**

**Module Length:** 480 min  
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**Section End Time:**

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| **ASK** participants what they remember about safety and elevators | **In your own words:**  
Thinking back to other courses or just in general, what do we already know about car components and possible maintenance requirements?  
Landing components and maintenance?  
Safety devices and maintenance?  
Signs and maintenance?  
Lighting and maintenance?  
*Allow participants to think for a minute and perhaps discuss with a partner ideas as well as write down any ideas. Discuss participant responses and if possible list them on a chalk board or similar.* | ✓ PPT slide 5 |
| **SMALL GROUP ACTIVITY** | | ✓ Chalk board or large paper |
| **WRITE** | | ✓ Blank Paper |

**Instructor’s Notes**

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The inspection and maintenance of the car and landings of transit elevator systems is part of overall preventative maintenance that elevator technicians must perform. This module provides the participant with guidance on how to inspect, clean and adjust components that are located on top of and inside the elevator car, and how to maintain landings. The participant will also be provided with methods to perform operational tests on safety devices and lighting, both inside and outside of the elevator car. In addition, the importance of inspecting, repairing and/or replacing signage used in and around transit elevator cars will be discussed.
### Elevator – Car and Landings

**Instructor’s Guide**

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| REVIEW slides | **IN YOUR OWN WORDS:**  
  **Ask**  
  Lets start by looking at the top of car. Can you name components visible from the top of car here in this photo courtesy of Elevator Bob?  
  **Allow participants to discuss possible answers.**  
  **Advance** | ✓ PPT slide 9 |
| ASK | **In your own words:**  
  **Ask**  
  Lets start by looking at the top of car. Can you name components visible from the top of car here in this photo courtesy of Elevator Bob?  
  **Allow participants to discuss possible answers.**  
  **Advance** | **Instructor’s Notes** |

---

**Module Length:** 480 min  
**Time remaining:** 450 min  
**This section:** 70 min (38 slides)  
**Section start time:**  
**Section End Time:**

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**Transit Elevator/Escalator Consortium**
# Elevator – Car and Landings

## Instructor’s Guide

**Elevator – Car and Landings**

**Module Length:** 480 min  
**Time remaining:** 450 min  
**This section:** 70 min (38 slides)  
**Section start time:**  
**Section End Time:**

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
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</thead>
</table>
| REVIEW slides | **In your own words:**  
**Ask/Recall**  
What types of components might need inspection and maintenance at a landing?  
**Allow participants to discuss possible answers.**  
**Advance**  
**Review diagram.**  
Review top of car components as illustrated on the slide:  
- Top of car operating device  
- Car fan  
- Emergency exit hatch  
- Guide rollers  
- Car door operator  
- Light and receptacle  
- Guide rollers  
**Advance** |

## Instructor’s Notes

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- [ ]
- [ ]

## Materials Needed

- ✓ PPT slide 10
In your own words:

Before performing an inspection and maintenance on the top of an elevator car be sure to post the car out-of-service signage and follow your authority’s LOTO procedures as well as the guidelines in the *Elevator Industry Field Employees’ Safety Handbook*. Always before entering the top-of-car, place the **stop switch** in the stop position. Then allow the doors to close and verify that the car will not run.

**Advance**
## Elevator – Car and Landings

**Instructor’s Guide**

| Module Length: 480 min | Time remaining: 450 min | This section: 70 min (38 slides) | Section start time: ________ | Section End Time: ________ |

<table>
<thead>
<tr>
<th><strong>DO</strong></th>
<th><strong>SAY</strong></th>
<th><strong>Materials Needed</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>REVIEW slide</td>
<td>In your own words: <strong>Ask</strong> What components do we find on top of the car which may need inspection and maintenance? <strong>Allow participants to discuss possible answers.</strong> <strong>Review the list of components inside of a car.</strong> <strong>Advance</strong></td>
<td>✓ PPT slide 12</td>
</tr>
<tr>
<td>? ASK</td>
<td></td>
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</tbody>
</table>
## Elevator – Car and Landings

**Instructor’s Guide**

Module Length: 480 min  
Time remaining: 450 min  
This section: 70 min (38 slides)  
Section start time: ________  
Section End Time: ________

### DO

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
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<tbody>
<tr>
<td>REVIEW slide</td>
<td>In your own words:</td>
</tr>
<tr>
<td>REFER participants to</td>
<td>Refer participants to Participant Course book p. 63</td>
</tr>
<tr>
<td></td>
<td>for chart to write additional notes.</td>
</tr>
<tr>
<td></td>
<td>Advance</td>
</tr>
</tbody>
</table>

### SAY

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
</table>

### Instructor’s Notes

- In your own words: Refer participants to Participant Course book p. 63 for chart to write additional notes.
- Advance

### Materials Needed

- PPT slide 13
- Course book

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Transit Elevator/Escalator Consortium
## Elevator – Car and Landings

### Instructor’s Guide

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<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| REVIEW slides | **In your own words:**  
Push the **Stop Button** as seen in this photo and verify that it is working as designed by attempting to move the car in inspection mode. If not functioning as designed, correct the defect as required.  
**Advance** | ✓ PPT slides 14, 15 |

### Instructor’s Notes

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- [Blank line]
### Elevator – Car and Landings

**Instructor’s Guide**

<table>
<thead>
<tr>
<th>Module Length: 480 min</th>
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<th>Section start time:</th>
<th>Section End Time:</th>
</tr>
</thead>
</table>

**DO**

- REVIEW slides

**SAY**

**In your own words:**

- Inspect and test the **door operator**, **Advance** Check for loose parts, including all fastenings.
- **Advance** Clean the dust off the cover, motor, pulleys, belt and crank arms.
- **Advance** Lubricate drive chains, gear reducer and shaft bearings, as necessary.

**Instructor’s Notes**

- Here you can see the location of the door operator. **Advance**

**Materials Needed**

- ✓ PPT slides 16, 17

**Top of Car**

- Door Operator
  - Inspect and test
  - Check for loose parts including all fastenings
  - Clean dust on the cover, motor, pulleys, belt, and crank arms
  - Lubricate as needed
    - Drive chains
    - Gear reducer
    - Shaft bearings
In your own words:

Ensure a secure attachment at the **safety carrier** or safety attachment point.

**Advance** Examine the crosshead linkage (where applicable) for the condition of the set screws, pins, mechanical keys, rods and connection points to the safeties located at the bottom rail shoes. Check the tail rope that attaches to the safety carrier. Verify that it is rust-free and tight on the drum.

**Advance**

Also check that the tail rope is in the deflector pulleys, so that when activated it will deploy as designed and not kink or break. **Advance**

Materials Needed

- PPT slides 18, 19
### Materials Needed

- **In your own words:**
  - Guide rollers, Roller guide assemblies, and guide shoes: Check *guide rollers* for wear and damage and replace as required. Examine the guide rollers for fit and alignment. They should contact the rails with sufficient force to make a firm contact with the rail.
  - *Advance* Grease all roller guide assemblies on the elevator, if applicable. Most rollers have sealed bearings that cannot be lubricated. But, a common cause of guide roller misalignment is the lack of lubricant in the pivot bushings. The frequency of lubrication will vary with the environment and operation, but a couple drops of oil once a month is recommended.
  - *Advance* Be sure to replace all car guide shoes, if necessary.

### Instructor’s Notes

- REVIEW slide

- ![Diagram](image-url)
### Elevator – Car and Landings

#### Instructor’s Guide

Module Length: 480 min  
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Section start time: ________  
Section End Time: ________

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
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</thead>
</table>
| REVIEW slide | **In your own words:**  
Guide Rails: Examine the **guide rails** for loose fastenings and fit at the joints. Rails that are lubricated must be cleaned to prevent accumulation of lubricant, dirt, and lint. **Advance** | ✓ PPT slide 21 |

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**Instructor’s Notes**

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# Elevator – Car and Landings

**Instructor’s Guide**

<table>
<thead>
<tr>
<th>DO</th>
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<tbody>
<tr>
<td>REVIEW slide</td>
<td>In your own words:</td>
<td></td>
</tr>
<tr>
<td>ASK</td>
<td></td>
<td>✓ PPT slide 22</td>
</tr>
</tbody>
</table>

**Instructor’s Notes**

- Ask What is a selector tape?
- Allow participants to discuss possible answers.
- Check the selector tape or cable for secure fastening and operation.
- Advance Examine the sensor guides on the stationary tape for wear. If the guide groove is twice the width of the tape thickness, it should be replaced.
- Advance Make sure that the selector tape is securely fastened at each end.
- Advance For magnetic selector tapes, examine the magnets on tape for grime build up or materials that may interfere with their operation.
- Advance For ones with holes, make sure that the holes are not elongated.

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**Module Length:** 480 min  
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**Section End Time:**  

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**Top of Car**

- Selector Tape
  - Look for secure/fastening and operation
  - Examine sensor guides on stationary tape for wear
    - Replace guide groove twice width of tape thickness
  - Ensure fastening at both ends
  - Magnetic Selector Tapes – examine for grime build up, etc.
  - Selector Tape with Holes – ensure holes are not elongated

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**Transit Elevator/Escalator Consortium**
**Elevator – Car and Landings**

*Instructor’s Guide*

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| REVIEW slides | **In your own words:**
Check **traveling cable** for wear, chafing, kinking and alignment.  
**Advance** Examine attachment points for secure fastening and looseness.  
**Advance** Check for slippage of the cable through the grips. Slippage can be prevented by taping the bottom of the grip with electrical tape.  
**Advance** Clean the **car ventilation and fan** opening. If necessary, remove the fan and clean the blades or squirrel cage.  
**Advance** Lubricate the motor; install and check for proper operation.  
**Advance** If a belt drive is used, examine the belt’s condition and tension.  
**Advance** Replace all guards on blades, belts and motors as needed.  
**Advance** | ✓ PPT slides 23, 24 |

**Instructor’s Notes**

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## Elevator – Car and Landings

### Instructor’s Guide

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**Section End Time:**

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
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<tbody>
<tr>
<td>REVIEW slides</td>
<td>In your own words:</td>
</tr>
</tbody>
</table>

Check the emergency escape hatch like seen here making sure it is secure and accessible. Verify that it cannot be opened from the inside of the car.

**Advance** Remember, when leaving the car top, remove all tools and supplies.

**Advance** Observe all safety precautions, (i.e., place car top stop switch to stop position, step off, and return stop switch to run/normal position). Never store lubricants, tools, supplies or anything else on the car top.

**Advance** Verify that the top car exit is secured so that it cannot be opened from inside the car.

**Advance** Allow the door to close, place a call and verify that the car operates correctly before removing out-of-service signs.

**Advance**

### Instructor’s Notes

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### Materials Needed

- ✓ PPT slides 25, 26
<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
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</thead>
<tbody>
<tr>
<td>REVIEW slide</td>
<td>In your own words: <em>Refer participants to</em> Elevator Maintenance</td>
<td>✓ PPT slide 27</td>
</tr>
<tr>
<td>REFER participants to</td>
<td><strong>Elevator Maintenance 2nd Edition</strong></td>
<td></td>
</tr>
<tr>
<td>Elevator Maintenance</td>
<td>Section 4.2 p.22 - 228</td>
<td></td>
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<tr>
<td></td>
<td><em>for more information on maintenance from the top of the car.</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Advance</em></td>
<td>✓ Elevator Maintenance</td>
</tr>
</tbody>
</table>

**Instructor’s Notes**

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____________________________________
### Elevator – Car and Landings

**Instructor’s Guide**

**In your own words:**
Let's see what we have learned so far: Jerome is going to perform inspection and maintenance on the top of the car. What should Jerome do before he begins work?

**Call on participants for answer**

**Advance once given the correct answer**

**Answer:**
- Signage
- LOTO
- Elevator Industry Field Employees' Safety Handbook
- Before entering
  - **Stop switch** in stop position
  - Allow doors to close
  - Verify car will not run

**Advance**

**Instructor’s Notes**

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**Materials Needed**

- ✓ PPT slide 28

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**Module Length:** 480 min  
**Time remaining:** 450 min  
This section: 70 min (38 slides)  
Section start time:  
Section End Time:  

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**DO**

- ASK

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**SAY**

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**Materials Needed**

- ✓ PPT slide 28
<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>In your own words:</strong> What must be examined, tested, and repairs made if needed prior to any other maintenance?</td>
<td>✓ PPT slide 29</td>
</tr>
<tr>
<td></td>
<td><strong>Call on participants for answer</strong></td>
<td></td>
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<tr>
<td></td>
<td><strong>Advance once given the correct answer</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Answer:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Top-of-car operator, stop switch, and light</td>
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</table>

**Instructor’s Notes**

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### Elevator – Car and Landings

**Instructor’s Guide**

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| ASK | **In your own words:** Danny needs to perform inspection and maintenance of the traveling cable. What should Danny do? **Call on participants for answer** **Advance once given the correct answer** 
   **Answer:**
   - Look for wear, chafing, kinking and alignment
   - Examine attachment points for secure fastening and looseness
   - Look for slippage of cable through grips
     - Prevent by taping bottom of grip with electrical tape
   **Advance** | ✓ PPT slide 30 |

**Instructor’s Notes**

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## Elevator – Car and Landings

**Instructor’s Guide**

<table>
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<tr>
<th>DO</th>
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<th>Materials Needed</th>
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</thead>
<tbody>
<tr>
<td>REVIEW slides</td>
<td><strong>In your own words:</strong> Next, lets look at Inside-the-car. <em>Share humorous quote and photo from inside car.</em> <strong>Advance</strong></td>
<td>✓ PPT slides 31, 32</td>
</tr>
</tbody>
</table>

**Instructor’s Notes**

- Prior to performing inspection and maintenance on the inside of the car, begin by examining the car interior for damage to suspended ceiling, wall panels and trim, door panels, door astragals, lighting and floor. Check for damage, loose or missing handrails. Repair as required.

- **Advance** Verify that there is a valid permit, if such is required by your authority.

- **Advance** Also, check the door opening/closing buttons are operating properly, repair as needed.

- **Advance** If applicable, check for proper operation of motion detector and camera equipment.
## Elevator – Car and Landings

### Instructor’s Guide

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<table>
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<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| ASK                                     | In your own words:  
**Ask**  
What components do we find inside of the car which may need inspection and maintenance?  
**Allow participants to discuss possible answers.**  
**Review the list of components inside of a car.**  
**Advance**  
Refer participants to  
Participant Course book p. 68  
*for chart to write additional notes.*  
**Advance** | ✓ PPT slide 33, 34  
✓ Course book |
| REVIEW slide                           |                                                                     |                  |
| REFER participants to Course book      |                                                                     |                  |

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Instructor’s Notes

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## Elevator – Car and Landings

**Instructor’s Guide**

Module Length: 480 min  
Time remaining: 450 min  
This section: 70 min (38 slides)  
Section start time:  
Section End Time: 

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>In your own words:</strong></td>
<td>✓ PPT slide 35</td>
</tr>
<tr>
<td></td>
<td>Inspect and test door operation and alignment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Advance</strong> Operate the elevator both up and down. Stop at each landing and note the leveling accuracy, stopping, acceleration and deceleration. The level should be within ½ inch of the landing at each stop. If the leveling is erratic, on hydraulic elevators, the control valve needs to be serviced or replaced. As you run the elevator from landing to landing, listen for any unusual noises such as scraping and rattling. Investigate and correct as required.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Advance</strong> Be sure to check door operation for smooth start and stop without bouncing, slamming and hitting. If needed, adjust the door operator to achieve smooth acceleration and deceleration in both the open and closed direction. <strong>Do Not Advance</strong></td>
<td></td>
</tr>
</tbody>
</table>

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**Instructor’s Notes**

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<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>REVIEW slide</td>
<td>In your own words: Doors that bounce and rattle probably need new hanger rollers. Such repair would be made from the top of the car. <strong>Advance</strong> Also, check the wear on sliding guides by shifting your weight back and forth and side to side. This can also be checked from inside the car at a landing with door open by observing the movement of the car sill in relation to the landing sill. <strong>Advance</strong></td>
<td>✓ PPT slides 35, 36</td>
</tr>
</tbody>
</table>

**Instructor’s Notes**

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**Instructor’s Notes**

- **In your own words:**
  
  **Ask**
  What is another name for an in-car stop switch?

  **Answer:** Key-operated stop switch

  Verify that the in-car stop switch is working as designed. Check operation of the in-car stop switch with the car stopped near or at the top terminal. Use key to check operation on independent service.

  **Advance**

  Operate the elevator in both directions, stopping at each landing. Remove any debris from door jamb, sills. Be sure to examine all sills for excessive sill groove wear, defects and damage. Check car door gibs for secure attachment, wear and engagement into the sills.

  **Advance**

---

**Materials Needed**

- ✓ PPT slides 37, 38
In your own words:
Here is an example of a door sill area.

**Advance**

Verify that the **ventilation fan** is operating as designed. If not functioning as designed correct the defect as required. Ensure the grill is secured and clean of dirt and dust.

**Advance**

### Instructor’s Notes

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### Materials Needed

- ✔ PPT slides 39, 40
### Materials Needed

- PPT slides 41, 42

### Instructor’s Notes

- In your own words:
  
  Examine the car **operating panel** for secure fastening. Be sure to report any damage due to vandalism. Verify that all raised and Braille characters are present. Check that the inspection mode works in the car operating panel. Examine all car push buttons for illumination and defects. Check the position indicators for condition and operation of all lamps. Replace all burned out lamps.

  **Advance**

- Activate the audible **alarm push button** on the operating panel (Figure 8) and verify the alarm bell sounds. If not functioning as designed, correct or report the defect as required. In some instances the alarm bell is connected to the in-car **auto-dialer**.

  **Advance**
In your own words:

If the elevator is equipped with audible signals, such as the floor passing signal, check that they are operating and make any repairs as needed. Check the operation of emergency communication devices such as a phone, “push-to-talk” or auto-dialer. If not functioning as designed, follow your authority’s procedures to notify the responsible department that will fix immediately. Be reminded that code, ASME A.171, requires that each elevator to be equipped with emergency two-way communication systems between the elevator and a point outside the hoistway.

Advance
## Elevator – Car and Landings

### Instructor’s Guide

Module Length: 480 min  
Time remaining: 450 min  
This section: 70 min (38 slides)  
Section start time: ________  
Section End Time: ________

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| REVIEW slide| In your own words:  
**Refer participants to**  
Elevator Maintenance 2nd Edition  
Section 3.4 & 3.4.1 p.209 - 212  
for more information on maintenance performed inside of the car.  
**Advance** | PPT slide 43  
**Elevator Maintenance** |
| REFER participants to Elevator Maintenance. | | |

### Instructor’s Notes

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________________________________________________________________________
________________________________________________________________________
### Elevator – Car and Landings

**Instructor’s Guide**

<table>
<thead>
<tr>
<th><strong>DO</strong></th>
<th><strong>SAY</strong></th>
<th><strong>Materials Needed</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>![Ask Icon]</td>
<td><strong>In your own words:</strong> Lets see what we have learned so far: Yes or No. When inspecting the COP, Carll must examine position indicators for condition, operation of lamps, and does not need to replace burned out lamps. <strong>Call on participants for answer</strong> <strong>Advance once given the correct answer</strong></td>
<td>✓ PPT slide 45</td>
</tr>
</tbody>
</table>

**Instructor’s Notes**

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---
DO

In your own words:
What should Melissa inspect when performing an inside of car inspection?

Call on participants for answer

Advance once given the correct answer

Answer:
• Look for damage to ceiling, walls and trim, door panels, door astragals, lighting, floor, handrails and repair as needed
• Verify valid permit if required
• Test door opening and closing buttons, repair as needed
• Test motion detector and camera equipment if applicable

SAY

Materials Needed

✓ PPT slide 46
### DO

**ASK**

**CLASSROOM ACTIVITY**

### SAY

In your own words:

*Take time to visit the field to provide an example demonstration and opportunities for participants to perform the following tests:*

- Perform a car inspection
- Perform a landing inspection

*Advance*

### Materials Needed

- PPT slide 47

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**Instructor’s Notes**

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**Transit Elevator/Escalator Consortium**
### Elevator – Car and Landings

**Instructor’s Guide**

**Module Length:** 480 min  
**Time remaining:** 260 min  
**This section:** 30 min (12 slides)  
**Section start time:** ________  
**Section End Time:** ________

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| REVIEW slides | In your own words:  
Next, let’s look at the Landing.  
Courtesy of Elevator Bob –  
“Where are the hall call buttons?”  
**Advance** | ✓ PPT slides 48, 49, 50 |
| ASK | **Ask/Recall**  
What types of components might need inspection and maintenance at a landing?  
**Discuss participant answers**  
**Advance**  
**Review diagram**  
**Advance** | |

**Instructor’s Notes**

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## Elevator – Car and Landings

**Instructor’s Guide**

**Module Length:** 480 min  
**Time remaining:** 260 min  
**This section:** 30 min (12 slides)  
**Section start time:** ________  
**Section End Time:** ________

### DO

| RE | REVIEW slide |
| RE | REFER participants to Course book |

### SAY

- **In your own words:**  
  *Refer participants to*  
  
  **Participant Course book p.71**  
  
  for chart to write additional notes.

  **Advance**

### Instructor’s Notes

- ________________________________
- ________________________________
- ________________________________
- ________________________________
- ________________________________

### Materials Needed

- ✓ PPT slide 51  
- ✓ Course book
## In your own words:
Operate elevator from outside the car.

**Advance** Register a hall call at each landing. Verify that the button illuminates and the car responds to the hall call. Repair any defects as required. Be sure to inspect and test hall lanterns and call stations for burned out lamps and damage. Inspect hall **position indicators** at each landing and verify operation. Replace any burned out lamps.

**Advance**

*Click on alarm for sound effect.*
Verify that all alarms, gongs and chimes sound clearly. Repair as necessary.

**Advance**

### Materials Needed

☑ PPT slides 52, 53

### Instructor's Guide

- **DO**
  - REVIEW slides
  
- **SAY**
  - In your own words:
  - Operate elevator from outside the car.
  - **Advance** Register a hall call at each landing. Verify that the button illuminates and the car responds to the hall call. Repair any defects as required. Be sure to inspect and test hall lanterns and call stations for burned out lamps and damage. Inspect hall **position indicators** at each landing and verify operation. Replace any burned out lamps.
  - **Advance**
  - *Click on alarm for sound effect.*
  - Verify that all alarms, gongs and chimes sound clearly. Repair as necessary.
  - **Advance**
### DO

- **REVIEW** slides

### MATERIALS NEEDED

- PPT slides 52, 53

---

### SYA

- **In your own words:**
  - Operate elevator from outside the car.
  - **Advance** Register a hall call at each landing. Verify that the button illuminates and the car responds to the hall call. Repair any defects as required. Be sure to inspect and test hall lanterns and call stations for burned out lamps and damage. Inspect hall **position indicators** at each landing and verify operation. Replace any burned out lamps.
  - **Advance**

- **Click on alarm for sound effect.**
  - Verify that all alarms, gongs and chimes sound clearly. Repair as necessary.
  - **Advance**

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### INSTRUCTOR’S NOTES

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### Elevator – Car and Landings

**Instructor’s Guide**

Module Length: 480 min  
Time remaining: 260 min  
This section: 30 min (12 slides)  
Section start time: ________  
Section End Time: ________

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
</tr>
</thead>
</table>
| REVIEW slide | **In your own words:**  
Examine the condition of the **door panels** and clearance between panel and sills, and lintel and jambs. This clearance should be 3/8 inch or less.  
For **clearance parameters** (gaps), simply use a ruler to make sure that all spaces are within code specifications as per A17.1 - 2010 Section 2.11.  
**Refer participants to the A17.1 code to find specifications.** |

- **Instructor’s Notes**

<table>
<thead>
<tr>
<th>Materials Needed</th>
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</thead>
<tbody>
<tr>
<td>✓ PPT slide 54</td>
</tr>
<tr>
<td>✓ ASME A17.1 Code Book</td>
</tr>
</tbody>
</table>

**Materials Needed**

- ASME A17.1 Code Book
- ADVANCE PPT slide 54
In your own words:

Note that door sills, which may be checked from inside the car, should also be cleaned during preventive maintenance. They can be cleaned with a wire brush, compressed air, etc. As always, follow your authority's specific procedures. If damaged, replace as needed.

Advance

Check the hoistway door unlocking devices, including escutcheons and key lock boxes.

Advance If escutcheons or key locks have been damaged so that the door can be opened with ordinary tools, they must be repaired or replaced. Always report such damage per your authority’s guidelines.

Advance Also, examine hoistway access switches for proper operation.

Advance
In your own words:
Remember to check door closing force which must be 30 lbs of force or less to comply with the code. To test closing force, use a force gauge on the edge of the hoistway door – as the sensor will detect an obstruction if it is measured on the inside of the car door, and will not close. Where this is measured on the door depends on the manufacturer, so be sure to consult your manufacturer's specifications. Kinetic closing energy measurements vary depending on the type of door.

Advance
**DO**

**REVIEW** slide

**SAY**

In your own words:

Remember to check door closing force which must be 30 lbs of force or less to comply with the code. To test closing force, use a force gauge on the edge of the hoistway door – as the sensor will detect an obstruction if it is measured on the inside of the car door, and will not close. Where this is measured on the door depends on the manufacturer, so be sure to consult your manufacturer's specifications. Kinetic closing energy measurements vary depending on the type of door.

**Advance**

**Materials Needed**

- ✓ PPT slide 57

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**In your own words:**

Lets see what we have learned so far: Ron is to inspect the hall call station and position indicators. What steps does Ron need to take in order to complete this task?

**Call on participants for answer**

**Advance once given the correct answer**

**Answer:**

Operate elevator from outside of car

- Register hall call at each landing
- Verify button illumination and car response
- Inspect & test hall lanterns, call station lamps, position indicators
- Repair or replace burned out lamps as needed.

**Advance**

**Materials Needed**

- PPT slide 58

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**Instructor’s Notes**

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<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASK</td>
<td><strong>In your own words:</strong> Door closing force must be _____ of force or less to comply with the code.</td>
<td>✓ PPT slide 59</td>
</tr>
<tr>
<td></td>
<td>a. 10lbs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. 30lbs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. 50lbs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. 100lbs</td>
<td></td>
</tr>
<tr>
<td>Instructor’s Notes</td>
<td><strong>Call on participants for answer</strong> Advance once given the correct answer Answer: b. 30lbs <strong>Advance</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Elevator – Car and Landings

**Instructor’s Guide**

Module Length: 480 min  
Time remaining: 230 min  
This section: 30 min (7 slides)  
Section start time:  
Section End Time:  

<table>
<thead>
<tr>
<th><strong>DO</strong></th>
<th><strong>SAY</strong></th>
<th><strong>Materials Needed</strong></th>
</tr>
</thead>
</table>
| REVIEW slide | In your own words:  
**Ask/Recall**  
What might be some safety devices in a car or landing to maintain?  
**Discuss participant answers. Advance.**  
**Review the list of safety devices. Advance.**  
Let's look at the car alarm, in-car stop switch, and hoistway access switch.  
For the car alarm:  
**Advance.** Activate the audible alarm **push button** on the car operating panel and verify the alarm bell sounds. If not functioning as designed, correct the defect as required.  
**In-Car Stop Switch**  
**Advance.** Verify that the **in-car stop switch** is working as designed.  
**Advance.**  
**Hoistway Access Switch**  
Inspect the **hoistway access switches** at the top and bottom landings and verify operation. | ✓ PPT slide 60, 61 |

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**Instructor’s Notes**

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### Elevator – Car and Landings

**Instructor’s Guide**

Module Length: 480 min  
Time remaining: 230 min  
This section: 30 min (7 slides)  
Section start time:  
Section End Time:  

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| REVIEW slides
Instructor’s Notes |

#### DO

- **In your own words:**
  - **Hoistway Access Switch**
    - Inspect the **hoistway access switches** at the top and bottom landings and verify operation.  
      **Advance**

- **Door Closers**
  - **Advance** Examine the operation of the **door closers**, either the **spirators** or **spring closers**, to ensure that the car does not start moving before the doors close.

- **Emergency Escape Hatch**
  - **Advance** Open the **emergency escape hatch** and verify that it is working as designed by attempting to move the car in inspection mode. If not functioning as designed, correct the defect as required.  
    **Advance**

- **Materials Needed**
  - ✓ PPT slides 61, 62
### Materials Needed

- PPT slides 63, 64

### DO

#### REVIEW slides

### SAY

**In your own words:**

**Emergency Stairwell Exits**

Examine each landing. Verify the door opening/closing buttons are operating. Ensure the doors are secured and the interlock contacts and assemblies are clean and securely fasten. Clean and adjust as required.

**Advance**

**Broken Tape Switch (if applicable)**

Trip the switch and ensure that the elevator does not operate. Reset switch and if not functioning as designed correct the defect as required. If the plank/safety switch is located on the cross head, activate and verify that the elevator will not move. On elevators with “type B” safeties, clean and lubricate the threaded rod and drum beneath the car in the safety plank.

**Advance**
## Elevator – Car and Landings

### Instructor’s Guide

Module Length: 480 min
Time remaining: 230 min
This section: 30 min (7 slides)

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| REVIEW slides | In your own words:  
**Camera Equipment (if applicable)**  
Check if camera and enclosure equipment are intact. If there is damage, follow your authority’s reporting procedures.  
*Advance* | ✓ PPT slides 65 |

### Instructor’s Notes

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**Elevator – Car and Landings**

*Instructor’s Guide*

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**Materials Needed**

- PPT slide 66

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<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
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</thead>
</table>
| ASK | In your own words:  
Lets see what we have learned so far:  
Yes or No. Amri is inspecting door closers  
and must ensure the car doesn’t move before  
the doors close. |

**Call on participants for answer**

**Advance once given the correct answer**

**Answer:** Yes

**Advance**

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Instructor’s Notes

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In your own words:
Next, lets look at the signage. And courtesy of Elevator Bob while considering signage, “Another long walk.”

Advance

Ask
What types of signs might we find in transit with regard to elevators?

What might be important to keep in mind in terms of inspection and maintenance of signage?

Discuss participant answers

Advance

Materials Needed

✓ PPT slide 67, 68
There are a variety of signs used in transit elevator systems. Among them are signs that meet Americans with Disability Act (ADA) requirements. There are also safety, fire, emergency and directional signs, along with notification signs regarding restricted areas. Another commonly required sign may be found on the machine room door, (e.g. “Machine Room” or “Elevator Machine Room”). Often elevator driving machines must be engraved in a metal tag in block lettering ¼-inch in height and permanently attached to the driving machine. Of course, inspection certificates and maximum-rated load signs are required to be posted inside the elevator.

**Advance**
### Instructor’s Notes

- ADA signage is important because it helps people with disabilities move about transit facilities, locate accessible areas and safely use transit elevators.
- ADA compliant signs for elevators have to follow specific guidelines for the call buttons, hall lanterns, Braille requirements, control buttons and control button height requirements. The ADA Accessibility Guidelines (ADAAG) require that elevators meet the *ASME A17.1-1990 Safety Code for Elevators and Escalators*.

**Advance**

### Materials Needed

- PPT slide 69

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**DO**

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>REVIEW slide</td>
<td>In your own words: ADA signage is important because it helps people with disabilities move about transit facilities, locate accessible areas and safely use transit elevators. ADA compliant signs for elevators have to follow specific guidelines for the call buttons, hall lanterns, Braille requirements, control buttons and control button height requirements. The ADA Accessibility Guidelines (ADAAG) require that elevators meet the <em>ASME A17.1-1990 Safety Code for Elevators and Escalators</em>. Advance</td>
</tr>
</tbody>
</table>
## Elevator – Car and Landings

### Instructor’s Guide

**Module Length:** 480 min  
**Time remaining:** 200 min  
**This section:** 30 min (11 slides)  
**Section start time:** ________  
**Section End Time:** ________

### DO  
### SAY  
### Materials Needed

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>REVIEW slide</td>
<td>In your own words: Refer participants to ASME A17.1-1990 Safety Code for Elevators and Escalators for detailed review of code requirements related to signage requirements.</td>
<td>✓ PPT slide 70</td>
</tr>
<tr>
<td>REFER participants to ASME A17.1 Code Book</td>
<td>Advance</td>
<td>✓ ASME A17.1 Code Book</td>
</tr>
</tbody>
</table>

### Instructor’s Notes

- [Blank lines for notes]

**Transit Elevator/Escalator Consortium**
In your own words:
ADA signage is important because it helps people with disabilities move about transit facilities, locate accessible areas and safely use transit elevators. ADA compliant signs for elevators have to follow specific guidelines for the call buttons, hall lanterns, Braille requirements, control buttons and control button height requirements. The ADA Accessibility Guidelines (ADAAG) require that elevators meet the ASME A17.1-1990 Safety Code for Elevators and Escalators.

Advance

And here are example of braille and raised characters.

Advance
DO

REVIEW slides

SAY

In your own words:

Fire and emergency signage. *Advance*

Directional signage. *Advance*

Warning Signage. *Advance*

Materials Needed

✓ PPT slides 73, 74, 75
**Elevator – Car and Landings**

**Instructor’s Guide**

Module Length: 480 min  
Time remaining: 200 min  
This section: 30 min (11 slides)  
Section start time:  
Section End Time:  

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| ![?] ASK | **In your own words:**  
Lets see what we have learned so far:  
Signs are intended to meet the needs for:  
(check all that apply)  
  a. Patrons  
  b. Technicians  
  c. Safety  
  d. ADA requirements  
  e. Directional | ✓ PPT slide 76 |

**Instructor’s Notes**

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**Call on participants for answer**

**Advance once given the correct answer**

Answer: a., b., c., d., e.

**Advance**
### Elevator – Car and Landings

**Instructor’s Guide**

Module Length: 480 min  
Time remaining: 200 min  
This section: 30 min (11 slides)  
Section start time: ________  
Section End Time: ________

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| ASK | **In your own words:** Alex must inspect signage for his transit authority. What must Alex do to complete this task?  

---

**Call on participants for answer**

**Advance once given the correct answer**  
**Answer:**

- Check raised and Braille characters  
- Check signage inside car and in corridor  
- Repair or report missing or damaged signs  
- Follow transit authority procedures

---

**Instructor’s Notes**

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- PPT slide 77
The last item in this module we will look at is lighting. Lighting in the car and at the landing is very important for many reasons.

**Advance**

**Ask/Recall**

What types of components might need inspection and maintenance at a landing?

**Discuss participant answers**

**Advance to review the list of components at the landing.**

**Advance**

---

**Materials Needed**

- PPT slides 78, 79

---

**In your own words:**
In your own words:

Module 1 of this course provided details about the inspection and maintenance of the three types of lighting found in transit elevator systems: fluorescent, incandescent, and LED. Refer to the module for the common symptoms and corrective actions regarding each type. Be reminded that when replacing the lamp(s), insure that the correct size, type, and wattage is used. Whenever replacing a lighting component, follow all precautions related to locking out the elevator before beginning the process of lamp replacement.

Advance

Remember that the lighting circuits and the operational circuits may not be the same and removing power from the operation of the elevator does not necessarily mean that the lighting circuit will be disabled. Advance
**Elevator – Car and Landings**

**Instructor’s Guide**

Module Length: 480 min  
Time remaining: 170 min  
This section: 20 min (9 slides)  
Section start time:  
Section End Time: 

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
</tr>
</thead>
</table>
| **REVIEW** slide | **In your own words:**  
From inside the car, examine all car push buttons for illumination and defects, including the car position indicator lights.  
**Advance** Replace all burned-out lamps and damaged jewels.  
**Advance** Test and verify the proper operation of the car emergency light, and repair it as needed.  
**Advance** Observe the car lighting and ensure that all fixtures are secured and working as designed.  
**Advance** If not functioning as designed, correct the defect as required.  
**Advance** |

|  | **Materials Needed** |
|  | ✓ PPT slide 82 |

**Instructor’s Notes**

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________________________________________________________________________
REVIEW slide

In your own words:

At the Landing

Advance

Verify that the call button illuminates and the car responds to the hall call. Repair any defects as required. Inspect hall position indicators at each landing and verify operation. Replace any burned out lamps. For other lighting

Advance

Check the operation of the lighting and receptacles on top of the car and in the pit. Make any needed repairs to lights. Check emergency lights for proper operation. Press test button and check to see if lights turn on. Replace batteries as required.

Advance

Materials Needed

✓ PPT slide 83
**DO**

**SAY**

**In your own words:**

Let's see what we have learned so far:

Three types of lighting found in transit include:

(check all that apply)

- Fluorescent
- Incandescent
- LAD
- Inconsistent
- LED

**Call on participants for answer**

Advance once given the correct answer

**Answer:** a., b., e.

Advance

**Materials Needed**

- PPT slide 84
In your own words:
Yes or No. The lighting circuits and the operational circuits may not be the same and removing power from the operation of the elevator does not necessarily mean that the lighting circuit will be disabled.

Call on participants for answer
Advance once given the correct answer
Answer: Yes
Advance

☑️ PPT slide 85
### Elevator – Car and Landings

**Instructor’s Guide**

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>? ASK</td>
<td><strong>In your own words:</strong> Jim must respond to a call for inadequate lighting in a car at a nearby station. What must Jim do to complete the inspection?</td>
<td>✓ PPT slide 86</td>
</tr>
<tr>
<td></td>
<td><strong>Call on participants for answer</strong></td>
<td></td>
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<tr>
<td></td>
<td><strong>Advance once given the correct answer</strong></td>
<td></td>
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<tr>
<td></td>
<td><strong>Answer:</strong></td>
<td></td>
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<tr>
<td></td>
<td>• Examine all car push buttons</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Replace burned-out lamps and damaged jewels</td>
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</tr>
<tr>
<td></td>
<td>• Test and verify operation of car emergency light</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure all fixtures and secure and operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Repairs as needed</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Advance</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Instructor’s Notes**

<table>
<thead>
<tr>
<th>Question or Note</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

**Module Length:** 480 min  
**Time remaining:** 170 min  
**This section:** 20 min (9 slides)  
**Section start time:** ________  
**Section End Time:** ________
## Elevator – Car and Landings

### Instructor’s Guide

| Module Length: 480 min | Time remaining: 150 min | This section: 120 min | Section start time: ________ | Section End Time: ________ |

<table>
<thead>
<tr>
<th><strong>DO</strong></th>
<th><strong>SAY</strong></th>
<th><strong>Materials Needed</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ASK</td>
<td><strong>In your own words:</strong></td>
<td>✓ PPT slide 87</td>
</tr>
<tr>
<td>CLASSROOM ACTIVITY</td>
<td></td>
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</tr>
</tbody>
</table>

**Instructor’s Notes**

- Take time to visit the field to provide an example demonstration and opportunities for participants to perform the following tests:
  - Perform an operational test on all safety devices on the Underside
  - Perform an operational test on all safety devices on the Car Top
  - Perform an operational test on all safety devices on the Landing
  - Perform an operational test on all safety devices inside Car.
  - Perform an operational test on regular interior lights

**Advance**
### Classroom Activity

**DO**

**SAY**

In your own words:  
*Read slide.*

*For each objective, briefly review what was learned in this module or ask participants to share what they have learned for each learning objective and briefly discuss as a class.*

**Advance**

*Continue to review objectives.*

**Advance**

*Continue to review objectives.*

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**Materials Needed**

- ✓ PPT slides 88, 89, 90

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**Instructor’s Notes**

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Elevator – Car and Landings

Instructor’s Guide

**Module Length:** 480 min  
**Time remaining:** 30 min  
**This section:** 30 min (5 slides)  
**Section start time:** ________  
**Section End Time:** ________

<table>
<thead>
<tr>
<th>DO</th>
<th>SAY</th>
<th>Materials Needed</th>
</tr>
</thead>
</table>
| ![CLASSROOM ACTIVITY](image) | **In your own words:**
Let's take a look at some of the key words we have defined as moved through this module.

*Read slide. Discuss definitions as a group.*

*Advance* | ✓ PPT slide 91 |

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**Instructor’s Notes**

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# Elevator – Car and Landings

**Instructor’s Guide**

Module Length: 480 min  
Time remaining: 30 min  
This section: 30 min (5 slides)  
**Section start time:**  
**Section End Time:**

<table>
<thead>
<tr>
<th><strong>DO</strong></th>
<th><strong>SAY</strong></th>
<th><strong>Materials Needed</strong></th>
</tr>
</thead>
</table>
| ![A](Image)  
**CLASSROOM ACTIVITY** | **In your own words:**  
Administer quizzes. | ✓ PPT slides 92  
✓ Quizzes  
✓ Pencils |
| ![B](Image)  
**INDIVIDUAL ACTIVITY** | | |

**Instructor’s Notes**

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