# **Instructor Guide**



103: Introduction and Overview to Train Stops



## Signals – Introduction and Overview to Train Stops Instructor's Guide



# **Table of Contents**

Overview		4
Purpose & Components	O.,	11
Configurations		16
Train Stop Types		27
Other Train Stops		54
•		
• • • • • • • • • • • • • • • • • • •		



## Signals – Introduction and Overview to Train Stops Instructor's Guide



#### Icons Used In This Guide



**REVIEW** slides



INDIVIDUAL ACTIVITY



**ASK** 



**WRITE** 



**CLASSROOM ACTIVITY** 



Multimedia



SMALL GROUP ACTIVITY



**REFER** participants to

### **Agenda**

, 1,901.44					
Topic #	Topic Title	Duration			
1	Overview	30 Minutes			
2	Purpose & Components	20 Minutes			
3	Configurations	20 Minutes			
4	Train Stop Types	40 Minutes			
5	Other Train Stops	40 Minutes			
6	Field Trip	90 Minutes			
40	Summary	30 Minutes			
0	Total Time:	270 Minutes			

### Signals – Introduction and Overview to Train Stops Instructor's Guide



#### **Overview**

**Purpose** The purpose of this module is to:

provide an overview of the purpose principles of operation and various configurations of train stops that are present in transit and commuter rail systems.

#### **Objectives**

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

- Describe principles of operation and purpose of train stops
- Differentiate between pneumatic and electric train stops
- Identify and describe different types of train stops
- Identify and describe the purpose of a dragging equipment detector (DED) trip vane device

# **Materials Mandatory**

Make sure you have the following

- PowerPoint Presentation
- Coursebook
- Quizzes
- Pencils
- Handouts:

#### **Optional**

You may also want the following for optional activities:

- Chalk board with chalk, large paper with marker, etc.
- Internet connection or downloaded video(s)
- Lab, s mulator or out of service elevator

#### Signals – Introduction and Overview to Train Stops Instructor's Guide



Module Length: 270 min

Time remaining: 270 min

This section: 30 min (9 slides)

Section start time:

Section End Time:

#### DO

# **Materials Needed**



In your own words:

Welcome to the course on The Introduction and Overview of Trains Stops.

SAY

Ad vance

Click on the movie symbol and play video.

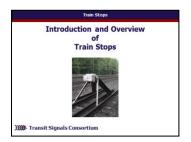
After video:

Sometimes trains do not need to stop, but what we are going to learn today is what equipment is used for when they need to stop.

Riders, and we, depend on us.

Advance

✓ PPT slides 1, 2





**Internet Connection** or downloaded video

# Instructor's Notes

#### Signals – Introduction and Overview to Train Stops Instructor's Guide



Module Length: 270 min

Time remaining: 240 min

This section: 20 min (5 slides)

Section start time:

Section End Time:

**Materials Needed** 

#### DO



**REVIEW** slide



**REFER** participants to textbook

#### Instructor's Notes

#### In your own words:

Note that inside the stop box are numerous controlle's These controllers communicate with the central instrument location (CIL), and change the trip arm position and aspect accordingly. This is done through a series of contacts, also known as *ringers*. These contacts whether they are made (closed) or not made (opened) communicate with the CIL. These connections determine the aspect of the signal. This information, as well as the positioning of the arm, is relayed back to the CIL. Signals from the CIL are determined by track circuits and the location of the train(s). This process between field equipment and the CIL via the stop box is depicted in Figure 103.10. Note that all these communications happen in "real-time."

SAY

Advance

✓ PPT slides 11, 12, 13







√ Course book