

Unit 1.4—Vehicle Configuration Factors. This unit must provide classroom instruction addressing the key vehicle components used in the configuration of combination vehicles. It also must provide familiarization with various vehicle combinations, as well as provide instruction about unique characteristics and factors associated with LCV configurations.

Section 2—Basic Operation.

The units in this section cover the interaction between the driver and the vehicle. They are intended to teach driver-trainees how to inspect, couple and uncouple LCVs, ensure the vehicles are in the proper operating condition, and control the motion of LCVs under various road and traffic conditions.

During the driving exercises at off-highway locations required by this section, the driver-trainee must first familiarize himself/herself with basic operating characteristics of an LCV. Utilizing an LCV, the students must be able to perform the skills learned in each unit to a level of proficiency required to permit safe transition to on-street driving.

Unit 2.1—Inspection. This unit must provide instruction addressing the systematic vehicle inspection of LCV tractor-trailer combinations, including pre-trip, en route, and post-trip inspection procedures. While vehicle inspections are common in all CMV operations, some factors are peculiar to LCVs. Emphasis must be placed upon component failure recognition.

Unit 2.2—Coupling and Uncoupling. This unit must provide instruction addressing the procedures for coupling and uncoupling LCVs. While vehicle coupling and uncoupling procedures are common with all truck-tractor/semitrailer operations, some factors are peculiar to LCVs. Emphasis must be placed upon preplanning and safe operating procedures.

Unit 2.3—Basic Control and Handling. This unit must provide an introduction to basic vehicular control and handling as it applies to LCVs. This must include instruction addressing brake performance, handling characteristics and factors affecting LCV stability while braking, turning, and cornering. Emphasis must be placed upon safe operating procedures.

Unit 2.4—Basic Maneuvers. This unit must provide instruction addressing the basic vehicular maneuvers that will be encountered by LCV drivers. This must include instruction relative to backing, lane positioning and path selection, merging situations, and parking LCVs. Emphasis must be placed upon safe operating procedures as they apply to

brake performance and directional stability while accelerating, braking, merging, cornering, turning, and parking.

Unit 2.5—Turning, Steering, and Tracking. This unit must provide instruction addressing turning situations, steering maneuvers, and the tracking of LCV trailers. This must include instruction relative to trailer sway and off-tracking. Emphasis must be placed on maintaining directional stability.

Unit 2.6—Proficiency Development: Basic Operations. The purpose of this unit is to enable driver-students to gain the proficiency in basic operation needed to safely undertake on-street instruction in the Safe Operations Practices section of the curriculum.

The activities of this unit must consist of driving exercises that provide practice for the development of basic control skills and mastery of basic maneuvers. Driver-students practice skills and maneuvers learned in the Basic Control and Handling; Basic Maneuvers; and Turning, Steering and Tracking Units. A series of basic exercises are practiced on off-highway locations until students develop sufficient proficiency for transition to on-street driving.

Once the driver-student's skills have been measured and found to be adequate, the driver-student must be allowed to move to on-the-street driving.

Nearly all activity in this unit will take place on the driving range or on streets or roads that have low-density traffic conditions.

Section 3—Safe Operating Practices

The units in this section must cover the interaction between student drivers, the vehicle, and the traffic environment. They must teach driver-students how to apply their basic operating skills in a way that ensures their safety and that of other road users under various road, weather, and traffic conditions.

Unit 3.1—Interacting with Traffic. This unit must provide instruction addressing the principles of visual search, communication, and sharing the road with other traffic. Emphasis must be placed upon visual search, mirror usage, signaling and/or positioning the vehicle to communicate, and understanding the special situations encountered by LCV drivers in various traffic situations.

Unit 3.2—Speed and Space Management. This unit must provide instruction addressing the principles of speed and space management. Emphasis must be placed upon maintaining safe vehicular speed and appropriate space

surrounding the vehicle under various traffic and road conditions. Special attention must be placed upon understanding the special situations encountered by LCVs in various traffic situations.

Unit 3.3—Night Operations. This unit must provide instruction addressing the principles of Night Operations. Emphasis must be placed upon the factors affecting operation of LCVs at night. Night driving presents specific factors that require special attention on the part of the driver. Changes in vehicle safety inspection, vision, communications, speed management, and space management are needed to deal with the special problems night driving presents.

Unit 3.4—Extreme Driving Conditions. This unit must provide instruction addressing the driving of LCVs under extreme driving conditions. Emphasis must be placed upon the factors affecting the operation of LCVs in cold, hot, and inclement weather and in the mountains and the desert. Changes in basic driving habits are needed to deal with the specific problems presented by these extreme driving conditions.

Unit 3.5—Security Issues. This unit must provide an understanding of the driver's role in America's war on terrorism as it relates to: (1) The driver's role in reducing the risk of LCV hijacking, (2) the importance of notifying the authorities concerning potentially dangerous situations; and (3) the need for heightened vigilance in preparation of travel, while on the road, and when stopping.

Unit 3.6—Proficiency Development. This unit must provide driver-students an opportunity to refine, within the on-street traffic environment, their vehicle handling skills learned in the first three sections. Driver-student performance progress must be closely monitored to determine when the level of proficiency required for carrying out the basic traffic maneuvers of stopping, turning, merging, straight driving, curves, lane changing, passing, driving on hills, driving through traffic restrictions and parking has been attained. The driver-student must also be assessed for regulatory compliance with all traffic laws.

Nearly all activity in this unit will take place on public roadways in a full range of traffic environments applicable to this vehicle configuration. This must include urban and rural uncontrolled roadways, expressways or freeways, under light, moderate and heavy traffic conditions. There must be a brief classroom session to familiarize driver-students with the type of on-street