

**§ 383.93 Endorsements.**

(a) *General.* In addition to taking and passing the knowledge and skills tests described in subpart G of this part, all persons who operate or expect to operate the type(s) of motor vehicles described in paragraph (b) of this section shall take and pass specialized tests to obtain each endorsement. The State shall issue CDL endorsements only to drivers who successfully complete the tests.

(b) *Endorsement descriptions.* An operator must obtain State-issued endorsements to his/her CDL to operate commercial motor vehicles which are:

- (1) Double/triple trailers;
- (2) Passenger vehicles;
- (3) Tank vehicles;
- (4) Required to be placarded for hazardous materials; or
- (5) School buses.

(c) *Endorsement testing requirements.* The following tests are required for the endorsements contained in paragraph (b) of this section:

- (1) *Double/Triple Trailers*—a knowledge test;
- (2) *Passenger*—a knowledge and a skills test;
- (3) *Tank vehicle*—a knowledge test;
- (4) *Hazardous Materials*—a knowledge test; and
- (5) *School bus*—a knowledge and a skills test.

[53 FR 27651, July 21, 1988, as amended at 67 FR 49760, July 31, 2002]

**§ 383.95 Air brake restrictions.**

(a) If an applicant either fails the air brake component of the knowledge test, or performs the skills test in a vehicle not equipped with air brakes, the State shall indicate on the CDL, if issued, that the person is restricted from operating a CMV equipped with air brakes.

(b) For the purposes of the skills test and the restriction, air brakes shall include any braking system operating fully or partially on the air brake principle.

**Subpart G—Required Knowledge and Skills**

SOURCE: 53 FR 27654, July 21, 1988, unless otherwise noted.

**§ 383.110 General requirement.**

All drivers of commercial motor vehicles shall have knowledge and skills necessary to operate a commercial motor vehicle safely as contained in this subpart. A sample of the specific types of items which a State may wish to include in the knowledge and skills tests that it administers to CDL applicants is included in the appendix to this subpart G.

**§ 383.111 Required knowledge.**

All commercial motor vehicle operators must have knowledge of the following general areas:

(a) *Safe operations regulations.* Driver-related elements of the regulations contained in 49 CFR parts 382, 391, 392, 393, 395, 396, and 397, such as: Motor vehicle inspection, repair, and maintenance requirements; procedures for safe vehicle operations; the effects of fatigue, poor vision, hearing, and general health upon safe commercial motor vehicle operation; the types of motor vehicles and cargoes subject to the requirements; and the effects of alcohol and drug use upon safe commercial motor vehicle operations.

(b) *Commercial motor vehicle safety control systems.* Proper use of the motor vehicle's safety system, including lights, horns, side and rear-view mirrors, proper mirror adjustments, fire extinguishers, symptoms of improper operation revealed through instruments, motor vehicle operation characteristics, and diagnosing malfunctions. Commercial motor vehicle drivers shall have knowledge on the correct procedures needed to use these safety systems in an emergency situation, e.g., skids and loss of brakes.

(c) *Safe vehicle control*—(1) *Control systems* The purpose and function of the controls and instruments commonly found on commercial motor vehicles.

(2) *Basic control.* The proper procedures for performing various basic maneuvers.

(3) *Shifting.* The basic shifting rules and terms, as well as shift patterns and procedures for common transmissions.

(4) *Backing.* The procedures and rules for various backing maneuvers.

(5) *Visual search.* The importance of proper visual search, and proper visual search methods.

(6) *Communication.* The principles and procedures for proper communications and the hazards of failure to signal properly.

(7) *Speed management.* The importance of understanding the effects of speed.

(8) *Space management.* The procedures and techniques for controlling the space around the vehicle.

(9) *Night operation.* Preparations and procedures for night driving.

(10) *Extreme driving conditions.* The basic information on operating in extreme driving conditions and the hazards that are encountered in extreme conditions.

(11) *Hazard perceptions.* The basic information on hazard perception and clues for recognition of hazards.

(12) *Emergency maneuvers.* The basic information concerning when and how to make emergency maneuvers.

(13) *Skid control and recovery.* The information on the causes and major types of skids, as well as the procedures for recovering from skids.

(d) *Relationship of cargo to vehicle control.* The principles and procedures for the proper handling of cargo.

(e) *Vehicle inspections:* The objectives and proper procedures for performing vehicle safety inspections, as follows:

(1) The importance of periodic inspection and repair to vehicle safety.

(2) The effect of undiscovered malfunctions upon safety.

(3) What safety-related parts to look for when inspecting vehicles.

(4) Pre-trip/enroute/post-trip inspection procedures.

(5) Reporting findings.

(f) *Hazardous materials knowledge, such as:* What constitutes hazardous material requiring an endorsement to transport; classes of hazardous materials; labeling/placarding requirements; and the need for specialized training as a prerequisite to receiving the endorsement and transporting hazardous cargoes.

(g) *Air brake knowledge as follows:*

(1) Air brake system nomenclature;

(2) The dangers of contaminated air supply;

(3) Implications of severed or disconnected air lines between the power unit and the trailer(s);

(4) Implications of low air pressure readings;

(5) Procedures to conduct safe and accurate pre-trip inspections.

(6) Procedures for conducting enroute and post-trip inspections of air actuated brake systems, including ability to detect defects which may cause the system to fail.

(h) *Operators for the combination vehicle group shall also have knowledge of:*

(1) Coupling and uncoupling—The procedures for proper coupling and uncoupling a tractor to semi-trailer.

(2) Vehicle inspection—The objectives and proper procedures that are *unique* for performing vehicle safety inspections on combination vehicles.

[53 FR 27654, July 21, 1988, as amended at 62 FR 37151, July 11, 1997]

#### § 383.113 Required skills.

(a) *Basic vehicle control skills.* All applicants for a CDL must possess and demonstrate basic motor vehicle control skills for each vehicle group which the driver operates or expects to operate. These skills should include the ability to start, to stop, and to move the vehicle forward and backward in a safe manner.

(b) *Safe driving skills.* All applicants for a CDL must possess and demonstrate the safe driving skills for their vehicle group. These skills should include proper visual search methods, appropriate use of signals, speed control for weather and traffic conditions, and ability to position the motor vehicle correctly when changing lanes or turning.

(c) *Air brake skills.* Except as provided in § 393.95, all applicants shall demonstrate the following skills with respect to inspection and operation of air brakes:

(1) *Pre-trip inspection skills.* Applicants shall demonstrate the skills necessary to conduct a pre-trip inspection which includes the ability to:

(i) Locate and verbally identify air brake operating controls and monitoring devices;

(ii) Determine the motor vehicle's brake system condition for proper adjustments and that air system connections between motor vehicles have been properly made and secured;