Instructor Guide



219: Elevator: Inspection and Basic Maintenance Module 4: Emergency Equipment

JUNE TRANSIT ELEVATOR/ESCALATOR CONSORTIUM

Elevator – Emergency Equipment Instructor's Guide



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Elevator – Emergency Equipment Instructor's Guide

Icons Used In This Guide





ASK



INDIVIDUAL ACTIVITY





WRITE



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Multimedia



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Agenda

Topic #	Topic Title	Duration
1	Overview	30 Minutes
2	Sensory Inspection	10 Minutes
3	Emergency Equipment	30 Minutes
4	Fire Service	20 Minutes
5	Field Trip	120 Minutes
6	Summary	30 Minutes
	Total Time:	240 Minutes

Elevator – Emergency Equipment Instructor's Guide



Overview

Purpose The purpose of this module is to:

Provide the participant with an overview of the tasks involved in inspecting and maintaining emergency equipment in a transit elevator system.

Objectives

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

- List emergency equipment which requires inspection and maintenance
- Perform operational test on emergency equipment for transit elevators
- Discuss and test Fire Service Phase I & II operations

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
 - Tech Tip

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Elevator – Emergency Equipment Instructor's Guide			
Module Length: 240 min Time remaining: 240 min	n This section: 30 min (6 slides) Section start time:	Section End Time:	
DO	SAY	Materials Needed	
REVIEW introduction slides	An your own words: Welcome to the course on the inspection and maintenance of emergency equipment. Advance Riders depend on us. The effective operation of emergency equipment in transit stations will be critical in an emergency situation as well as other times when bossibly needed. Advance	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	

Elevator – Emergency Equipment			
Instructor's Guide			
Module Length: 240 min Time remaining: 240	min This section: 30 min (6 slides) Section s	start time: Section End Time:	
DO	SAY	Materials Needed	
REVIEW module objectives Instructor's Notes	 In your own words: Today we will List emergency equipment which inspection and maintenance Perform operational test on emerequipment for transit elevators Discuss and test Fire Service Phoperations Advance 	List emergency equipment which requires inspection and maintenance Perform operational test on emergency equipment for transit elevators Discuss and test Fire Service Phase I & II operations	

Elevator – Emergency Equipment Instructor's Guide			
Module Length: min Time remaining: 240) min This section: min (slides)	Section start time: _	Section End Time:
DO	SAY		Materials Needed
REVIEW key terms	 In your own words: Lets take a look at some of we will be defining as move module: Drop key 	through this	✓ PPT slide 4 Cleater Inspection and Handmanzer: Energoncy (guipmont Key Terms - Drop key - Drop
Instructor's Notes	module:)))))) Transit Elevator/Escalator Consortium +

Elevator – Emergency Equ	ipment	
Instructor's GuideModule Length: 240 minTime remaining: 240	min This section: 30 min (6 slides) Section start time:	Section End Time:
DO	SAY	Materials Needed
ASK participants what they remember about safety and elevators SMALL GROUP ACTIVITY VRITE Instructor's Notes	 In your own words: Thinking back to other courses or just in general, what is some emergency equipment found in elevator systems? What emergency equipment may require inspection or maintenance? What do we know about operational testing on emergency equipment? 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. Advance 	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><text><text><text><text><text></text></text></text></text></text></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>

Elevator – Emergency Equ Instructor's Guide Module Length: 240 min Time remaining: 240		Section End Time:
DO	SAY	Materials Needed
Instructor's Notes	In your own words: Each transit authority has its own methods and procedures regarding maintenance of emergency equipment and the course participant should follow their authority's established guidelines for such maintenance. Advance The guidelines presented here in this module are general guidelines for elevator technicians who must maintain emergency equipment in the transit elevator systems. The participant is likely familiar with equipment such as fire extinguishers, smoke detectors, and sprinkler systems which require periodic inspection, maintenance, and testing. But there is other equipment that may not be as familiar to the participant such as a rescuvator or smoke curtains. Do Not Advance	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>

Elevator – Emergency Equ Instructor's Guide Module Length: 240 min Time remaining: 240		Section End Time:
DO REVIEW slide	SAY In your own words: This module lists these and other emergency equipment with the intention to demonstrate to the technician how to inspect, maintain, and even test such equipment. Advance Many transit properties work in tandem with their local fire departments with respect to the operational inspection and maintenance of emergency equipment. Because the responsibilities of elevator technicians involve periodic regular	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>
	maintenance and inspection, they are generally the first to check on emergency equipment and, should anything be amiss, either fix or alert the fire authorities. Advance	

Elevator – Emergency Equ Instructor's Guide	ipment	
Module Length: 240 min Time remaining: 240	min This section: 30 min (6 slides) Section start time:	Section End Time:
DO	SAY	Materials Needed
REVIEW slide	In your own words: Various organizations develop code specifications for the type, location, suitability, and installation of emergency equipment that is found in transit elevator system. Along with local jurisdictional directives, transit properties follow strict guidelines through organizations such as the American Society of Mechanical Engineers (ASME); the National Fire Protection Association (NFPA); and the federal and state directives of the Occupational Safety & Health Administration (OSHA). Most of the guidelines for emergency equipment for elevators are found in ASME A17.1 and NFPA 14 and these are referenced throughout this module. <i>Advance</i>	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>

Elevator – Emergency Equipment Instructor's Guide Module Length: 240 min Time remaining: 210 min This section: 10 min (2 slides) Section start time: Section End Time: DO	
DO SAY Materials Neede	
	ed
In your own words: During a sensory inspection a good elevator technician relies on the physical senses of sight, smell, hearing, and touch while inspecting and maintaining the elevator emergency equipment. Ask What may indicate a problem with elevator emergency equipment as indicated by sight? Discuss answers Advance for sample answers Items blocking quick access to emergency equipment; damage, dents, rust, oil, etc.; required labels and signage are clearly visible. Advance	7

Elevator – Emergency Equ Instructor's Guide	ipment	
Module Length: 240 min Time remaining: 210	nin This section: 10 min (2 slides) Section start	t time: Section End Time:
DO	SAY	Materials Needed
REVIEW slides	In your own words: Ask What may indicate a problem with eleval emergency equipment as indicated by s Discuss answers Advance for sample answers Smell of burnt wires. Advance Ask What may indicate a problem with eleval emergency equipment as indicated by t Discuss answers Advance for sample answers Loose hardware. Equipment feels lighted usual (fire extinguisher). Advance	smell? Physical Senses employing dark access to emergency equipment, damage dents, inst, oil, eff.: required blacks and signage are clearly visible. employing dark access to emergency equipment, damage dents, inst, oil, eff.: required blacks and signage are clearly visible. employing dark access to emergency equipment, damage dents, inst, oil, eff.: required blacks and signage are clearly visible. employing dark access to emergency equipment, damage dents, inst, oil, eff.: required blacks and signage are clearly visible. employing dark access to emergency equipment, damage dents, inst, oil, eff.: required blacks and signage are clearly visible. employing dark access to emergency equipment, damage dents, inst, oil, eff.: required blacks and signage are clearly visible. employing dark access to emergency equipment, damage dents, inst, oil, eff.: required blacks and signage are clearly visible. employing dark access to emergency equipment, damage dents, inst, oil, eff.: required blacks and signage are clearly visible. employing dark access to emergency equipment, damage dents, inst, oil, eff.: required blacks access to employing dork access access and access acces

Elevator – Emergency Equ Instructor's Guide Module Length: 240 min Time remaining: 210		e: Section End Time:
DO	SAY	Materials Needed
Instructor's Notes	In your own words: What may indicate a problem with elevator emergency equipment as indicated by hearing? Discuss answers Advance for sample answers Rattling or clicking of loose components su as rollers, hardware. Clicking near hoistwa door. Clunking as counterweight/car lands buffer. With more experience, you will become more familiar with the normal sights, smells, sour and feel of the system. During a sensory inspection, check for deviations from this norm. Advance	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>

Elevator – Emergency Equ Instructor's Guide	ipment	
Module Length: 240 minTime remaining: 200	min This section: 30 min (15 slides) Section start time:	Section End Time:
DO	SAY	Materials Needed
REVIEW slide	 In your own words: This is probably the most recognized piece of emergency equipment. OSHA requires monthly inspections. Advance Check that the fire extinguisher is readily and easily available, not blocked by any objects or difficult to get to in any way. It should be mounted securely and there should be a sign above it that shows there is a fire extinguisher in that location. Remove anything blocking access to the fire extinguisher. Advance Your next check will be to pick the fire extinguisher up. If it is a powder type of fire extinguisher, you should give it a shake or two to prevent the powder from settling. 	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>

Elevator – Emergency Equipment Instructor's Guide Section: 30 min (15 slides) Section start time: Section Edit Time: Module Length: 240 min Time remaining: 200 min This section: 30 min (15 slides) Section start time: Section Edit Time: Image: Comparison of the section: 30 min (15 slides) Section start time: Section Edit Time: Image: Comparison of the section: 30 min (15 slides) Section start time: Section Edit Time: Image: Comparison of the section: 30 min (15 slides) Section start time: Section Edit Time: Image: Comparison of the section: 30 min (15 slides) Section start time: Section Edit Time: Image: Comparison of the section: 30 min (15 slides) Section start time: Section Edit Time: Image: Comparison of the section: 30 min (15 slides) Review of time: Comparison of the section: 31 min edit time: 11 min edit time: 31 min edit time: 11 min edit time: 31 min edit time: 11 min edit time: 32 min edit time: 11 min edit time: 32 min edit time: 11 min edit time: 32 min edi			
DO SAY Materials Needed Image: Review slide In your own words: In your own words: Check the pull ring or pin and the seal are in place and the extinguisher is in its proper place. The seal is typically a tie wrap or similar device which will have to be broken to use the fire extinguisher. ✓ PPT slide 10 Instructor's Notes Check that it doesn't feel lighter than usual or lighter than others of the same size. Turn the fire extinguisher around in your hands, checking all angles and portions for dents, rust, oil, etc. If there is oil or any substance on it, wipe it off. If there is rust – look especially ✓ PPT slide 10		ipment	
 In your own words: Check the pull ring or pin and the seal are in place and the extinguisher is in its proper place. The seal is typically a tie wrap or similar device which will have to be broken to use the fire extinguisher. Check that it doesn't feel lighter than usual or lighter than others of the same size. Turn the fire extinguisher around in your hands, checking all angles and portions for dents, rust, oil, etc. If there is oil or any substance on it, wipe it off. If there is rust – look especially 	Module Length: 240 min Time remaining: 200 r	min This section: 30 min (15 slides) Section start time:	Section End Time:
 Instructor's Notes Check in pull ring or pin and the seal are in place and the extinguisher is in its proper place. The seal is typically a tie wrap or similar device which will have to be broken to use the fire extinguisher. Check that it doesn't feel lighter than usual or lighter than others of the same size. Turn the fire extinguisher around in your hands, checking all angles and portions for dents, rust, oil, etc. If there is rust – look especially 	DO	SAY	Materials Needed
or severe abuse, follow your department's guidelines for replacement. Check to make sure the instructions on it are legible and the label is facing outward Advance		Check the pull ring or pin and the seal are in place and the extinguisher is in its proper place. The seal is typically a tie wrap or similar device which will have to be broken to use the fire extinguisher. Check that it doesn't feel lighter than usual or lighter than others of the same size. Turn the fire extinguisher around in your hands, checking all angles and portions for dents, rust, oil, etc. If there is oil or any substance on it, wipe it off. If there is rust – look especially on the bottom and underside of extinguisher – or severe abuse, follow your department's guidelines for replacement. Check to make sure the instructions on it are legible and the label is facing outward	Elevator Inspection and Maintenance: Emergency Equipment Emergency Equipment Fire Extinguisher Order: Fire extinguisher continued Proper placement of pull ring or pin and the seal Proper weight Wipe clean if meeded Turn fire extinguisher over looking for rust, dents, oil, etc. Consumer in needed and facing outward Resplace if meeded and in accordance with department guidelines

Elevator – Emergency Equ Instructor's Guide		
Module Length: 240 minTime remaining: 200	min This section: 30 min (15 slides) Section start time:	Section End Time:
DO	SAY	Materials Needed
REVIEW slide	In your own words: Here is a photo of a labeled fire extinguisher located in a machine room in SEPTA. You can see the seal and pull ring. <i>Ask</i> What should we check for with regard to these two items? <i>Answer: Proper placement.</i>	<section-header><section-header><text><section-header><section-header><section-header><section-header><section-header><section-header><section-header><text></text></section-header></section-header></section-header></section-header></section-header></section-header></section-header></text></section-header></section-header>
Instructor's Notes	You can also see the inspection tag and instructions clearly visible and up-to-date. <i>Advance</i>	

Elevator – Emergency Equ Instructor's Guide Module Length: 240 min Time remaining: 200		Section End Time:
DO	SAY	Materials Needed
REVIEW slides	In your own words: Emergency communication devices such as a phone, "push-to-talk" or auto-dialer are placed in the machine room, pit, and inside each elevator. Advance ASME A17.1 requires that each elevator to be equipped with emergency two-	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>
Instructor's Notes	 way communication systems between the elevator and a point outside the hoistway. <i>Advance</i> Check that the telephone or communication system is operating. If not operating, follow your Authority's procedures to notify the responsible department that will fix immediately. <i>Advance</i> Here is an example of an auto-dialer inside an elevator. <i>Advance</i> 	<text><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></text>

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Module Length: 240 min Time remaining: 200 n	nin This section: 30 min (15 slides) Section start time:	Section End Time:
DO	SAY	Materials Needed
REVIEW slides	 In your own words: Here is an example of an attendant phone inside an elevator. Advance ASME A17.1 requires sprinkler systems conforming to NFPA 13 to be installed in the hoistway, machinery space, machine room, control space, or control room. Advance In several transit agencies, inspecting sprinkler systems is the responsibility of the local fire department and outside the scope of the mechanic. Advance Nevertheless, the elevator technician can note any cracks, leaks, or visible malfunction of the sprinkler systems whenever during their normal inspection and maintenance routine. Do Not Advance 	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><text><section-header><text><text><text><text><text><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></text></text></text></text></text></section-header></text></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>

Elevator – Emergency Equipment Instructor's Guide		
Module Length: 240 min Time remaining: 200	min This section: 30 min (15 slides) Section start time:	Section End Time:
DO	SAY	Materials Needed
REVIEW slides	In your own words: Anything out of the ordinary should be immediately noted and reported according to the transit agency's procedures. Advance Note: if the machine room is	✓ PPT slides 15, 16 Levere Inspection and Maintenance: Encryptory Educated <u>Emergency Equipment</u> <u>Sprinkler and Deluge Systems</u> Poss Ordform WFP 13 Conterd in holistway, machinery space, machine room, control space, or control to room.
Instructor's Notes	 Advance Note: if the machine room is equipped with a sprinkler system, ASME code requires that it is on a shunt (by-pass system) or the sprinkler heads removed. Some local governments require that the sprinkler systems be inspected by licensed fire protection personnel. Advance ASME 17.1 elevator safety code stipulates that smoke detectors should be located in the elevator machine room, hoistway, and in the elevator lobby on each floor. As the elevator technician performs preventative maintenance tasks, he or she should note any cracks or visibly malfunction of smoke detectors. 	 Located in hostway, machinery space, machine room, control space, or control room Sometimes responsibility of local fire department Technician can check for Cacads, feels, or visible mafunction Report anything out of ordnary Machine room required to be on a shunt or sprinkler heads removed Transit Elevator/Escalator Consortium Machine room, holdstway, and lobby on each floor Check for Cracks or visible mafunction Unsubstrained Anything out of ordinary Report problems according to transit authority procedures Transit Elevator/Escalator Consortium 3000-Transit Elevator/Escalator Consortium 3010-Transit Elevator/Escalator Consortium 3011

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Instructor's Guide		
Module Length: 240 min Time remaining: 200	min This section: 30 min (15 slides) Section start time:	Section End Time:
DO	SAY	Materials Needed
	In your own words:	
REVIEW slides	Check for any unusual noise being emitted from the unit. Anything out of the ordinary should be immediately noted and reported according to the transit agency's procedures. <i>Advance</i>	 PPT slides 16, 17, 18 Reverse and testerosator: Exergency Fagiment Emergency Equipment ASME required AsME required to an advance for a static static
Instructor's Notes	Follow your agency's procedures with respect to testing smoke detectors. Local laws may require that smoke detectors to be checked every year using canned smoke to test and ensure that each head and system is	3) 3) Transit Elevator/Escalator Consortium Elevator Inspection and Haintenance: Energency Equipment Emergency Equipment Smoke Detectors Testing Follow transit authority procedures Local laws may apply, may require canned smoke test Mary times performed by licensed fire protection personnel
	operating properly. In many instances this work is done by licensed fire protection personnel. <i>Advance</i> Here is a smoke detector in a hoistway. <i>Advance</i>	Image: Transit Elevator/Escalator Consortium 1 Image: Transit Elevator/Escalator Consortium 1

Elevator – Emergency Equ Instructor's Guide	ipment	
Module Length: 240 min Time remaining: 200	min This section: 30 min (15 slides) Section start time:	Section End Time:
DO	SAY	Materials Needed
REVIEW slide	In your own words: Alarm Bell Advance Activate the audible alarm push button, shown in in the car operating panel 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. Security Camera Advance Check and test according to your transit authority's recommended procedures. Advance	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>

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min This section: 30 min (15 slides) Section start time:	Section End Time:
SAY	Materials Needed
 In your own words: There are two sets of keys that the elevator technician should check: drop keys and fire service keys. Advance Check that firefighter's keys are in the designated location and that they are available. Check the keys for damage and check that they work properly as designed. Advance Here is an example of a drop key. Advance The rescuvator is a battery operated auxiliary power device that automatically activates during a power loss. Advance 	<section-header><section-header><section-header><text><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><text><section-header><text></text></section-header></text></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></text></section-header></section-header></section-header>
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Elevator – Emergency Equipment Instructor's Guide			
Module Length: 240 min Time remaining: 200	min This section: 30 min (15 slides) Section start time:	Section End Time:	
DO	SAY	Materials Needed	
REVIEW slides	In your own words: The rescuvator comes on while all elevator safety features remain in operation and causes the stalled hydraulic elevator car to descend to the lowest landing. The rescuvator is mounted in a metal enclosure and includes a non-spillable, sealed, maintenance-free battery which never requires water. Check for connections and	<section-header><text><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></text></section-header>	
	keep the area around the rescuvator clean and dust-free. For testing and inspecting, the elevator technician should always follow the manufacturer's recommendations and the transit agency's procedures. <i>Advance</i> For testing and inspection of a rescuvator, follow your transit authority procedures as well as manufacturer recommendations. <i>Advance</i>	Rescuvator* ecommendations and transit authority procedures user user user user user	

Elevator – Emergency Equipment Instructor's Guide			
min This section: 20 min (10 slides) Section start time:	Section End Time:		
SAY	Materials Needed		
In your own words: Sometimes referred to as "Firefighters' Service" this is a term that describes how an elevator should operate during a fire or other type of emergency. Consisting of two phases, Firefighters' Service provides an automatic and manual option to initially return all elevators to the floor designated as the recall landing and an in-car operation option for firefighters searching a building floor by floor. Advance Under ASME A17 standards, once a fire has been detected, elevators operate under either Phase I or Phase II regulations. The Phase I recall switch is outside the elevator where the hall call buttons are located. The Phase II switch is inside the elevator car where buttons are located. Do Not Advance	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>		
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This section: 20 min (10 slides) Section start time:	Section End Time:
SAY	Materials Needed
your own words: e elevator technician needs to be keenly are of what these phases mean as they go out their work of inspecting and maintaining hsit elevators. Follow the directions on the erating instruction label. Experienced vator mechanics consider it a best practice	✓ PPT slides 24, 25 Creater Inspector and Neutronics: Compared Logical Compared Service Extender Inspector and Neutronics: Compared Service Extender Compared Service For Service Service Extender Compared Service Extender Compared Service Extender Compared Service For Service Service Service Extender Compared Service Exte
berform a monthly check of fire service tches. Check for rust or switches being zen in place. Test the keys. Ivance e elevator technician needs to be keenly are of what these phases mean as they go but their work of inspecting and maintaining nsit elevators. Follow the directions on the erating instruction label. Experienced vator mechanics consider it a best practice berform a monthly check of fire service tches. Check for rust or switches being	Elevator Improvement Fire Service Phases I & II • Check • Best practice: monthly • Best practice: monthly • Test will • Follow directions on operating instruction label • Will be structure • Test will • Test will will will will will will will wil
	SAY our own words: elevator technician needs to be keenly are of what these phases mean as they go out their work of inspecting and maintaining sit elevators. Follow the directions on the rating instruction label. Experienced vator mechanics consider it a best practice erform a monthly check of fire service ches. Check for rust or switches being en in place. Test the keys. vance elevator technician needs to be keenly are of what these phases mean as they go out their work of inspecting and maintaining sit elevators. Follow the directions on the rating instruction label. Experienced rator mechanics consider it a best practice erform a monthly check of fire service

Elevator – Emergency Equipment Instructor's Guide			
Module Length: 240 min Time remaining: 170	min This section: 20 min (10 slides) Section start time:	Section End Time:	
DO	SAY	Materials Needed	
REVIEW slide	 In your own words: The Phase I recall switch is outside the elevator where the hall call buttons are located. The Phase II switch is inside the elevator car where buttons are located. Advance Phase I operation is typically activated either manually by a special key. It can also be activated automatically by a fire alarm initiating device. An elevator can enter Phase I operation by a two-position key switch mounted near the hall call station Advance To test Phase I, set the elevator to Phase I from the recall landing. Verify that the elevator controller cancels all calls and returns the elevator to the recall landing. If not functioning as designed, correct the defect as required. 	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	
	To test Phase I, set the elevator to Phase I from the recall landing. Verify that the elevator controller cancels all calls and returns the elevator to the recall landing. If not functioning as designed, correct the defect as required.		

Elevator – Emergency Equipment Instructor's Guide Module Length: 240 min Time remaining: 170 min This section: 20 min (10 slides) Section start time: Section End Time: O SAY Materials Needed In your own words: Here is a photo of a firefighters' emergency operation Phase 1 button. Advance The Phase II switch is inside the elevator car where buttons are located. Advance ASME code defines Phase II as				
DO SAY Materials Needed In your own words: In your own words: · PPT slides 27, 28 Were is a photo of a firefighters' emergency operation Phase 1 button. · PPT slides 27, 28 Advance The Phase II switch is inside the elevator car where buttons are located.	Instructor's Guide			
REVIEW slides In your own words: Here is a photo of a firefighters' emergency operation Phase 1 button. Advance The Phase II switch is inside the elevator car where buttons are located.				
REVIEW slides Here is a photo of a firefighters' emergency operation Phase 1 button. ✓ PPT slides 27, 28 Advance The Phase II switch is inside the elevator car where buttons are located. Image: Compare 1 button car where buttons are located.	DO	SAY	Materials Needed	
Instructor's Notes "the operation of an elevator by firefighters where the elevator is under their control." Advance Phase II operation is an override meant for firefighters after Phase I has been activated. Under Phase II operation, firefighters can use a key switch to operate the elevator, provided the hoistway is clear of smoke and the elevator has electricity. Advance Advance		 Here is a photo of a firefighters' emergency operation Phase 1 button. Advance The Phase II switch is inside the elevator car where buttons are located. Advance ASME code defines Phase II as "the operation of an elevator by firefighters where the elevator is under their control." Advance Phase II operation is an override meant for firefighters after Phase I has been activated. Under Phase II operation, firefighters can use a key switch to operate the elevator, provided the hoistway is clear of smoke and the elevator has electricity. 	<text><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></text>	

Elevator – Emergency Equipment Section start time: Instructor's Guide Time remaining: 170 min Module Length: 240 min Time remaining: 170 min			
5			
DO REVIEW slide Tech Tip Instructor's Notes	SAY In your own words: Set the elevator to Phase II and verify it is operating as designed. See the attached "Tech Tip" for proper operation of the Fireman's Service. If not functioning as designed, correct the defect as required. If unable to correct the defect note the defect in the "Remarks" section of the Maintenance sheet and notify the E&E control desk and your immediate supervisor. Refer participants to "Tech Tip" handout	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><text></text></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	
	and discuss the proper operation of the Fireman's Service. Advance		

Elevator – Emergency Equipment			
Module Length: 240 min Time remaining: 170 r	min This section: 20 min (10 slides) Section start time:	Section End Time:	
DO	SAY	Materials Needed	
REVIEW slides	In your own words: Set the elevator to Phase II and verify it is operating as designed. See the attached "Tech Tip" for proper operation of the Fireman's Service. If not functioning as designed, correct the defect as required. If unable to correct the defect note the defect in the "Remarks" section of the Maintenance sheet and notify the E&E control desk and your immediate supervisor. <i>Refer</i> Participants to "Tech Tip" and discuss the proper operation of the Fireman's Service. <i>Advance</i>	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	

Elevator – Emergency Equipment Instructor's Guide			
Module Length: 240 min Time remaining: 170	min This section: 20 min (10 slides) Section start time:	Section End Time:	
DO	SAY	Materials Needed	
SK ASK	In your own words: Lets see what we have learned so far: Equipment feels lighter than usual would be detected by a sensory inspection. a. sight b. smell c. hear d. touch	✓ PPT slide 30 ∠vertextextextextextextextextextextextextext	
Instructor's Notes	Call on participants for answer Advance once given the correct answer Answer: d. Advance		

Elevator – Emergency Equipment Instructor's Guide			
Module Length: 240 minTime remaining: 170	min This section: 20 min (10 slides) Section start time: _	Section End Time:	
DO	SAY	Materials Needed	
ASK Instructor's Notes	In your own words: A	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	

Elevator – Emergency Equipment			
Module Length: 240 min	Time remaining: 170 min	This section: 20 min (10 slides) Section start time:	Section End Time:
DO		SAY	Materials Needed
ASK	es In Ye II : fir Ca Ar	your own words: es or No. ASME defines Fire Service Phase as "The operation of an elevator by efighters where the elevator is under their ontrol." all on participants for answer dvance once given the correct answer hswer: Yes. heck for Cracks or visible malfunction Unusual noise Anything out of ordinary Report problems according to transit 	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><text><section-header><section-header><text></text></section-header></section-header></text></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>
	A	authority procedures	

Elevator – Emergency Equipment Instructor's Guide			
Module Length: 240 minTime remaining: 170	min This section: 20 min (10 slides) Section start time:	Section End Time:	
DO	SAY	Materials Needed	
ASK	In your own words: Yes or No. ASME defines Fire Service Phase II as "The operation of an elevator by firefighters where the elevator is under their control." Call on participants for answer Advance once given the correct answer Answer: Yes	✓ PPT slide 33 Idvator Inspection and Natatranunc: Langtoney Equipment Emergency Equipment Envolded Construction Service Phase II as Transit Elevator/Escalator Consortium	
Instructor's Notes	Advance		

Elevator – Emergency Equipment Instructor's Guide			
Module Length: 240 min Time remaining: 170	min This section: 20 min (10 slides) Section start time:	Section End Time:	
DO	SAY	Materials Needed	
REVIEW slides	In your own words: Click on the word video to link to short video clips.	✓ PPT slides 33 Metabolic Magnetic Ma	
	<u>Video</u> : Fire Service Recall using Fire Service key. 6:36 minutes <u>http://www.youtube.com/watch?v=uGHjZHUat9s</u>	Video Plunger Gripper, Adams Elevators LifeJacket® Video Elevator Smoke Curtain Demonstration Video Elevator/EscalatorConsortium 13	
Instructor's Notes	Video: Plunger Gripper, Adams Elevators LifeJacket®. 6 minutes <u>http://www.adamselevator.com/products_life_jacket.asp</u>		
	<u>Video:</u> Elevator Smoke Curtain Demonstration. 1 minute <u>https://www.youtube.com/watch?v=Kq8mN_I9KFA</u>		
	Advance		

Elevator – Emergency Equipment Instructor's Guide					
Module Length: 240 min Time remaining: 150	min This section: 120 min Section start time: _	Section End Time:			
DO	SAY	Materials Needed			
ASK CLASSROOM CLASSROOM CLIVITY	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 operational test on emergency equipment for transit elevators] Advance				

Elevator – Emergency Equipment Instructor's Guide Module Length: 240 min Time remaining: 30 min This section: 30 min (3 slides) Section start time: Section End Time:				
DO	SAY	Materials Needed		
Instructor's Notes	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 Lets 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	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>		

Elevator – Emergency Equipment Instructor's Guide				
Module Length: 240 min Time remaining: 30 m	This section: 30 min (3 slides)	Section start time: Section End Time:		
DO	SAY	Materials Needed		
	In your own words: Administer quizzes.	 ✓ PPT slides 37 ✓ Quizzes ✓ Pencils 		
INDIVIDUAL ACTIVITY		Quiz Time		