Heavy Vehicle Rescue

(NFPA 1006: Heavy Vehicle Rescue Awareness/Operations/Technician)

Certification Training Standards Guide (2021)





California Department of Forestry and Fire Protection Office of the State Fire Marshal State Fire Training

Heavy Vehicle Rescue

Certification Training Standards Guide (2021)

Publication Date: November 2022

This CTS guide utilizes the following NFPA standards to provide the qualifications for State Fire Training's Heavy Vehicle Rescue (2021) certification:

• NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)

State Fire Training coordinated the development of this CTS guide. Before its publication, the Statewide Training and Education Advisory Committee (STEAC) and the State Board of Fire Services (SBFS) recommended this CTS guide for adoption by the Office of the State Fire Marshal (OSFM).

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How to Read a CTS Guide

Overview

A certification training standard (CTS) guide lists the requisite knowledge, skills, and job performance requirements an individual must complete to become certified in a specific job function.

It also documents and justifies the OSFM-approved revisions to the certification's NFPA standard and identifies where each certification training standard is taught (course plan), tested (skill sheets), and validated (task book).

Individuals aspiring to meet State Fire Training's certification training standards must do so in accordance with the codes, standards, regulations, policies, and standard operating procedures applicable within their own agency or jurisdiction.

Format

Each certification training standard is comprised of eight sections.

Section Heading

Training standards are grouped by section headings that describe a general category. For example, the Fire Fighter 1 CTS guide includes the following section headings: NFPA Requirements, Fire Department Communications, Fireground Operations, and Preparedness and Maintenance.

Training Standard Title

The training standard title provides a general description of the performance requirement contained within the individual standard.

Authority

The CTS guide references each individual standard with one or more paragraphs of the corresponding National Fire Protection Association (NFPA) Professional Qualifications. This ensures that each fire service function within California's certification system meets or exceeds NFPA standards.

When California requirements exceed the NFPA standard, the CTS guide cites the Office of the State Fire Marshal as the authority and prints the corresponding information in *italics*.

Job Performance Requirements

This segment includes a written statement that describes a specific job-related task, the items an individual needs to complete the task, and measurable or observable outcomes.

Requisite Knowledge

This segment lists the knowledge that an individual must acquire to accomplish the job performance requirement.

Requisite Skills

This segment lists the skills that an individual must acquire to accomplish the job performance requirement.

Content Modification

This table documents and justifies any revisions to the NFPA standard that the development or validation cadres make during the development of a CTS guide.

Cross Reference

This table documents where each training standard is taught (course plan), tested (skill sheets), and validated (task book).

Heavy Vehicle Rescue

Section 1: Awareness

1-1: Sizing-up a Heavy Vehicle Rescue Incident

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.1.1

Job Performance Requirement

Size up a heavy vehicle rescue incident, given background information and applicable reference materials, so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, primary search parameter are identified, and information required to develop an initial incident action plan is obtained.

Requisite Knowledge

- 1. Identify types of reference materials and their uses
- 2. Identify availability and capability of the resources
- 3. Describe elements of an incident action plan and related information
- 4. Describe relationship of the size-up to the incident management system
- 5. *Describe* information gathering techniques and how that information is used in the size-up process
- 6. Describe basic search criteria for heavy vehicle rescue incidents

Requisite Skills

- 1. Read technical rescue reference materials
- 2. Gather information
- 3. Use interview techniques
- 4. Relay information
- 5. Use information-gathering sources

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
• Topic 2-1	• Skill 1	• JPR 1

1-2: Recognizing Incident Hazards and Initiating Isolation Procedures

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.1.2

Job Performance Requirement

Recognize incident hazards and initiate isolation procedures, given scene control barriers, personal protective equipment (PPE), requisite equipment, and available specialized resources, so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.

Requisite Knowledge

- 1. Identify resource capabilities and limitations
- 2. Identify types and nature of incident hazards
- 3. Describe equipment types and their uses
- 4. Describe isolation terminology, methods, equipment, and implementation
- 5. Identify operational requirement concerns
- 6. Identify common types of rescuer and victim risks
- 7. Describe risk/benefit analysis methods and practices
- 8. Describe hazard recognition, isolation methods, and terminology
- 9. Describe methods for controlling access to the scene
- 10. Identify types of technical references

Requisite Skills

- 1. Identify resource capabilities and limitations
- 2. Identify incident hazards
- 3. Assess potential hazards to rescuers and bystanders
- 4. Place scene control barriers
- 5. Operate control and mitigation equipment

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
 Topic 2-5 	• Skill 5	• JPR 1

1-3: Recognizing the Need for Technical Rescue Resources

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.1.3

Job Performance Requirement

Recognize the need for technical rescue resources at an operations- or technical-level incident, given AHJ guidelines, so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and awareness level personnel are incorporated into the operational plan.

Requisite Knowledge

- 1. Describe operational protocols
- 2. Identify specific planning forms
- 3. Identify types of incidents common to the AHJ
- 4. Identify hazards
- 5. Describe incident support operations and resources
- 6. Describe safety measures

Requisite Skills

- 1. Apply operational protocols
- 2. Select specific planning forms based on the types of incidents
- 3. Identify and evaluate various types of hazards within the AHJ
- 4. Request support and resources
- 5. Determine required safety measures

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
Topic 2-3	• Skill 3	• JPR 1

1-4: Supporting an Operations- or Technician-level Incident

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.1.4

Job Performance Requirement

Support an operations- or technician-level incident, given an incident, an assignment, an incident action plan, and resources from the tool kit, so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported.

Requisite Knowledge

- 1. Describe AHJ operational protocols
- 2. *Identify* hazard recognition
- 3. Describe incident management
- 4. Identify PPE selection
- 5. Describe resource selection and use
- 6. *Identify* scene support requirements

Requisite Skills

- 1. Apply operational protocols
- 2. Function within an incident management system
- 3. Follow and implement an incident action plan
- 4. Report task progress status to a supervisor or incident command

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
• Topic 2-4	• Skill 4	• JPR 1

Section 2: Operations

2-1: Creating an Incident Action Plan

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.2.1

Job Performance Requirement

Create an incident action plan for a heavy vehicle incident, and conduct an initial and ongoing size-up, given agency guidelines, planning forms, and an operations-level vehicle incident or simulation, so that a standard approach is used during training and operational scenarios, emergency situation hazards are identified, isolation methods and scene security measures are considered, fire suppression and safety measures are identified, vehicle stabilization needs are evaluated, and resource needs are identified and documented for future use.

Requisite Knowledge

- 1. Describe operational protocols
- 2. *Identify* specific planning forms
- 3. Identify types of heavy vehicles common to the AHJ boundaries
- 4. Identify vehicle hazards
- 5. Describe incident support operations and resources
- 6. *Describe* vehicle anatomy
- 7. Describe fire suppression and safety measures

Content Modification

Block	Modification	Justification
RK3	Added	Added to distinguish between vehicle types. Common passenger
	"heavy".	vehicles are covered elsewhere.

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
Topic 2-1	• Skill 2	• JPR 1

2-2: Establishing Fire Protection

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.2.2

Job Performance Requirement

Establish fire protection, given an extrication incident and fire control support, so that fire and explosion potential is managed and fire hazards and rescue objectives are communicated to the fire suppression crew.

Requisite Knowledge

- 1. Identify types of fire and explosion hazards
- 2. Describe incident management system
- 3. Describe types of extinguishing devices
- 4. Describe agency policies and procedures
- 5. Identify types of flammable and combustible substances and types of ignition sources
- 6. Describe extinguishment or control options

Requisite Skills

- 1. Identify fire and explosion hazards
- 2. Operate within the incident management system
- 3. Use extinguishing devices
- 4. Apply fire control strategies
- 5. Manage ignition potential

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
 Topic 2-1 (RK2) 	• Skill 6	• JPR 1
 Topic 2-6 (RK1, 		
RK3 – RK6)		

2-3: Stabilizing a Heavy Vehicle Resting in its Position of Use in a Flat Stable Environment

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.2.3

Job Performance Requirement

Stabilize a heavy vehicle that has come to rest in its position of use on the road or other stable surface, given a vehicle tool kit and PPE, so that the vehicle is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise vehicle stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.

Requisite Knowledge

- 1. Describe types and rated capacities of stabilization devices
- 2. Describe mechanism of heavy vehicle movement
- 3. Identify types of stabilization points
- 4. *Identify* types of stabilization surfaces
- 5. Describe AHJ policies and procedures
- 6. Describe types of vehicle construction components as they apply to stabilization

Requisite Skills

1. Select, operate, and monitor stabilization devices

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
• Topic 3-1	• Skill 10	• JPR 2
	• Skill 11	
	• Skill 12	
	• Skill 13	
	• Skill 31	
	• Skill 32	

2-4: Stabilizing a Heavy Vehicle Resting in its Roof or Side

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Stabilize a heavy vehicle that has come to rest in its roof or side, given a vehicle tool kit and PPE, so that the vehicle is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise vehicle stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.

Requisite Knowledge

- 1. Describe types and rated capacities of stabilization devices
- 2. Describe mechanism of heavy vehicle movement
- 3. *Identify* types of stabilization points
- 4. *Identify* types of stabilization surfaces
- 5. Describe AHJ policies and procedures
- 6. Describe types of vehicle construction components as they apply to stabilization

Requisite Skills

1. Select, operate, and monitor stabilization devices

Content Modification

Block	Modification	Justification
CTS	Added new	NFPA for Heavy Vehicle Rescue only addresses a vehicle on its
	standard.	wheels or in a multi-hazard configuration. Cadre requested this addition to mirror requirements in Common Passenger Vehicle standard.

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
Topic 3-1	• Skill 10	• JPR 2
	• Skill 11	
	• Skill 12	
	• Skill 13	
	• Skill 14	
	• Skill 31	
	• Skill 32	

2-5: Isolating Potentially Harmful Energy Sources

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.2.4

Job Performance Requirement

Isolate potentially harmful energy sources, including propulsion power, restraint systems, and construction materials, given a heavy vehicle, vehicle tool kit, and PPE, so that all hazards are identified, systems are managed, beneficial system use is evaluated, and hazards to rescue personnel and victims are minimized.

Requisite Knowledge

- 1. Identify types and uses of PPE
- 2. Identify types of energy sources
- 3. Describe system isolation methods
- 4. Describe specialized system features
- 5. Describe tools for disabling hazards
- 6. Describe policies and procedures of the AHJ

Requisite Skills

- 1. Select and use hazard-specific PPE
- 2. Identify hazards
- 3. Operate beneficial systems in support of tactical objectives
- 4. Operate tools and devices for securing and disabling hazards

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
• Topic 2-7	• Skill 7	• JPR 1
	• Skill 8	
	• Skill 9	

2-6: Mitigating Hazards Associated with Alternative Fuel Vehicles

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Identify and mitigate hazards associated with alternative fuel vehicles, given an alternative fuel heavy vehicle, heavy vehicle tool kit, and PPE, so that all hazards are identified and isolated, systems are managed, beneficial system use is evaluated, and hazards to rescue personnel and victims are minimized.

Requisite Knowledge

- 1. Identify an "alternative" fuel vehicle
- 2. Identify alternative fuel sources
- 3. Identify types of alternative fuel heavy vehicles in the AHJ
- 4. Identify hazards associated with alternative fuel vehicles
- 5. Describe how to isolate hazards
- 6. Describe policies and procedures of the AHJ

Requisite Skills

1. None

Content Modification

Block	Modification	Justification
CTS	Added a new	NFPA 1006 does not address alternative fuel vehicles, but they are
	standard.	common in California and require specialized knowledge and skills
		in a rescue environment.

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue		Heavy Vehicle Rescue Technician (2021)
Technician (2021)	N/A	Instructor Task Book
• Topic 2-8		• JPR 1

2-7: Determining Heavy Vehicle Access and Egress Points

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.2.5

Job Performance Requirement

Determine the heavy vehicle access and egress points, given the structural and damage characteristics and potential victim location(s), so that the victim location(s) is identified; access and egress points for victims, rescuers, and equipment are designated; flows of personnel, victims, and equipment are identified; existing entry points are used; time constraints are factored; selected entry and egress points do not compromise vehicle stability; chosen points can be protected; equipment and victim stabilization are initiated; and AHJ safety and emergency procedures are followed.

Requisite Knowledge

- 1. Describe heavy vehicle construction/features
- 2. Identify access and egress points
- 3. *Identify* routes and hazards operating systems
- 4. Describe AHJ standard operating procedure
- 5. Describe emergency evacuation and safety signals

Requisite Skills

- 1. Identify access and egress points and probable victim locations
- 2. Assess and evaluate impact of vehicle stability on the victim

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
Topic 5-1	• Skill 22	• JPR 3

2-8: Creating Access and Egress Openings for Rescue from a Heavy Vehicle Resting on its Wheels

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.2.6

Job Performance Requirement

Create access and egress openings for rescue from a heavy vehicle on its wheels, given a vehicle tool kit, specialized tools and equipment, PPE, and an assignment, so that the movement of rescuers and equipment complements victim care and removal, an emergency escape route is provided, the technique chosen is expedient, victim and rescuer protection is afforded, and vehicle stability is maintained.

Requisite Knowledge

- 1. Describe heavy vehicle construction and features
- 2. *Describe* electrical, mechanical, hydraulic, pneumatic, and alternative access and egress equipment
- 3. *Identify* points and routes of ingress and egress
- 4. *Identify* techniques and hazards
- 5. Describe agency policies and procedures
- 6. Describe emergency evacuation and safety signals

Requisite Skills

- 1. Identify heavy vehicle construction features
- 2. Select and operate tools and equipment
- 3. Apply tactics and strategy based on assignment
- 4. Apply victim care and stabilization devices
- 5. Perform hazard control based on techniques selected
- 6. Demonstrate safety procedures and emergency evacuation signals

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
 Topic 5-1 (RK1, RK3, 	R = Required	• JPR 3
RK6, RS1)	O = Optional	
 Topic 5-2 (RK3, RK4, 	• Skill 23 (R)	
RK5, RS8, RS9, RS11,	• Skill 24 (R)	
RS12)	• Skill 25 (R)	
 Topic 6-2 (RS10) 	 Skill 26 (R) 	
	 Skill 27 (R) 	
	 Skill 28 (R) 	
	 Skill 29 (R) 	
	 Skill 30 (R) 	
	 Skill 40 (O) 	
	• Skill 41 (O)	

2-9: Creating Access and Egress Openings for Rescue from a Heavy Vehicle Resting on its Roof or Side

Authority

1. Office of the State Fire Marshal

Job Performance Requirement

Create access and egress openings for rescue from a heavy vehicle on its roof or side, given a vehicle tool kit, specialized tools and equipment, PPE, and an assignment, so that the movement of rescuers and equipment complements victim care and removal, an emergency escape route is provided, the technique chosen is expedient, victim and rescuer protection is afforded, and vehicle stability is maintained.

Requisite Knowledge

- 1. Describe heavy vehicle construction and features
- 2. Describe electrical, mechanical, hydraulic, pneumatic, and alternative access and egress equipment
- 3. Identify points and routes of ingress and egress
- 4. Identify techniques and hazards
- 5. Describe agency policies and procedures
- 6. Describe emergency evacuation and safety signals

Requisite Skills

- 1. Identify heavy vehicle construction features
- 2. Select and operate tools and equipment
- 3. Apply tactics and strategy based on assignment
- 4. Apply victim care and stabilization devices
- 5. Perform hazard control based on techniques selected
- 6. Demonstrate safety procedures and emergency evacuation signals

Content Modification

Block	Modification	Justification
CTS	Added new	NFPA for Heavy Vehicle Rescue only addresses a vehicle on its
	standard.	wheels or in a multi-hazard configuration. Cadre requested this addition to mirror requirements in Common Passenger Vehicle standard.

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
 Topic 5-1 (RK1, RK3, 	R = Required	• JPR 3
RK6, RS1)	O = Optional	
 Topic 5-2 (RK3, RK4, 	• Skill 23 (R)	
RK5, RS8, RS9, RS11,	• Skill 24 (R)	
RS12)	• Skill 25 (R)	
 Topic 6-2 (RS10) 	• Skill 26 (R)	
	• Skill 27 (R)	
	• Skill 28 (R)	
	• Skill 29 (R)	
	• Skill 30 (R)	
	• Skill 38 (O)	
	• Skill 39 (O)	
	• Skill 40 (O)	
	• Skill 41 (O)	

2-10: Disentangling Victim(s)

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.2.7

Job Performance Requirement

Disentangle victim(s), given an operations-level extrication incident, a vehicle tool kit, PPE, and specialized equipment, so that undue victim injury is prevented; victim protection is provided; and stabilization is maintained.

Requisite Knowledge

- 1. Describe tool selection and application
- 2. Describe stabilization systems
- 3. Describe protection methods
- 4. Describe disentanglement points and techniques
- 5. Describe dynamics of disentanglement

Requisite Skills

- 1. Operate disentanglement tools
- 2. Initiate protective measures
- 3. Identify and eliminate points of entrapment
- 4. Maintain incident stability and scene safety

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
• Topic 6-1	Skill 33	JPR 5
	• Skill 34	

2-11: Removing a Packaged Victim to a Designated Safe Area

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.2.8

Job Performance Requirement

Remove a packaged victim to a designated safe area, as a member of a team, given a victim transfer device, a designated egress route, and PPE, so that the team effort is coordinated, the designated egress route is used, the victim is removed without compromising victim packaging, undue injury is prevented, and stabilization is maintained.

Requisite Knowledge

- 1. Describe patient handling techniques
- 2. Describe types of immobilization, packaging, and transfer devices
- 3. Describe types of immobilization techniques
- 4. Describe uses of immobilization devices

Requisite Skills

- 1. Use immobilization, packaging, and transfer devices for specific situations
- 2. Use immobilization techniques
- 3. Apply medical protocols and safety features to immobilize, package, and transfer
- 4. Use all techniques for lifting the patient

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
 Topic 6-2 	• Skill 35	JPR 5
	• Skill 36	

2-12: Terminating a Heavy Vehicle Incident

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.2.9

Job Performance Requirement

Terminate a heavy vehicle incident, given PPE specific to the incident, isolation barriers, and an extrication tool kit, so that rescuers and bystanders are protected during termination operations; the party responsible for the operation, maintenance, or removal of the affected vehicle is notified of any modification or damage created during the extrication process; scene control is transferred to a responsible party; potential or existing hazards are communicated to that responsible party; and command is terminated.

Requisite Knowledge

- 1. Describe PPE characteristics
- 2. Identify hazards and risks
- 3. Describe isolation techniques
- 4. Identify statutory requirements identifying responsible parties
- 5. Describe accountability system use
- 6. Describe reporting methods
- 7. Describe post incident analysis techniques

Requisite Skills

- 1. Select and use hazard-specific PPE
- 2. Decontaminate PPE
- 3. Use barrier protection techniques
- 4. Collect data and implement record keeping/reporting protocols
- 5. Conduct post incident analysis activities

Content Modification

Block	Modification	Justification
RS4	Added	The verb "collect" didn't apply to "record keeping/reporting
	"implement".	protocols".
RS5	Added "conduct".	NFPA did not provide a verb.

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
Topic 7-1	• Skill	• JPR 6

Section 3: Technician

3-1: Creating an Incident Action Plan to Access or Remove Occupants from a Multi-hazard Configuration or Environment

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.3.1

Job Performance Requirement

Create an incident action plan for an incident where a heavy vehicle has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove the occupants, given agency guidelines, planning forms, and a technician-level vehicle incident or simulation, so that a standard approach is used during training and operational scenarios, emergency situation hazards are identified, isolation methods and scene security measures are considered, fire suppression and safety measures are identified, vehicle stabilization needs are evaluated, and resource needs are identified and documented for future use.

Requisite Knowledge

- 1. Describe operational protocols
- 2. Identify specific planning forms
- 3. Describe common heavy vehicles
- 4. Describe heavy vehicle hazards
- 5. Describe incident support operations and resources
- 6. *Identify* heavy vehicle anatomy
- 7. Describe fire suppression and safety measures

Requisite Skills

- 1. Apply operational protocols
- 2. Select specific planning forms based on the position of the heavy vehicle
- 3. Identify and evaluate various types of common heavy vehicles
- 4. Request support and resources
- 5. Identify commercial/heavy vehicle anatomy
- 6. Determine the required fire suppression crew and safety measures

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
Topic 2-1	• Skill 2	• JPR 1

3-2: Stabilizing a Heavy Vehicle to Access or Remove Occupants from a Multihazard Configuration or Environment

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.3.2

Job Performance Requirement

Stabilize a heavy vehicle that has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove the occupants, given a vehicle and machinery tool kit and PPE, so that the vehicle is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise vehicle stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.

Requisite Knowledge

- 1. Identify types and rated capacities of stabilization devices
- 2. Describe mechanism of vehicle movement
- 3. *Identify* types of stabilization points
- 4. *Identify* types of stabilization surfaces
- 5. Describe AHJ policies and procedures
- 6. Identify types of heavy vehicle construction components as they apply to stabilization

Requisite Skills

1. Select, operate, and monitor stabilization devices on heavy vehicle

Content Modification

Block	Modification	Justification

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Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
 Topic 3-1 	• Skill 10	• JPR 2
	• Skill 11	
	• Skill 12	
	• Skill 13	
	• Skill 14	
	• Skill 15	
	• Skill 16	
	• Skill 31	
	• Skill 32	

3-3: Lifting a Heavy Vehicle

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.3.3

Job Performance Requirement

Lift a heavy vehicle, given a heavy vehicle incident, a vehicle tool kit and PPE, so that unanticipated movement is prevented during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise vehicle stability; selected lift points are structurally sound; lifting equipment can be monitored; and the risk to rescuers is minimized.

Requisite Knowledge

- 1. Describe types of lifting devices
- 2. Describe mechanism of vehicle movement
- 3. Identify types of lifting points
- 4. Identify types of lifting surfaces
- 5. Describe types of cribbing
- 6. Describe AHJ policies and procedures
- 7. Describe types of vehicle construction components as they apply to lifting

Requisite Skills

- 1. Deploy and operate lifting devices
- 2. Deploy cribbing
- 3. Recognize competent lift points
- 4. Calculate weights and center of gravity
- 5. Assess vehicle stability
- 6. Use tools or systems to prevent unwanted movement

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
 Topic 4-1 	• Skill 17	• JPR 4
	• Skill 18	
	Skill 20	
	Skill 21	

3-4: Coordinating Heavy Equipment to Lift, Move, or Stabilize a Heavy Vehicle

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.3.4

Job Performance Requirement

Coordinate the use of heavy equipment as part of a plan to lift, move, or stabilize a heavy vehicle, given a heavy vehicle incident, heavy equipment and an operator, a vehicle tool kit, and PPE, so that the objective is met and the risks to the responders are minimized.

Requisite Knowledge

- 1. Describe methods of requesting heavy equipment
- 2. Describe methods of communication
- 3. Describe use of rigging

Requisite Skills

- 1. Determine estimated weights to be moved or lifted
- 2. Perform coordinated integrated lifting or moving operations utilizing heavy equipment

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
 Topic 4-2 	• Skill 19	• JPR 4

3-5: Creating Access and Egress Openings for Rescue from a Heavy Vehicle to Access or Remove Occupants from a Multi-hazard Configuration or Environment

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.3.5

Job Performance Requirement

Create access and egress openings for rescue from a heavy vehicle that has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove the occupants, given a vehicle tool kit, specialized tools and equipment, PPE, and an assignment, so that the movement of rescuers and equipment complements victim care and removal, an emergency escape route is provided, the technique chosen is expedient, victim and rescuer protection is afforded, and common passenger vehicle stability is maintained.

Requisite Knowledge

- 1. Identify heavy vehicle construction and features
- 2. *Describe* electrical, mechanical, hydraulic, pneumatic, and alternative access and egress equipment
- 3. Identify points and routes of ingress and egress
- 4. Describe techniques and hazards
- 5. Describe agency policies and procedures
- 6. Describe emergency evacuation and safety signals

Requisite Skills

- 1. Identify heavy vehicle construction features
- 2. Select and operate tools and equipment
- 3. Apply tactics and strategy based on assignment
- 4. Apply victim care and stabilization devices
- 5. Perform hazard control based on techniques selected
- 6. Demonstrate safety procedures and emergency evacuation signals

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
	-	
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
 Topic 5-1 (RK1, RK3, 	R = Required	• JPR 3
RK6, RS1)	O = Optional	
 Topic 5-2 (RK3, RK4, 	• Skill 23 (R)	
RK5, RS8, RS9, RS11,	• Skill 24 (R)	
RS12)	• Skill 25 (R)	
 Topic 6-2 (RS10) 	• Skill 26 (R)	
	• Skill 27 (R)	
	• Skill 28 (R)	
	• Skill 29 (R)	
	• Skill 30 (R)	
	• Skill 38 (O)	
	• Skill 39 (O)	
	• Skill 40 (O)	
	• Skill 41 (O)	

3-6: Disentangling Victim(s) from a Heavy Vehicle Resting in a Multi-hazard Configuration or Environment

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.3.6

Job Performance Requirement

Disentangle victim(s) from a heavy vehicle that has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove occupants, given a heavy vehicle extrication incident, a vehicle tool kit, PPE, and specialized equipment, so that undue victim injury is prevented, victim protection is provided, and stabilization is maintained.

Requisite Knowledge

- 1. Describe tool selection and application
- 2. Describe stabilization systems
- 3. Describe protection methods
- 4. Describe disentanglement points and techniques
- 5. Describe dynamics of disentanglement

Requisite Skills

- 1. Operate disentanglement tools
- 2. Initiate protective measures
- 3. Identify and eliminate points of entrapment
- 4. Maintain incident stability and scene safety

Content Modification

Block	Modification	Justification

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
• Topic 6-1	Skill 33	• JPR 5
	• Skill 34	

3-7: Removing a Packaged Victim to a Designated Safe Area

Authority

- 1. NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications (2021)
 - Paragraph 9.3.7

Job Performance Requirement

Remove a packaged victim to a designated safe area, as a member of a team from a heavy vehicle that has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove the occupants, given a victim transfer device, a designated egress route, and PPE, so that the team effort is coordinated, the designated egress route is used, the victim is removed without compromising victim packaging, undue injury is prevented, compartment syndrome due to crash injuries is managed, and stabilization is maintained.

Requisite Knowledge

- 1. Describe patient handling techniques
- 2. Describe the incident management system
- 3. Describe types of immobilization packaging and transfer devices
- 4. Describe types of immobilization techniques
- 5. Describe use of immobilization devices

Requisite Skills

- 1. Use immobilization, packaging, and transfer devices for specific situations
- 2. *Apply* immobilization techniques
- 3. Apply medical protocols and safety features to immobilize, package, and transfer
- 4. Apply all techniques for lifting the patient

Content Modification

Block	Modification	Justification
RS2	Added "apply".	NFPA did not provide a verb.
RS4	Added "apply".	NFPA did not provide a verb.

Course Plan	Training Record	Task Book
Heavy Vehicle Rescue	Heavy Vehicle Rescue	Heavy Vehicle Rescue Technician
Technician (2021)	Technician (2021)	(2021) Instructor Task Book
• Topic 6-2	Skill 35	• JPR 5
	• Skill 36	