

Report Date: 27 Oct 2014

Summary Report for Individual Task
052-247-1230
Neutralize Power Sources and Other Hazards for a Vehicle or Machinery Incident
Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - The materials contained in this course have been reviewed by the course developers in coordination with the Ft Leonard Wood MO/MSCOE foreign disclosure authority. This course is releasable to students from all requesting foreign countries without restrictions.

Condition: You are a member of an Urban Search and Rescue (US&R) team given a vehicle and machinery tool kit, fire extinguisher and personal protective equipment (PPE). This task should not be trained in MOPP 4.

Standard: Neutralize energy sources and hazards associated with the vehicle/machinery incident without causing additional injury to the victim or rescue personnel IAW National Fire Protection Association (NFPA) 1006 standards.

Special Condition: None

Safety Risk: Low

MOPP 4: Never

Task Statements

Cue: None

DANGER
None

WARNING
None

CAUTION
None

Remarks: All required references and technical manuals will be provided by the local US&R Command.

Notes: None

Performance Steps

1. Stabilize the scene.
 - a. Establish hot, warm, cold zones.
 - b. Stabilize the vehicle/machinery. (See task 052-247-1326)
 - c. Establish a fire protection capability (as needed).
 - (1) Create a fire control point.
 - (2) Assign a Soldier to fire suppression activities.
2. Isolate potential energy sources.
 - a. Common passenger vehicles.
 - (1) Shut down the engine (if running).
 - (2) Disconnect the battery.
 - (a) Open the hood of the vehicle.
 - (b) Locate the battery system in order to eliminate the ignition source.
 - (c) Cut or remove the negative terminal connection.
 - (d) Cut or remove the positive terminal connection.
 - (e) Tape the cut sections or terminal connections of the cables to prevent them from touching the battery terminals.
 - (3) Remove the smart key (if equipped) out of range approximately 15-20 feet from the vehicle.
 - b. Commercial buses.
 - (1) Turn engine key to the off position.
 - (2) Engage the engine stop switch found on the driver's control panel.

Note: Some commercial buses may have additional stop control switches located in the engine compartment. If equipped, these switches will also have to be placed in the off position.
 - (3) Disconnect the battery.
 - (a) Locate and open the battery compartment.

Note: It may be necessary to pry open the battery compartment if the key cannot be located. Some busses are equipped with a battery shut off switch located in the battery compartment. Power from the batteries can be interrupted by simply moving this switch to the "off" position.
 - (b) Cut or remove negative terminal connection.
 - (c) Cut or remove positive terminal connection.

(d) Tape the cut sections or terminal connections of the cables to prevent them from touching the terminals.

c. Hybrid vehicles.

(1) Common passenger vehicles.

Note: Attempt any necessary component adjustments before disabling the power to the vehicle, such as activating the electrical parking brake, adjusting power seats, and releasing hatchbacks.

(a) Shut down the engine (if running).

(b) Open the hood of the vehicle.

(c) Locate the battery system in order to eliminate the ignition source.

(d) Disengage the 12-volt battery system by removing or cutting the negative terminal cable and ensuring that the cable does not make contact with the vehicle.

WARNING

Energy capacitors in some Hybrid models can hold power for 5-10 minutes after the power has been disengaged.

CAUTION

Orange colored cables are used to indicate high-voltage wiring, and yellow or blue colored cables indicate intermediate-voltage wiring. See hybrid vehicle instructions for specific instructions.

(e) Remove the main fuse from the vehicle to ensure the electrical system is disabled.

Note: Remove all the fuses in the fuse box if the main fuse cannot be identified.

(2) Hybrid buses.

Note: Attempt any necessary component adjustments before disabling the power to the vehicle, such as activating the electrical parking brake and adjusting power seats.

(a) Turn engine key to the off position.

(b) Engage the engine stop switch found on the driver's control panel.

Note: Some commercial busses have additional stop control switches located in the engine compartment. If equipped, these switches will also have to be placed in the off position.

(c) Locate and open the battery compartment.

Note: It may be necessary to pry open the battery compartment if the key cannot be located.

(d) Disengage the 12-volt battery system by removing or cutting the negative terminal cable and ensuring that the cable does not make contact with the vehicle.

(e) Remove high voltage fuses in engine compartment fuse box.

Note: Remove all the fuses in the fuse box if the high voltage fuse cannot be identified.

DANGER

Death or permanent injury could occur if sparks from cutting tools come into contact with leaking fuel. Alternate cutting or extrication methods may be necessary to prevent sparks.

3. Mitigate fuel leaks (if needed).
4. Disable airbag/restraint systems.
 - a. Shut down the engine (if running).
 - b. Remove the smart key (if equipped) out of range approximately 15-20 feet from the vehicle.

CAUTION

Caution should be used when working around a vehicle with non-deployed air bags. Rough handling of the vehicle could cause the airbags to deploy.

- c. Disconnect the battery (using the steps above).

Note: Disconnecting the battery does not deactivate air bags and reserve power can last up to 10 minutes.

WARNING

Do not cut or puncture deployed air bags. These bags contain a white hazardous powder that could be harmful if the powder makes contact with exposed skin.

- d. Push deployed airbags out of the way to gain access to the victim.
- e. Unbuckle or cut seatbelt strap to gain access to the victim.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the Soldier GO if all measures are passed (P). Score the Soldier NO-GO if any measure is failed (F). If the student fails any measure, show him how to do it correctly.

Evaluation Preparation: Provide the Soldier with all the items listed in the conditions. Tell the Soldier to neutralize power sources and other hazards for a vehicle and machinery incident.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Stabilized the scene.			
2. Isolated potential energy sources.			
3. Mitigated fuel leaks (if needed).			
4. Disabled airbag/restraint systems.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	IFSTA	International Fire Service Training Association (IFSTA) Fire Service Search and Rescue, 7th Edition	No	No
	ISBN-10: 1449648827	Vehicle Extrication: Levels I & II: Principles And Practice	No	No
	NFPA 1006	Standard for Rescue Technician Professional Qualifications	Yes	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

Prerequisite Individual Tasks : None

Supporting Individual Tasks :

Task Number	Title	Proponent	Status
052-247-1326	Stabilize Vehicles and Machinery	052 - Engineer (Individual)	Approved
052-247-3201	Supervise Rescue Operations at an Urban Search and Rescue Incident	052 - Engineer (Individual)	Approved
052-247-3101	Perform a Size Up of an Urban Search and Rescue Incident	052 - Engineer (Individual)	Approved

Supported Individual Tasks :

Task Number	Title	Proponent	Status
052-247-1232	Establish Access and Egress Openings for a Heavy Vehicle or Machinery Incident	052 - Engineer (Individual)	Analysis
052-247-1231	Stabilize Heavy Vehicles and Machinery	052 - Engineer (Individual)	Analysis
052-247-1233	Rescue an Injured or Entrapped Victim from a Heavy Vehicle or Machinery Incident	052 - Engineer (Individual)	Analysis
052-247-1326	Stabilize Vehicles and Machinery	052 - Engineer (Individual)	Approved

Supported Collective Tasks : None