Fundamentals of Fire Fighter Skills and Hazardous Materials Response, Canadian Fourth Edition Chapter 24: Vehicle Rescue and Extrication Candidate: \_\_\_\_\_ Date: \_\_\_\_\_ Skill Drill 24-1 Fire Fighter II, 5.4.1 Disable the Electrical System of an Electric Drive Vehicle Evaluator Instructions: The candidate shall be provided with a hybrid vehicle in a simulated motor vehicle crash. Task: Given a hybrid vehicle, the candidate shall be able to safely disable the electrical system. **Performance Outcome:** The candidate shall be able to safely disable the electrical system of a hybrid vehicle. Candidate Directive: "Disable the electrical system of a hybrid vehicle." First Test Retest Task Steps No. Immobilize the vehicle by chocking the wheels. Set the parking brake, and place 1. the vehicle in park, if you can access these controls. Lower all automatic windows, if possible. Disable the low-voltage system by shutting off the vehicle's ignition (power button or conventional key) and disconnecting or cutting the 12-volt battery cables. Cut the 12-volt negative cable first, and then cut the positive cable. Double cut each cable to remove a short section. This will prevent the cables from accidentally touching. For vehicles equipped with a proximity key, move the key as far away from the vehicle as possible to prevent the possibility of unintentional restart. Because it may take up to 10 minutes for the high-voltage system to discharge, use caution while performing extrication operations. Retest Evaluator: Retest Approved By:

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Fundamentals of Fire Fighter Skills and Hazardous Materials Response, Canadian Fourth Edition Chapter 24: Vehicle Rescue and Extrication Candidate: Date: Skill Drill 24-2 Fire Fighter II, 5.4.1 Performing a Scene Size-Up at a Motor Vehicle Accident **Evaluator Instructions:** The candidate shall be provided with the following: simulated motor vehicle crash, response vehicle, mobile radio, portable radio, PPE, and additional responding units. Conduct in conjunction with others as part of an integrated, realistic training evolution. Task: Given a simulated motor vehicle crash, the first arriving Public Safety Official (fire fighter, EMS provider, or law enforcement) on the scene of a motor vehicle crash shall perform a size-up, make an arrival report, and establish command. **Performance Outcome:** The candidate shall be able to respond safely, locate emergency vehicle to protect the scene, assess for hazards, make an arrival report, assume command, direct, and assign subsequent arriving units. Candidate Directive: "Perform a scene size-up and initiate the Incident Management System at a motor vehicle crash." First Test Retest No. Task Steps  $\mathbf{F}$ Position emergency vehicles to protect the MVA scene and the rescuers. Take any 1. additional actions needed to prevent further MVAs. 2. Perform a quick initial assessment as you arrive on the scene, establish command, and give a brief initial radio report. Establish fire suppression protection if fluids are released or if extrication may be required; a minimum of one 1½-in. (38-mm) hose line should be in place. 3. Perform a 360-degree walk-around to identify potential hazards. Look for hazards above and below the vehicle, and determine the stabilization equipment needed to prevent further movement of the vehicle involved in the incident. Determine the number of patients, the severity of their injuries, and the amount of entrapment. Give an updated report, and call for additional resources if needed. Establish a secure working area and an equipment staging area. Direct personnel to 5. perform initial tasks. Retest Approved By: Retest Evaluator: Evaluator Comments: Candidate Comments:

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Retest Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_ Retest Candidate Date: \_\_\_\_\_

Candidate: Date: Skill Drill 24-3 Fire Fighter II, 5.4.1 Mitigating the Hazards at a Motor Vehicle Accident Evaluator Instructions: The candidate shall be provided with the following: simulated motor vehicle crash, fully equipped engine with driver/operator, PPE, and SCBA. Conduct this skill in conjunction with others as part of an integrated, realistic training evolution. **Task:** Given a simulated motor vehicle crash, an engine with driver/operator, and an order to mitigate hazards, the candidate as part of a protection team shall extinguish any fire, open the vehicle hood, eliminate ignition sources, cut or disconnect each battery cable and ground together, and punch a hole in bottom/middle of windshield. Performance Outcome: The candidate shall be able to respond safely, place the emergency vehicle to protect the scene, perform personal size-up to assess for hazards, don PPE and SCBA, advance the hose line, safely carry hand tools, open hood, eliminate ignition sources, and cut or disconnect battery cables. Candidate Directive: "As part of a protection team, mitigate hazards at a motor vehicle crash." **First Test** Retest No. Task Steps  $\mathbf{F}$ Don PPE, including SCBA. Attach a regulator, if conditions require. 1. Assess the incident scene for hazards. Communicate with other crews and command. Advance a charged hose line to the proximity of the vehicle. Extinguish any fires. Open the hood of the vehicle. 3. 4. Mitigate electrical sources of ignition by cutting the 12-volt battery cables. Retest Evaluator: Retest Approved By: Evaluator Comments: Candidate Comments: Evaluator: \_\_\_\_\_ Date: \_\_\_\_ Candidate Date: \_\_\_\_ Retest Evaluator: \_\_\_\_\_\_ Date: \_\_\_\_\_ Retest Candidate Date: \_\_\_\_\_

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Chapter 24: Vehicle Rescue and Extrication

Chapter 24: Vehicle Rescue and Extrication Candidate: Date: Skill Drill 24-4 Fire Fighter II, 5.4.1 Stabilizing a Vehicle Following a Motor Vehicle Accident **Evaluator Instructions:** The candidate shall be provided with the following: simulated motor vehicle crash, assortment of cribbing, and PPE. Conduct this skill in conjunction with others as part of an integrated, realistic training evolution. **Task:** Given a simulated motor vehicle crash and an assortment of cribbing, the candidate as part of a stabilization team shall stabilize a vehicle resting on all four tires by using blocking/cribbing. **Performance Outcome:** The candidate shall be able to respond safely, locate emergency vehicle to protect the scene, perform personal size up to assess for hazards, don PPE, identify and retrieve cribbing, secure both sides of a tire, and utilize cribbing to stabilize a vehicle. Candidate Directive: "As part of a stabilization team, safely stabilize a vehicle that has been involved in a motor vehicle crash." First Test Retest No. Task Steps  $\mathbf{F}$ Don PPE, including eye protection. Minimize hazards to rescuers and victims. 1. Chock both sides of one tire to prevent the vehicle from rolling by placing one step chock in front of a wheel and a second step chock in back of the wheel. Use additional step chocks and cribbing, as needed. Consider deflating tires for added stability. Place the gear shift in park and apply the parking brake, if these controls can be accessed. 4. Lower all automatic windows, if possible. Turn off the ignition and remove the key Retest Approved By: Retest Evaluator: Evaluator Comments: Candidate Comments: Evaluator: \_\_\_\_\_ Date: \_\_\_\_ Candidate Date: \_\_\_\_

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Retest Evaluator: Date: Retest Candidate Date:

Chapter 24: Vehicle Rescue and Extrication Date: \_\_\_\_\_ Candidate: Skill Drill 24-5 Fire Fighter II, 5.4.1 **Breaking Tempered Glass** Evaluator Instructions: The candidate shall be provided with full personal protective equipment (PPE), gloves, eye protection, dust mask, center punch, and a vehicle with tempered windows. Task: Breaking tempered glass. Performance Outcome: The candidate shall demonstrate how to safely break tempered glass. Candidate Directive: "Demonstrate how to safely break tempered glass." **First Test** Retest No. Task Steps F Don PPE, including eye protection. Minimize hazards to rescuers and victims. 1. Ensure stability of the vehicle by using appropriate chocks and cribbing. Select a tool for breaking tempered glass. Ensure that the victim and other fire fighters are as protected as possible. 2. If using a spring-loaded centre punch tool, place the tool in the lower corner of the 3. window and sharply apply pressure until the spring is activated. If using a striking tool, strike the lowest corner away from the victim. 4. Remove loose glass around the window opening. Retest Evaluator: Retest Approved By: Evaluator Comments: Candidate Comments: Evaluator: \_\_\_\_\_ Date: \_\_\_\_ Candidate Date: \_\_\_\_\_

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Retest Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_ Retest Candidate Date: \_\_\_\_\_

Candidate: Date: Skill Drill 24-6 Fire Fighter II, 5.4.1 Gaining Access to a Vehicle Following a Motor Vehicle Accident Evaluator Instructions: The candidate shall be provided with the following: simulated motor vehicle crash with trapped victims, stabilization team, tools necessary for access such as a spring-loaded centre punch, and equipment to protect victims such as a blanket. Conduct this skill in conjunction with others as part of an integrated, realistic training evolution. **Task:** Given a simulated motor vehicle crash with victims trapped, the candidate as part of an access team shall gain access to the interior of a vehicle and victims. **Performance Outcome:** The candidate shall be able to respond safely, place the emergency vehicle to protect the scene, perform personal size-up to assess for hazards, don PPE, identify and retrieve necessary equipment for gaining access and protecting victims, break vehicle window, unlock doors, roll down windows, utilize onboard power accessories, shut off ignition, move gear shifter to park, set parking brake, determine and communicate victim care and extrication needs. Candidate Directive: "As part of an access team, gain access to the inside of the vehicle and the trapped victims." **First Test** Retest P No. Task Steps Don PPE, including eye protection. Minimize hazards to rescuers and victims. Ensure stability of the vehicle by using appropriate chocks and cribbing. If you can access the passenger compartment, place the gear shift in park, apply the parking brake, lower automatic windows, turn off the ignition, and move the proximity key (if applicable) away from the vehicle. Isolate the power by disconnecting or cutting the battery cables. Determine the best access point, and then open a door, break needed glass, or distort metal. Enter the vehicle, and communicate with the victim. Retest Approved By: Retest Evaluator: Evaluator Comments: Candidate Comments: Evaluator: \_\_\_\_\_ Date: \_\_\_\_ Candidate Date: \_\_\_\_ Retest Evaluator: \_\_\_\_\_\_ Date: \_\_\_\_\_ Retest Candidate Date: \_\_\_\_\_

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Chapter 24: Vehicle Rescue and Extrication

Chapter 24: Vehicle Rescue and Extrication Candidate: Date: Skill Drill 24-7 Fire Fighter II, 5.4.1 Forcing a Vehicle Door Evaluator Instructions: The candidate shall be provided with the following: simulated motor vehicle crash with trapped victims; door(s) that need to be forced; teams taking care of command, protection, stabilization, victim access, and medical care; hand tools; power tools which may include hydraulic spreaders/cutter/combo tools and reciprocating saws with extra blades; and PPE. Conduct this skill in conjunction with others as part of an integrated, realistic training evolution. Task: Given a simulated motor vehicle crash with victims trapped, the candidate as part of a disentanglement team shall force a door using hand and power tools. Performance Outcome: The candidate shall be able to respond safely, locate an emergency vehicle to protect the scene, perform personal size-up to assess for hazards, don PPE, identify and retrieve necessary equipment for providing disentanglement, set up power supplies, couple hoses, perform readiness check, communicate with victims and other providers, and use tools to force a door. Candidate Directive: "Force a vehicle door using hand and/or power tools." First Test Retest P No. Task Steps Don PPE, including eye protection. Retrieve and set up the required tools. Check the equipment for readiness. Assess the vehicle for stabilization and hazards, including SRS devices. 2. Communicate with the victim; minimize hazards to both the rescuers and the Engage hand tools or a power unit to force the door, using good body mechanics. 3. Remove the door, if possible. If rapid extrication is required, secure the door with ropes or cribbing so it does not shift while removing the victim. Retest Evaluator: Retest Approved By: Evaluator Comments: Candidate Comments: Evaluator: \_\_\_\_\_ Date: \_\_\_\_ Candidate Date: \_\_\_\_

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Retest Evaluator: Date: Retest Candidate Date:

Candidate: Date: Skill Drill 24-8 Fire Fighter II, 5.4.1 Gaining Access and Providing Medical Care to a Victim in a Vehicle Evaluator Instructions: The candidate shall be provided with the following: simulated motor vehicle crash with trapped victims, teams taking care of stabilization and disentanglement, and supplies necessary for victim care and protection. Even though victim care is usually required to be administered only by licensed emergency medical providers, having each rescuer in the class get an opportunity to provide "simulated medical care" gives the rescuer who normally only works on the outside of a wrecked vehicle a true appreciation for what is going on inside the vehicle. Conduct this skill in conjunction with others as part of an integrated, realistic training evolution. Task: Given a simulated motor vehicle crash with victims trapped, the candidate as part of a medical care team shall gain access to the victims and provide medical care to a victim trapped in a vehicle because of a motor vehicle crash. **Performance Outcome:** The candidate shall be able to respond safely, locate an emergency vehicle to protect the scene, perform personal size-up to assess for hazards, don PPE, identify and retrieve necessary equipment for providing medical care and packaging, assess the victim, determine and communicate medical care and extrication needs, and initiate victim packaging. Candidate Directive: "Provide victim care to victims trapped in a motor vehicle crash in accordance to appropriate standards of care." First Test Retest F No. Task Steps 1. Don PPE, including eye protection, and minimize the hazards present. Communicate the action plan to the victim. Enter the vehicle through the best access point. Begin initial medical care per your department's EMS protocols, and communicate the victim's condition to the outside rescuers. Begin packaging the victim for extrication. Retest Evaluator: Retest Approved By: Evaluator Comments: Candidate Comments: Evaluator: \_\_\_\_\_ Date: \_\_\_\_ Candidate Date: \_\_\_\_ Retest Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_ Retest Candidate Date: \_\_\_\_\_

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Chapter 24: Vehicle Rescue and Extrication

Chapter 24: Vehicle Rescue and Extrication Candidate: Date: ID#: Skill Drill 24-9 Fire Fighter II, 5.4.1 **Performing a Dash Roll** Evaluator Instructions: The candidate shall be provided with the following: simulated motor vehicle crash with trapped victims; dash that needs to be displaced; teams taking care of command, protection, stabilization, victim access, and medical care; hand tools; power tools which may include hydraulic spreaders/cutter/combo tools and reciprocating saws with extra blades; and PPE. Due to the universal joint in the steering columns of most modern vehicles, it is not standard practice to pull steering columns with chains. Conduct this skill in conjunction with others as part of an integrated, realistic training evolution. **Task:** Given a simulated motor vehicle crash with victims trapped, the candidate as part of a disentanglement team shall displace the dash using hand and power tools. Performance Outcome: The candidate shall be able to respond safely, place the emergency vehicle to protect the incident scene, perform personal size-up to assess for hazards, don PPE, identify and retrieve necessary equipment for providing disentanglement, set up power supplies, couple hoses, perform readiness check, communicate with the victim and other providers, adjust cribbing as needed, and use tools to displace the dash. Candidate Directive: "Displace the dash using hand and/or power tools." First Test Retest P No. Task Steps Don PPE, including eye protection. Minimize hazards to rescuers and victims. Prevent the vehicle from rolling by placing a chock in front of one tire and a second chock behind the same tire. Use additional step chocks and cribbing, as needed. Consider deflating tires for added stability. Communicate with the victim, and ensure that both the victim and rescuers are protected from hazards. Make a relief cut at the bottom of the A-post. Use a hydraulic ram or spreading tool to roll the dash and bulkhead up and away from the victim. Place cribbing under the rocker panel as the dash is being rolled. Place a wedge in the A-post cut to prevent the dash from returning to its original 3. position. Retest Approved By: Retest Evaluator: Evaluator Comments: Candidate Comments:

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Fundamentals of Fire Fighter Skills and Hazardous Materials Response, Canadian Fourth Edition Chapter 24: Vehicle Rescue and Extrication Candidate: Date: Skill Drill 24-10 Fire Fighter II, 5.4.1 Performing a Dash Lift Evaluator Instructions: The candidate shall be provided with the following: simulated motor vehicle crash with trapped victims; dash that needs to be displaced; teams taking care of command, protection, stabilization, victim access, and medical care; hand tools; power tools which may include hydraulic spreaders/cutter/combo tools and reciprocating saws with extra blades; and PPE. Due to the universal joint in the steering columns of most modern vehicles, it is not standard practice to pull steering columns with chains. Conduct this skill in conjunction with others as part of an integrated, realistic training evolution. **Task:** Given a simulated motor vehicle crash with victims trapped, the candidate as part of a disentanglement team shall displace the dash using hand and power tools. Performance Outcome: The candidate shall be able to respond safely, place the emergency vehicle to protect the incident scene, perform personal size-up to assess for hazards, don PPE, identify and retrieve necessary equipment for providing disentanglement, set up power supplies, couple hoses, perform readiness check, communicate with the victim and other providers, adjust cribbing as needed, and use tools to displace the dash. Candidate Directive: "Displace the dash using hand and/or power tools." First Test Retest P No. Task Steps Don PPE, including eye protection. Minimize hazards to rescuers and victims. Prevent the vehicle from rolling by placing a chock in front of one tire and a second chock behind the same tire. Use additional step chocks and cribbing, as needed. Consider deflating tires for added stability. Communicate with the victim, and ensure that both the victim and rescuers are protected from hazards. Make necessary relief cuts in the A-post and other structural members, as needed. Use a hydraulic spreading tool in the A-post relief cut to lift the dash and bulkhead up and away from the victim. Place cribbing under the rocker panel as the dash is being lifted. 3. Maintain contact with the hydraulic spreading tool to prevent the tool from shifting while removing the victim. Retest Evaluator: Retest Approved By: Evaluator Comments:

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Fundamentals of Fire Fighter Skills and Hazardous Materials Response, Canadian Fourth Edition Chapter 24: Vehicle Rescue and Extrication Candidate: Date: Skill Drill 24-11 Fire Fighter II, 5.4.1 Removing the Roof of a Vehicle Evaluator Instructions: The candidate shall be provided with the following: simulated motor vehicle crash with trapped victims; a vehicle roof that needs to be removed; teams taking care of command, protection, stabilization, victim access, and medical care; hand tools; power tools which may include hydraulic spreaders/cutter/combo tools and reciprocating saws with extra blades; PPE; and extra lifting assistance for the roof. Conduct this skill in conjunction with others as part of an integrated, realistic training evolution. Task: Given a simulated motor vehicle crash with victims trapped, the candidate as part of a disentanglement team shall remove the roof using hand and power tools. Performance Outcome: The candidate shall be able to respond safely, place the emergency vehicle to protect the incident scene, perform personal size-up to assess for hazards, don PPE, identify and retrieve necessary equipment for providing disentanglement, set up power supplies, couple hoses, perform readiness check, communicate with victim and other providers, and use tools to remove the vehicle roof. **Candidate Directive:** "Remove the roof using hand and/or power tools." First Test Retest No. Task Steps Don PPE, including eye protection. Retrieve and set up the required tools. Check the equipment for readiness. Assess the vehicle for stabilization and hazards. Prior to cutting any materials, be sure to identify the presence and location of any hidden pistons, canisters, electrical wiring, or SRS devices, such as air bags and seat belt pre-tensioners, and address these hazards accordingly. It may be necessary to remove interior trim around the posts to locate these devices. Communicate with the victim, and minimize hazards to both the rescuers and the victim. Remove any remaining glass. 2. Engage the appropriate tools to remove the roof, while using good body mechanics. Control the vehicle roof and protect against sharp edges at all times. 3. 4. Remove the roof to a safe location. Return the tools to the staging area upon completion of the tasks. Retest Evaluator: Retest Approved By: Evaluator Comments: Candidate Comments:

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