Texas Driver Education
Classroom and In-car Instruction
Model Curriculum

Module Two

Texas Driver Responsibilities:

Preparing to Operate a Vehicle

- **Driver Preparation Procedures**
- **Identifying Vehicle Control Devices**
- **Operating Vehicle Control Devices**
- **Vehicle Balance Considerations**
- **Standard Vehicle Reference Points**

GRADE HS
Module Two Introduction

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.

NOTE: TEA rules require that students without a valid driver’s license or instruction permit in his/her possession shall not receive behind-the-wheel instruction no matter where the instruction is provided.

Topic 1 - Driver Preparation Procedures. The student utilizes basic procedures and readiness techniques to enter, start, or secure the vehicle and performs basic vehicle maintenance checks.

Topic 2 - Identifying Vehicle Control Devices. The student recognizes and understands the function and operation of each vehicular alert or warning symbol, control device, information device, and comfort system.

Topic 3 - Operating Vehicle Control Devices. The student demonstrates proper steering, braking, and acceleration techniques and is capable of operating the vehicular systems and devices while seated in the driver seat.

Topic 4 - Vehicle Balance Considerations. The student recognizes the effects of steering, braking, and acceleration inputs on the balance of a vehicle and demonstrates vehicular control utilizing vehicle balance techniques.

Topic 5 - Standard Vehicle Reference Points. The student utilizes standard vehicle reference points to determine and execute lane placement, stopping position, and turning maneuvers.

In-car Activities. The student utilizes a controlled risk environment to view vehicle information and safety, comfort, communication, and convenience devices. The student uses vehicle controls and demonstrates vehicle placement techniques using standard vehicle reference points. The student utilizes simulation techniques to support classroom and in-car activities.

Minimum Time Frames
Module Two-3 Hours (Non-required)

<table>
<thead>
<tr>
<th>Module Two</th>
<th>Recommended Instructional Objective</th>
<th>Recommended Time Frames (Min)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Noncredit</td>
<td>Multi-phase Credit</td>
</tr>
<tr>
<td>CLASSROOM INSTRUCTION</td>
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<tr>
<td>Topic 1—Driver Preparation Procedures</td>
<td>Yes</td>
<td>25</td>
</tr>
<tr>
<td>Topic 2—Identifying Vehicle Control Devices</td>
<td>Yes</td>
<td>30</td>
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<td>Topic 3—Operating Vehicle Control Devices</td>
<td>Yes</td>
<td>55</td>
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<td>Topic 4—Vehicle Balance Considerations</td>
<td>Yes</td>
<td>25</td>
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<td>Topic 5—Standard Vehicle Reference Points</td>
<td>Yes</td>
<td>30</td>
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<tr>
<td>Instructional Breaks</td>
<td>No</td>
<td>15</td>
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<tr>
<td>SUPPLEMENT—PARENT PARTICIPATION ACTIVITIES</td>
<td>No</td>
<td>55</td>
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<td>IN-CAR INSTRUCTION (OPTION 1)</td>
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<tr>
<td>Behind the Wheel Instruction/Break (2)</td>
<td>Yes</td>
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<tr>
<td>Observation (Twice)</td>
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<td>IN-CAR INSTRUCTION MULTIPHASE (OPTION 2)</td>
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<tr>
<td>Behind the Wheel Instruction/Break (2)</td>
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<tr>
<td>Observation (Twice)</td>
<td>Yes</td>
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<td>Simulation/Break (2)</td>
<td>Yes</td>
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<tr>
<td>PARENTAL INVOLVEMENT</td>
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### Module Two Prerequisites:
- Qualifies for Texas Driver Learner’s Permit

### Topic Title: Driver Preparation Procedures

#### Topic 1 Time Frame:
- **25 minutes instructional time**
- **0 minutes discretional break time**

<table>
<thead>
<tr>
<th>Needed Resources</th>
<th>Instructor Activities</th>
<th>Time Frame</th>
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<tbody>
<tr>
<td>Transparencies T-2.0, T-2.1, T-2.2, T-2.3, T-2.4, T-2.5, T-2.6, T-2.7, T-2.8, T-2.9, and T-2.10.</td>
<td>. Review recommended Module Two Lesson Plans</td>
<td>15 minutes (prior to lesson)</td>
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<tr>
<td>Fact Sheets F-2.1</td>
<td>. Review Introductory Video Segment</td>
<td>10 minutes (prior to lesson)</td>
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<tr>
<td>Student Worksheets W-2.1 and W-2.2</td>
<td>. Use Topic 1 Transparencies</td>
<td>20 minutes</td>
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<td>Optional Video: “Teaching Your Teens to Drive” Lesson One: Developing Basic Vehicle Control”</td>
<td>T-2.0, “Introductory Transparency”</td>
<td>(1-2 minutes)</td>
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<td></td>
<td>T-2.1, “Pre-Drive Tasks”</td>
<td>(2-3 minutes)</td>
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<tr>
<td></td>
<td>T-2.2, “Pre-Drive Tasks”</td>
<td>(2-3 minutes)</td>
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<tr>
<td></td>
<td>T-2.3, “Pre-Drive Tasks”</td>
<td>(2-3 minutes)</td>
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<td>T-2.4, “Under the Hood Checks”</td>
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<td>T-2.5, “Driver Readiness Tasks”</td>
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<td></td>
<td>T-2.6, “Driver Readiness Tasks”</td>
<td>(2-3 minutes)</td>
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<td>T-2.7, “Starting Tasks”</td>
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<td>T-2.8, “Starting Tasks”</td>
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<td>T-2.9, “Securing Tasks”</td>
<td>(2-3 minutes)</td>
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<td>T-2.10, “Securing Tasks”</td>
<td>(1-2 minutes)</td>
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<td>Module Assessment MA-2.1 Test</td>
<td>. Review Student Worksheet</td>
<td>5-10 minutes</td>
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<td>Textbook Resources</td>
<td>W-2.1, “Your License to Drive”</td>
<td>(2-5 minutes)</td>
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<tr>
<td>“Drive Right” Ch. 3</td>
<td>W-2.2, “Under the Hood Checks”</td>
<td>(2-5 minutes)</td>
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<td>“Empower Yourself” pp. 1-15</td>
<td>. Review Fact Sheets</td>
<td>For instructor use or additional information</td>
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<tr>
<td>“How to Drive” Ch. 5</td>
<td>F-1.1, “Preventive Maintenance Checks”</td>
<td>5-10 minutes</td>
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<tr>
<td>“Handbook Plus” Ch. 2</td>
<td>. Review Assessment</td>
<td>10-15 minutes</td>
</tr>
<tr>
<td>“License to Drive” Ch. 5</td>
<td>MA-2.1 “Preparing to Drive”</td>
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</table>
### Knowledge and Skills

The student is expected to:

(A) describe and demonstrate pre-drive tasks:

- Recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle;
- Identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices;
- Understands and controls vehicle balance and vehicle operating space; and
- Appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.

### The Instructor:

- Shows Transparency T-2.0, “Module Two Transparencies” to initiate a discussion about the topics associated with Module Two in Preparing to Operate a Vehicle.

#### Module Two Transparencies

- Texas Driver Responsibilities: Preparing to Operate a Vehicle
  - Topic 1: Driver Preparation Procedures
  - Topic 2: Identifying Vehicle Control Devices
  - Topic 3: Operating Vehicle Control Devices
  - Topic 4: Vehicle Balance Considerations
  - Topic 5: Standard Vehicle Reference Points

#### Transparency T-2.0 Module Two Transparencies

- Pre-Drive Tasks
  - Check around outside of vehicle:
    - Broken glass (windows, lights)
    - Body damage
    - Condition of tires
    - Fluid leaks
    - Direction front tires are turned
    - Debris on the ground that could interfere with movement
  - Check for small children or pets near vehicle.

- Driver Readiness Tasks
  - Store valuables in trunk of vehicle:
    - Books and book bags have less chance of slipping off seats
  - Homework and inattention in the rear

- Starting Tasks
  - Food, candy, and sodas

- Securing Tasks
  - Approach driver’s door from front

### Topic ACTIVITIES

- Distributes Worksheet W-2.1, “Driver Preparations” to students for completion during this section.
  - Pre-Drive Tasks
  - Driver Readiness Tasks
  - Starting Tasks
  - Securing Tasks

### Topic RESOURCES

- Shows Transparency T-2.1, “Pre-Drive Tasks” to initiate discussion of pre-drive checks around the vehicle.
  - Check around outside of vehicle
  - Check for small children and pets

- Shows Transparency T-2.2, “Pre-Drive Tasks” to continue discussion of pre-drive checks around the vehicle.
  - Store valuables in the trunk
  - Approach driver’s door from front

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Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
The driver preparation section involves all the tasks which lead up to putting the car in motion and securing the vehicle. The topics will review pre-drive, driver readiness, starting, and securing tasks. The novice will be introduced to the preventive maintenance responsibilities associated with using a vehicle. The driver will review the meaning of vehicle controls, locations, and appropriate use of each are described. The module concludes with a discussion of targeting skills and the relationship of the vehicle operating space to standard vehicle reference points. A mirroring technique is introduced that will eliminate mirror blind spots and reduce night glare in the side view mirrors.

Module Two, Topic 1 starts with pre-drive tasks and concludes with developing standard reference points. This topic prepares the novice for the first in-car lesson.

**Pre-Drive Tasks.** The driver will become familiar with the specific tasks of approaching the vehicle in a safe manner. The tasks are not numbered for sequence or importance. The student will develop a sequence or procedure on Worksheet W-2.1 with the guidance of the instructor.

Tasks include:

- check outside of vehicle;
- check for small children and pets;
- storing valuables;
- when parked at curb, approach driver’s door from front;
- when parked in a parking lot, approach from rear;
- look into vehicle and check traffic flow;
- unlock and enter quickly.

“Teaching Your Teens To Drive” (1998) AAA Association Communication provides a video, student guide, and parent guide that has three lesson segments devoted to driver preparation, starting, and moving the vehicle. This resource adds to the information presented in this segment.

**Texas Essential Knowledge and Skills:** § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
The student is expected to:

- Summarize basic maintenance checks performed on a vehicle using the vehicle owner’s manual;

- Review Fact Sheet F-2.1, "Preventive Maintenance Checks" to provide some background information about basic maintenance requirements. The vehicle owner’s manual is the recommended resource for maintenance information.

- Ask the students to bring copies of family vehicle owner’s manual to class for comparison of information provided.

The instructor:

- Shows Transparency T-2.3, “Pre-Drive Checks” to continue discussion of pre-drive checks around the vehicle.
  - Approach door from rear in parking lot
  - Check vehicle and traffic flow
  - Unlock and enter quickly

- Shows Transparency T-2.4, “Under the Hood Checks” to initiate discussion of basic maintenance self-checks under the hood.

- Distributes Worksheet W-2.2, “Under the Hood Checks” to students for completion during this section.

- Reviews Transparency T-2.4, “Under the Hood Checks” to provide some background information about basic maintenance requirements. The vehicle owner’s manual is the recommended resource for maintenance information.

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle: identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Under the Hood Checks. Each driver should have an idea of his/her responsibility for vehicle maintenance. The owner's manual of any vehicle will provide information about periodic maintenance. Emphasize need for periodic maintenance to be completed by qualified service personnel. Many vehicles can be driven 100,000 miles before the first scheduled engine tune-up. However, it is important to remember that certain items require service on a more frequent schedule. For instance, Ford and General Motor Companies 1999 maintenance schedules for most of the passenger cars, minivans, light trucks, sport utilities, vans, and 4x4s extend over 150,000 miles and include the following examples:

Weekly self-checks:

- Tire pressure options
  - Maximum pressure listed on tire side-wall
  - Vehicle manufacturer's recommendation for smooth ride
- Tire tread wear or damage
  - Tread wear bars showing
  - Bald spots
  - Cuffing (uneven wear on inside or outside tread areas)
  - Bald center or side treads
  - Cuts, stones or metal fragments

Safety and Communication Accessories
- Headlights, tail lights, and turn signals
- Emergency lights and markers
- Emergency kit
- Windshield wipers

Heating Ventilation and Air Conditioner (HVAC)
- Air flow
- Temperature

Fact Sheet F-2.1 provides additional information on periodic maintenance checks as does any new vehicle owner's manual. Use the owner’s manual for the driver education vehicle available and ask students to bring in copies of their family vehicle owner’s manual for comparisons.
Knowledge and Skills
The student is expected to:

(C) describe and demonstrate the driver readiness tasks;

The Instructor:

. Shows Transparency T-2.5, “Driver Readiness Tasks” to initiate discussion of driver seating position, restraints, and mirror adjustments made prior to starting and moving a motor vehicle.

. Shows Transparency T-2.6, “Driver Readiness Tasks” to continue discussion of driver seating position, restraints, and mirror adjustments made prior to starting and moving a motor vehicle. Encourages students to list the procedures on Worksheet W-2.1.

. Shows Transparency T-2.7, “Starting Tasks” to initiate discussion of driver tasks necessary to start a motor vehicle. Encourage students to list the procedures on Worksheet W-2.1.

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle: identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Driver Readiness Tasks (recommended for use in-car)

- Security needs
  - entry checks
  - locking doors
- Seating Position
  - feet position
  - arm position
  - hand position
  - visual needs
- Active Restraints
  - safety belts
  - head restraints
- Mirror Settings
  - rear mirror setting position
  - side mirror setting to reduce mirror blind zone and glare elimination (BGE)

Starting Tasks (recommended for use in-car)

- Check parking brake
- Foot on brake
- Key in ignition
- Gear in “Park or Neutral”
- Check for fuel injection or automatic choke
- Turn key to “on” position
- Check alert lights and gauges
- Turn key to start engine
- Adjust Heating, Ventilation, and Air Conditioning (HVAC)
- Set accessories (headlights or daylight running lights are recommended)
- Check for warning lights and gauges

It is recommended that the “Owner's Manual” for the driver education vehicle be used as supplemental text materials in this session. The owner’s manual often has starting and securing procedures as an integral part of the getting to know your vehicle section.

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Knowledge and Skills

The student is expected to:

(D) describe and demonstrate the vehicle starting tasks; and

(E) describe and demonstrate the vehicle securing tasks.

The Instructor:

. Shows Transparency T-2.8, “Starting Tasks” to continue discussion of driver tasks needed to start a motor vehicle and guides student in listing the procedures on Worksheet W-2.1.

Note: Current vehicle owner’s manuals require that the parking brake be set prior to placing the vehicle in (P)ark.

. Shows Transparency T-2.9, “Securing Tasks” to initiate discussion of driver tasks needed to secure a motor vehicle and guides student in listing the procedures on Worksheet W-2.1.

Collects Worksheets W-2.1, Driver Preparation and W-2.2, Under the Hood Checks as assessment tools for this topic area. Additional evaluation and assessment questions for this topic are located on Module Assessment MA-2.1, Preparing To Drive.

Grade: HS  Module: Two  Topic: 1

Knowledge and Skills

The student is expected to:

(D) describe and demonstrate the vehicle starting tasks; and

(E) describe and demonstrate the vehicle securing tasks.

The Instructor:

. Shows Transparency T-2.8, “Starting Tasks” to continue discussion of driver tasks needed to start a motor vehicle and guides student in listing the procedures on Worksheet W-2.1.

Note: Current vehicle owner’s manuals require that the parking brake be set prior to placing the vehicle in (P)ark.

. Shows Transparency T-2.9, “Securing Tasks” to continue discussion of driver tasks needed to start a motor vehicle and guides student in listing the procedures on Worksheet W-2.1.

Collects Worksheets W-2.1, Driver Preparation and W-2.2, Under the Hood Checks as assessment tools for this topic area. Additional evaluation and assessment questions for this topic are located on Module Assessment MA-2.1, Preparing To Drive.

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Starting Tasks  (recommended for use in-car)

- Check parking brake
- Foot on brake
- Key in ignition
- Gear in “Park or Neutral”
- Check for fuel injection or automatic choke
- Turn key to “on” position
- Check alert lights and gauges
- Turn key to start engine
- Adjust Heating, Ventilation, and Air Conditioning (HVAC)
- Set accessories
- Check for warning lights and gauges

It is recommended that the “Owner’s Manual” for the driver education vehicle be used as supplemental text materials in this session. The owner’s manual often has starting and securing procedures as an integral part of the getting to know your vehicle section.

Securing Tasks  (recommended for use in-car)

- Stop within legal, secure parking space
- Set parking brake
- Place shift selector in (P)ark
- Turn off any accessories used
- Turn ignition switch to “off”
- “Lock” ignition and remove key
- Remove occupant restraints
- Check traffic prior to exiting vehicle
- Secure doors and windows

“Teaching Your Teens To Drive” (1998) AAA Association Communication provides a video, student guide, and parent guide that has three lesson segments devoted to driver preparation, starting, and moving the vehicle. This resource adds to the information presented in this segment.

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Module Two Topic 1 Resources

Module Two, Topic 1 Transparencies:
  T-2.0, Module Two Transparencies
  T-2.1, Pre-Drive Tasks
  T-2.2, Pre-Drive Tasks
  T-2.3, Pre-Drive Tasks
  T-2.4, Under the Hood Checks
  T-2.5, Driver Readiness Tasks
  T-2.6, Driver Readiness Tasks
  T-2.7, Starting Tasks
  T-2.8, Starting Tasks
  T-2.9, Securing Tasks
  T-2.10, Securing Tasks

Worksheets
  W-2.1, Driver Preparations
  W-2.2, Under the Hood Checks

Fact Sheets
  F-2.1, Preventive Maintenance Checks

Assessment
  W-2.1, Driver Preparations
  W-2.2, Under the Hood Checks
  MA-2.1, Preparing To Drive

Optional Resources
  “Teaching Your Teens To Drive.” (1996). AAA Association Communication, 1000 AAA Drive, Heathrow, FL 32746-5063, or your local AAA office, provides a video, student guide, and parent guide.

  “Owners Manual” for the driver education vehicle.

Approved textbooks, videos, and laboratory manuals
  “Drive Right, Latest Edition”
  “Empower Yourself with Zone Control Driving, Latest Edition”
  “How to Drive, Latest Edition”
  “License To Drive, Latest Edition”
  “Responsible Driving, Latest Edition”
Module Two Prerequisites:
• Qualifies for Texas Driver’s Permit

Topic 2 Time Frame:
- 30 minutes instructional time (60)
- 0 minutes discretionary break time (5)

Module Two, Topic 2 is not a required program element.

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<tr>
<th>Needed Resources</th>
<th>Instructor Activities</th>
<th>Time Frame</th>
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<tbody>
<tr>
<td>Texas Curriculum Guide</td>
<td>Review recommended Module Two, Topic 2 Lesson Plans</td>
<td>15 minutes (prior to lesson)</td>
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<tr>
<td>Student Worksheets W-2.3, W-2.4, and W-2.5</td>
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<tr>
<td>Optional Video: “Teaching Your Teens to Drive” Lesson One: Developing Basic Vehicle Control”</td>
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<tr>
<td>“Teaching Your Teens to Drive” Lesson One: Developing Basic Vehicle Control” Parent/Teen Handbook</td>
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<tr>
<td>Module Assessment MA-2.1 Test</td>
<td>Review Fact Sheets F-2.2, “Instrument Cluster of 1999 Ford F-150 Truck”</td>
<td>Module Two Topic 2 Assessments 3 Assessments 2-5 minutes to collect</td>
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<tr>
<td>Textbook Resources “Drive Right” Ch. 3 “Empower Yourself” pp. 1-15 “How to Drive” Ch. 5 “Handbook Plus” Ch. 2 “License to Drive” Ch. 5 “Responsible Driving” Ch. 6</td>
<td>Review Assessment W-2.3, “Control and Information Devices” W-2.4, “Control, Information, Comfort, and Safety Devices” W-2.5, “Family Vehicle Instrument Cluster”</td>
<td>For instructor use or additional information 10-15 minutes at the end of Module Two</td>
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Topic Title: Identifying Vehicle Control Devices

- 7.5 Non-credit course (32 hrs)
- 8.0 Multiphase course (40 hrs)
- 8.0 Credit course (56 hrs/semester)
### Knowledge and Skills

The student is expected to:

(A) recognize each vehicular alert or warning symbol and explain the symbol’s function and operation;

### The Instructor:

. Shows Transparencies T-2.11 “Alert/Warning Symbols and Controls” to identify and initiate a class discussion concerning the alert and warning symbols found in motor vehicles that provide information on vehicular control, convenience, safety and communication devices with attention to their safe and proper use.

. Shows Transparencies T-2.12 “Alert/Warning Symbols and Controls” to identify and continue a class discussion concerning the alert and warning symbols.

. Uses Worksheet W-2.3, “Control and Information Devices” during classroom discussion to illustrate the various operational controls.

. Provides W-2.5, “Family Vehicle Instrument Cluster” for use as a parent involvement activity utilizing the owner’s manual for the family vehicle (or that of a friend) to compare the control and information devices and symbols included in the dashboard of the vehicle with the one illustrated on the worksheet.

Note: W-2.5, “Family Vehicle Instrument Cluster” may be used as a Topic 3 assessment tool, which gives students a longer time period to complete the exercise.

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**Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle.** The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
The purpose of this lesson is to:

- Assist students in recognizing the symbols used to identify the operation, safety, communication, and control devices found in motor vehicles
- Assist students to correctly respond to and operate the various safety, communication, and control devices found in motor vehicles

Transparency answers include:

A. Air Bag On/Off Switch  B. Air Bag Activation
C. Antilock Brake System Activation  D. Theft Deterrent System Activation
E. 12 Volt Extension Outlet  F. Battery Warning Light
G. Brake Warning Light  H. Safety Alert Symbol
I. Vent and Air Flow Control  J. Door Locks
K. Low Oil Pressure Warning Light  L. Temperature Indicator
M. Seat Belt Reminder  N. Fog Lamps
O. Drive Wheel Selector  P. Fuel Indicator
Q. Fuse / Fuse Box  R. Emergency Flashers
S. Turn Signal/Wipers Stalk  T. Daytime Running Lights
U. Headlights/High Beam Indicator  V. Hood Release
W. Horn  X. Fan Speed Indicator
Y. Interior Light Adjustment  Z. Lighter Indicator
AA. Exterior Lights  BB. Overdrive On/Off switch
CC. Parking Lamp Indicator  DD. Adjust Left/Right Side Mirror
EE. Power Window Controls  FF. Rear Defroster Indicator
GG. Electronic Traction System Control  HH. Steering Wheel Height Adjustment
II. Trunk Release  JJ. Left/Right Signal Indicator
KK. Front Windshield Defroster  LL. Windshield Washer
MM. Windshield Wipers  NN. Cruise Control Device

Use of the driver education vehicle owner's manual to illustrate specific differences recommended for this lesson activity.

“Teaching Your Teens To Drive” (1998) AAA Association Communication provides a video, student guide, and parent guide that have three lesson segments devoted to driver preparation, starting, and moving the vehicle. This resource adds to the information presented in this segment.

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Knowledge and Skills

The student is expected to:

(B) recognize each vehicular information device and explain the devices function and operation;

The Instructor:

. Distributes Worksheet W-2.4, “Control, Information, Comfort, and Safety Devices” and instructs student to use for note taking during this session.

. Shows Transparency T-2.13 “Control, Information, Comfort, and Safety Devices” to identify the location and function of the various communication, comfort, information, and controls. The switches, dials, gauges, and levers confronting a driver are identified, and the instructor explains the need to be aware of the information, warnings, and control that they each provides.

. Shows Transparency T-2.14 “Control, Information, Comfort and Safety Devices” to continue the discussion of the various communication, comfort, information, and controls on the left of the dash panel.

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Fact Sheet F-2.2, “Instrument Panel of 1999 Ford Ranger Truck” will provide answers to the symbols, controls, information devices, and safety devices located on the dash panel. The rest of this area is provided for use by the instructor for identifying any unusual warning or alert lights or symbols.

**Texas Essential Knowledge and Skills:** § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned.  (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
The student is expected to:

(C) recognize each vehicular comfort system and explain the systems function and operation; and

(D) recognize each vehicular safety and convenience device and explain the systems function and operation.

and levers confronting a driver are identified, and the need to be aware of the information, warnings, and control that they each provide is explained.

. Shows Transparency T-2.15 “Control, Information, Comfort, and Safety Devices” to continue discussion of the location and function of the various communication, comfort, information, and control devices. The switches, dials, gauges, and levers confronting a driver are identified, and the need to be aware of the information, warnings, and control that they each provide is explained.

. Shows Transparency T-2.16 “Control, Information, Comfort, and Safety Devices” to continue discussion of the location and function of the various communication, comfort, information, and controls. The switches, dials, gauges, and levers confronting a driver are identified, and the need to be aware of the information, warnings, and control that they each provide is explained.

. Shows Transparency T-2.17 “Control, Information, Comfort, and Safety Devices” to continue discussion of the location and function of the various communication, comfort, information, and controls. The switches, dials, gauges, and levers confronting a driver are identified, and the need to be aware of the information, warnings, and control that they each provide is explained.

. Collects Worksheets W-2.3, W-2.4, and W-2.5 as assessment tools for this topic area. Additional evaluation and assessment questions for this topic are located in the Module Assessment MA-2.1, “Preparing To Drive.”

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Fact Sheet F-2.2, “Instrument Panel of 1999 Ford Ranger Truck” provides answers to the symbols, controls, information devices, and safety devices located on the dash panel. The rest of this area is provided for use by the instructor for identifying any unusual warning or alert lights or symbols.

**Outside Activity for 40 hour and 56 hour classroom would allow students to view under the hood items discussed in Topic 1 and dash panel symbols discussed in Topic 2. The outside activity would serve as a 30 minute classroom activity for this topic area.**

The instructor will collect Worksheet W-2.3 “Control and Information Devices” Worksheet W-2.4 “Control, Information, Comfort, and Safety Devices” and Worksheet W-2.5 “Family Vehicle Instrument Cluster” and use as assessment tools for this session.

Worksheet W-2.5 “Family Vehicle Instrument Cluster” may be combined with W-2.6 in Topic 3 as an optional assessment item.

Additional questions appear in the Module Assessment, MA-2.1, “Preparing to Drive.”

**Texas Essential Knowledge and Skills:** § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Module Two Topic 2 Resources

Module Two, Topic 2 Transparencies:
T-2.11, “Alert/Warning Symbols and Controls”
T-2.12, “Alert/Warning Symbols and Controls”
T-2.13, “Control, Information, Comfort, and Safety Devices”
T-2.15, “Control, Information, Comfort, and Safety Devices”
T-2.16, “Control, Information, Comfort, and Safety Devices”
T-2.17, “Control, Information, Comfort, and Safety Devices”

Worksheets
W-2.3, “Control and Information Devices”
W-2.4, “Control, Information, Comfort, and Safety Devices”
W-2.5, “Family Vehicle Instrument Cluster”

Fact Sheets

Assessment
W-2.3, “Control and Information Devices”
W-2.4, “Control, Information, Comfort, and Safety Devices”
W-2.5, “Family Vehicle Instrument Cluster”
MA-2.1 “Preparing to Drive”

Suggested Resources
“Teaching Your Teens To Drive.” (1996). AAA Association Communication, 1000 AAA Drive, Heathrow, FL 32746-5063, or your local AAA office, provides a video, student guide, and parent guide.

“Owner’s Manual” for the driver education vehicle.

Approved textbooks, videos, and laboratory manuals
“Drive Right, Latest Edition”
“Empower Yourself with Zone Control Driving, Latest Edition”
“How to Drive, Latest Edition”
“License To Drive, Latest Edition”
“Responsible Driving, Latest Edition”
### Module Two Prerequisites:
- Qualifies for Texas Driver’s Permit

### Topic Title: Operating Vehicle Control Devices

#### Topic 3 Time Frame:
- 55 minutes instructional time
- 5 minutes discretionary break time

#### Non-credit course (32 hrs)
- 8.5

#### Multiphase course (40 hrs)
- 9.0

#### Credit course (56 hrs/semester)
- 9.0

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<tr>
<th>Needed Resources</th>
<th>Instructor Activities</th>
<th>Time Frame</th>
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<tr>
<td>Textbook</td>
<td>. Review recommended Module Two, Topic 3 Lesson Plans</td>
<td>15 minute (prior to lesson)</td>
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<tr>
<td>Fact Sheet F-2.3</td>
<td>. Review Student Worksheet W-2.5, “Family Vehicle Instrument Cluster” W-2.6, “Family Vehicle Equipment”</td>
<td>50 minutes (5-8 minutes)</td>
</tr>
<tr>
<td>Student Worksheets W-2.5 and W-2.6</td>
<td>. Review Fact Sheets F-2.3, “Operating Vehicle Control Devices”</td>
<td>50 minutes (5-8 minutes)</td>
</tr>
<tr>
<td>Module Assessment MA-2.1 Test</td>
<td>. Review Assessment W-2.5, “Family Vehicle Instrument Cluster” W-2.6, “Family Vehicle Equipment” MA-2.1 “Preparing to Drive”</td>
<td>Module Two Topic 2 Assessments 2-5 minutes to collect For instructor use or additional information 10-15 minutes at the end of Module Two</td>
</tr>
</tbody>
</table>

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*Module Two, Topic 3 is not a required program element.*
Knowledge and Skills
The student is expected to:
(A) position the steering wheel and driver’s seat to provide for the operation of the vehicular control devices;
(B) explain the function and operation of the steering wheel, accelerator, and brake pedal;

The Instructor:
  . Steering Position
  . Moving Wheel
  . Adjusting Wheel Height and Angle

  . Accelerator Pedal Use
  . Brake Pedal Use

. Shows Transparency T-2.20, “Operating Vehicle Control Devices” to continue discussion of the operation of control devices
  . Gear Selection
  . Location and Use of Parking Brake
  . Cruise and Speed Control
  . Ignition Switch

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Operating Vehicle Control Devices

LESSON CONTENT (Instructor Support Information)

It is important that students know the location, purpose, and operation of the various controls, safety, comfort, and convenience devices when driving a motor vehicle. However, it is essential that they understand the increased risk associated with directing their attention to a task other than driving, i.e., talking on a cell phone, talking to friends in the car, or tuning a radio. Any of these activities tend to lower one’s level of alertness directed to driving and, typically, has an adverse effect on steering.

Operating Vehicle Control Devices
- Steering
- Steering Wheel Adjustment
- Gear Selector Lever
- Parking Brake
- Cruise/Speed Control
- Ignition Switch
- Accelerator Pedal
- Brake Pedal

Fact Sheet F-2.3, “Operating Control Devices,” provides information to support each of the issues listed on the transparencies.

“Teaching Your Teens To Drive” (1998) AAA Association Communication provides a video, student guide, and parent guide that has three lesson segments devoted to driver preparation, starting, and moving the vehicle. It is a resource that supplements the information presented in this segment.

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Knowledge and Skills

The student is expected to:

(C) explain the function and operation of the gear selector lever, parking brake, cruise control, and ignition switch.

The Instructor:

. Provides Worksheets W-2.6 “Family Vehicle Equipment” as an assessment tool for this topic area.

  . Rear View and Side View Mirrors
  . Safety Belts
  . Head Restraints
  . Horn Location and Use

  . Turn Signal and Lane Changer Device
  . Door Locks
  . Hazard Flashers
  . Windshield Wipers and Washer
  . Headlight and Daylight Running Lights

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Safety, Communication, Comfort, and Convenience Devices

- Mirrors
- Safety Belts
- Head Restraint
- Horn
- Turn Signal Lever
- Door Locks
- Hazard Flasher
- Windshield Wipers and Washers
- Headlights

Fact Sheet F-2.3, “Operating Control Devices,” provides information to support each of the issues listed on the transparencies.

“Teaching Your Teens To Drive” (1998) AAA Association Communication provides a video, student guide, and parent guide that has three lesson segments devoted to driver preparation, starting, and moving the vehicle. It is a resource that supplements the information presented in this segment.

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.

The Instructor:
  - Hood Release
  - Trunk Release
  - Heater, Ventilation, and Air Conditioner (HVAC)
  - Seat Adjustments

- Collects optional Worksheet W-2.5, “Family Vehicle Instrument Cluster” and Worksheet W-2.6, “Family Vehicle Equipment” as assessment tools for this topic area. Additional evaluation and assessment questions for this topic are located in the Module Assessment MA-2.1, “Preparing To Drive.”
Operating Vehicle Control Devices

LESSON CONTENT (Instructor Support Information)

Safety, Communication, Comfort, and Convenience Devices

- Hood Release
- Trunk Release
- Heater, Ventilation, and Air Conditioner (HVAC)
- Seat Adjustment Controls

Fact Sheet F-2.3, “Operating Control Devices,” provides information to support each of the issues listed on the transparencies.

“Teaching Your Teens To Drive” (1998) AAA Association Communication provides a video, student guide, and parent guide that has three lesson segments devoted to driver preparation, starting, and moving the vehicle. It is a resource that supplements the information presented in this segment.

The instructor is reminded to collect optional Worksheet W-2.5, “Family Vehicle Instrument Cluster” and Worksheet W-2.6, “Family Vehicle Equipment” as assessment tools for this topic area. Questions concerning this topic are located in the Module Assessment MA-2.1, “Preparing To Drive.”

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Module Two Topic 3 Resources

Module Two, Topic 3 Transparencies:
T-2.18, “Operating Vehicle Control Devices”
T-2.19, “Operating Vehicle Control Devices”
T-2.20, “Operating Vehicle Control Devices”
T-2.21, “Safety, Communication, and Convenience Devices”
T-2.22, “Safety, Communication, and Convenience Devices”
T-2.23, “Safety, Communication, and Convenience Devices”

Worksheets
W-2.5, “Family Vehicle Instrument Cluster”
W-2.6, “Family Vehicle Equipment”

Fact Sheets
F-2.3, “Operating Vehicle Control Devices”

Assessments
W-2.5, “Family Vehicle Instrument Cluster” (Optional use)
W-2.6, “Family Vehicle Equipment”

MA-2.1 “Preparing to Drive”

Suggested Resources
“Teaching Your Teens To Drive.” (1996). AAA Association Communication, 1000 AAA Drive, Heathrow, FL 32746-5063, or your local AAA office, provides a video, student guide, and parent guide.

“Owner’s Manual” for the driver education vehicle.

Approved textbooks, videos, and laboratory manuals
“Drive Right, Latest Edition”
“Empower Yourself with Zone Control Driving, Latest Edition”
“How to Drive, Latest Edition”
“License To Drive, Latest Edition”
“Responsible Driving, Latest Edition”
### Module Two Prerequisites:
- Qualifies for Texas Driver’s Permit

### Topic 4 Time Frame:
- **25 minutes instructional time**
- **5 minutes discretionary break time**

### Needed Resources

<table>
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<th>Instructor Activities</th>
<th>Time Frame</th>
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<tr>
<td>Textbook</td>
<td>. Review recommended Module Two, Topic 4 Lesson Plans</td>
<td>15 minutes (prior to lesson)</td>
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<tr>
<td>Fact Sheet F-2.4</td>
<td>. Review Fact Sheets F-2.4, “Understanding Vehicle Balance Concepts”</td>
<td>For instructor use or additional information</td>
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<tr>
<td>Worksheet W-2.7</td>
<td>. Review Worksheet W-2.7 “Vehicle Balance Basics”</td>
<td>Worksheet during session</td>
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<tr>
<td>Module Assessment MA-2.1 Test</td>
<td>. Review Assessment MA-2.1 “Preparing to Drive”</td>
<td>10-15 minutes at the end of Module Two</td>
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<tr>
<td>Optional Videos:</td>
<td>. Review Optional Video “In Control: Technical Aspects of the Vehicle”</td>
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<td>“In Control: Technical Aspects of the Vehicle”</td>
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<tr>
<td>“Teaching Your Teens to Drive” Lesson One: Developing Basic Vehicle Control”</td>
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<td>“Teaching Your Teens to Drive” Lesson One: Developing Basic Vehicle Control” Parent/Teen Handbook</td>
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<td>Textbook Resources</td>
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<td>“Drive To Survive”</td>
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<td>“Handbook Plus”</td>
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<td>“Going Faster”</td>
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<td>“Bondurant Behind the Wheel”</td>
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### Topic Title: Vehicle Balance Considerations

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<td>Non-credit course</td>
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<tr>
<td>Multiphase course</td>
<td>40 hrs</td>
</tr>
<tr>
<td>Credit course</td>
<td>56 hrs/semester</td>
</tr>
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</table>

Module Two, Topic 4 is not a required program element.
**Knowledge and Skills**

The student is expected to:

(A) define and explain vehicle balance;

(B) describe how seating position affects the ability to control vehicle balance;

(C) describe how steering, braking, and acceleration each affect vehicle balance and list ways to compensate to maintain vehicle balance under the forces of these conditions;


. Uses Transparency T-2.25 “Controlling Vehicle Balance” to continue discussion about vehicle balance concepts
  . Steering Wheel Balance
  . Changes in Steering Ratios
  . Precision Steering, Braking, and Acceleration

. Shows Transparency T-2.26, “Controlling Vehicle Balance” to continue discussion about vehicle balance concepts
  . Seating Position
  . Changing Balance from Side to Side (Roll)


**The Instructor:**

. Shows Transparency T-2.24, “Controlling Vehicle Balance,” to initiate discussion about vehicle balance concepts and how balance is affected by driver seating position, steering input, acceleration, and brake application.
Over 50 percent of occupant fatalities occur as a result of single vehicle crashes. Basically the vehicle runs off the roadway and strikes a fixed object or overturns. Almost without exception, these crashes involve improper steering or braking or a combination of the two actions.

The purpose of this section is to introduce students to the concept of vehicle balance as it relates to vehicle control and how balance is achieved and maintained.

**Vehicle Balance**

Vehicle suspension balance refers to the distribution of the weight of the vehicle on the chassis or frame. A transfer of weight from one point of the vehicle to another is caused by acceleration, deceleration, cornering, or a combination of these actions.

**Maintaining Vehicle Balance**

- Seating Position - in order to establish vehicle balance and improve ability to see, drivers will sit in a comfortable, erect position squarely behind the steering wheel.
- Changing Vehicle Load - Side to Side
- Changing Vehicle Load - Front to Rear
- Changing Vehicle Load - Rear to Front

**Steering Wheel Control**

- Hand Position
- Steering Techniques
- Hand To Hand Steering
- Hand Over Hand Steering
- Limited Evasive Steering
- One Hand Steering

Fact Sheet F-2.4, “Understanding Vehicle Balance Concepts,” provides information to support each of the issues listed on the transparencies.

“In Control: Vehicle Technical Aspects.” (1995). J.B. Heimann Production provides information from Sam Posey and Sandy Stevens about seating position, aspects of pitch, roll, vehicle understeer, vehicle oversteer, and antilock brakes. It is a resource that supplements the information presented in this segment.

**Texas Essential Knowledge and Skills:** § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
## Knowledge and Skills

The student is expected to:

- **(D)** describe how changes in vehicle balance from side to side, front to rear, and rear to front affect vehicle balance;

- **(E)** describe the correct hand positions and steering techniques recommended when performing driving maneuvers;

### The Instructor:

- Uses Transparency T-2.27 “Vehicle Control” to illustrate and discuss how sudden steering or improper combinations of braking and steering affects vehicle balance at any speed.

- Shows Transparency T-2.28 “Vehicle Control” to discuss load transfer during braking and cornering and steering at dangerously high speeds or improper combination of braking and steering.

- Shows Transparency T-2.29 “Vehicle Control” to discuss load transfer during rear end swings to the right or left causing a yaw (spinning) condition.

### Knowledge and Skills

**The student** is expected to:

- **(D)** describe how changes in vehicle balance from side to side, front to rear, and rear to front affect vehicle balance;

- **(E)** describe the correct hand positions and steering techniques recommended when performing driving maneuvers;

### The Instructor:

- Uses Transparency T-2.27 “Vehicle Control” to illustrate and discuss how sudden steering or improper combinations of braking and steering affects vehicle balance at any speed.

- Shows Transparency T-2.28 “Vehicle Control” to discuss load transfer during braking and cornering and steering at dangerously high speeds or improper combination of braking and steering.

- Shows Transparency T-2.29 “Vehicle Control” to discuss load transfer during rear end swings to the right or left causing a yaw (spinning) condition.

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**Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle.** The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Vehicle Balance Considerations

LESSON CONTENT (Instructor Support Information)

Maintaining Vehicle Balance

• Seating Position - in order to establish vehicle balance and improve ability to see, drivers will sit in a comfortable, erect position squarely behind the steering wheel.
• Changing Vehicle Load - Side to Side
• Changing Vehicle Load - Front to Rear
• Changing Vehicle Load - Rear to Front

Steering Wheel Control

• Hand Position
• Steering Techniques
• Hand To Hand Steering
• Hand Over Hand Steering
• Limited Evasive Steering
• One Hand Steering

Vehicle Movement and Rotation

• Pitch... vehicle movement to the front or to the rear
  - braking drops the front and lifts the rear
  - acceleration lifts the front and drops the rear
• Roll... vehicle movement to the left or right side
  - steering to the left makes vehicle roll to the right
  - steering to the right makes vehicle roll to the left
• Yaw... vehicle movement to the left or right around the center of gravity
  - loss of traction to rear tires causes vehicle to spin
  - sudden steering, sudden braking, or sudden acceleration may cause vehicle top spin around its center of gravity due to traction loss in rear

Modern Vehicle Technology Relates to Balance

• Sudden Braking Traction Loss is enhanced by Antilock Braking Systems.
• Sudden Acceleration Traction Loss is enhanced by Traction Control Systems.
• Sudden Steering Traction Loss is enhanced by Vehicle Stability Systems.
• The three vehicle balance (stability) control systems are designed to work to compliment driver behavior and aid when driver exceeds limitations of balance.

“In Control: Vehicle Technical Aspects.” (1995). J.B. Heimann Productions provides information from Sam Posey and Sandy Stevens about seating position, aspects of pitch, roll, vehicle understeer, vehicle oversteer, and antilock brakes. It is a resource that provides supplemental information presented in this segment.

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Knowledge and Skills

The student is expected to:

(F) describe how changes in vehicle load (balance) from side to side, front to rear, and from rear to front affect vehicle performance; and

(G) describe positioning of the hands and steering techniques recommended when performing various driving maneuvers.

The Instructor:

. Shows Transparency T-2.30 “Vehicle Control” to discuss load transfer during braking and cornering and steering at dangerously high speeds or improper combination of braking and steering.

. Shows Transparency T-2.31 “Vehicle Control” to discuss using the steering wheel in smooth and precise manner.

. Collects Worksheet W-2.7, “Vehicle Balance Basics” as assessment tools for this topic area. Additional evaluation and assessment questions concerning this topic are located in the Module Assessment MA-2.1, “Preparing To Drive.”

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Vehicle Balance Considerations

LESSON CONTENT (Instructor Support Information)

Maintaining Vehicle Balance
- Seating Position - in order to establish vehicle balance and improve ability to see, drivers will sit in a comfortable, erect position squarely behind the steering wheel.
- Changing Vehicle Load - Side to Side
- Changing Vehicle Load - Front to Rear
- Changing Vehicle Load - Rear to Front

Steering Wheel Control
- Hand Position
- Steering Techniques
- Hand To Hand Steering
- Hand Over Hand Steering
- Limited Evasive Steering
- One Hand Steering

Fact Sheet F-2.4, “Understanding Vehicle Balance Concepts,” provides information to support each of the issues listed on the transparencies.

“In Control: Vehicle Technical Aspects.” (1995). J.B. Heimann Production provides information from Sam Posey and Sandy Stevens about seating position, aspects of pitch, roll, vehicle understeer, vehicle oversteer, and antilock brakes. It is a resource that supplements the information presented in this segment.

The instructor is reminded to collect optional Worksheet W-2.7, “Vehicle Balance Basics” as assessment tools for this topic area. Additional evaluation and assessment questions concerning this topic are located in the Module Assessment MA-2.1, “Preparing To Drive.”

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Module Two Topic 4 Resources

Module Two, Topic 4 Transparencies:
  T-2.24, “Controlling Vehicle Balance”
  T-2.25, “Controlling Vehicle Balance”
  T-2.26, “Controlling Vehicle Balance”
  T-2.27, “Vehicle Control”
  T-2.28, “Vehicle Control”
  T-2.29, “Vehicle Control”
  T-2.30, “Vehicle Control”
  T-2.31, “Vehicle Control”

Worksheets
  W-2.7  “ Vehicle Balance Basics”

Fact Sheets
  F-2.4, “Understanding Vehicle Balance Concepts”

Assessment
  W-2.7  “ Vehicle Balance Basics”
  MA-2.1  “ Preparing to Drive”

Suggested Resources

  “In Control: America’s Driving Reference ” (1995) video from J. B. Heimann Productions (Technical Aspects of Vehicle)

  “Teaching Your Teens to Drive” Lesson One: Developing Basic Vehicle Control”
  “Teaching Your Teens to Drive” Lesson One: Developing Basic Vehicle Control” Parent/Teen Handbook

Textbook Resources
  “Drive To Survive”
  “Survival Behind the Wheel”
  “How to Drive”
  “Handbook Plus”
  “Going Faster”
  “Bondurant Behind the Wheel”
## Module Two Prerequisites:
- Qualifies for Texas Driver Instructional Permit

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<th>Topic</th>
<th>Time Frame</th>
<th>Non-credit course (32 hrs)</th>
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Module Two, Topic 5 is not a required program element.

### Needed Resources

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<td>Student Worksheet W-2.8</td>
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<td>Module MA-2.1 Test</td>
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<td>Optional Videos:</td>
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<td>“Targeting,” IDS #2</td>
</tr>
<tr>
<td>“Reference Points” IDS #1</td>
</tr>
<tr>
<td>“Teaching Your Teens to Drive” Lessons One to Three: Developing Basic Vehicle Control</td>
</tr>
</tbody>
</table>

### Instructor Activities

| . Review recommended Module Two, Topic 5 Lesson Plans |
| . Review T-2.34, “Traditional Mirror Views and Blind Spots” |

| . Review Assessment MA-2.1 “Preparing to Drive” |

### Time Frame

| 15 minute (prior to lesson) |
| 30 minutes (3-5 minutes) |
| 30 minutes (2-3 minutes) |
| 3-5 minutes (2-3 minutes) |
| 3-5 minutes (1-2 minutes) |
| 2-3 minutes (1-2 minutes) |
| 2-3 minutes (1-2 minutes) |
| 2-3 minutes (1-2 minutes) |
| 1-2 minutes (2-3 minutes) |
| 1-2 minutes (1-2 minutes) |
| 2-3 minutes (1-2 minutes) |
| 2-3 minutes (1-2 minutes) |
| 2-3 minutes (2-3 minutes) |
| 1-2 minutes (2-3 minutes) |
| 2-3 minutes (1-2 minutes) |
| 2-3 minutes (2-3 minutes) |
| 1-2 minutes (2-3 minutes) |

For instructor use or information

Module Two Topic 2-5 minutes to collect

10-15 minutes at the end of Module Two
Knowledge and Skills

The student is expected to:

- (A) define visual target in association to path of travel;
- (B) assess and analyze the path of travel of a vehicle;
- (C) assess and analyze the line of sight while seated in a vehicle.

The Instructor:

- Uses Transparency T-2.32 “Targeting and Visual Requirements” to discuss the vision and perception requirements necessary for the safe operation of a vehicle.

- Shows Transparency T-2.33, “Determining Vehicle Operating Space,” to discuss the space visible and not visible around the vehicle for the safe operation. Explain the space to be:
  - one carlength to the front;
  - two carlengths to the rear;
  - one carwidth to the left; and
  - two carwidths to the right.

- A supplemental activity for programs with more than 32 hours of classroom is to take the students onto a parking lot and demonstrate the vehicle operating space and mirror settings. Look to Supplemental Activity BTW 2.1 and the sample BTW lesson for instructions.

- Shows Transparency T-2.34, “Traditional Mirror Views and Blind Spots,” to discuss the vision and perception requirements necessary for the safe operation of a vehicle.

- Uses Fact Sheets 2.5, “Introducing Targeting Concepts,” and T-2.6, “Preventing Blind Spot Crashes and Eliminating Mirror Glare,” to explain the need to utilize targeting techniques and adjust mirrors to the outside, so that the side view mirrors do not show the same information as the rear view mirror.

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Vision and Perception Requirements

In this module, the instructor emphasizes the importance of directed attention, maintaining an open line of sight, searching skills, and targeting a line to maintain a safe path of travel. It is critical that students understand how an inadequate or improper visual search, lack of understanding of vehicle dynamics, failure to respond or a delayed response to a threatening object or condition contributes to driver crash involvement.

**Referencing Vehicle to Path of Travel**

**Visual Functions**
- Central (Focal) Vision is used to read and identify distinct objects and covers about three percent of one’s visual field.
- Fringe Vision is used to judge depth and position.
- Peripheral Vision is conical in shape around the other vision fields.

**Maintaining an Open Line of Sight**

**Searching Skills**
- Using visual references and turn points to make turns.
- Forward visual turning point.
- Rear visual turning point.
- Targeted line of sight, paths of travel.
- Referencing vehicle to paths of travel.

Fact Sheets F-2.5, “Introducing Targeting Concepts” and F-2.6, “Preventing Blind Spot Crashes and Eliminating Mirror Glare” provide information to support each of the issues listed on the transparencies.

“Targeting” (1997). by Interactive Driving Systems, Inc., Chesire, CT 06410 (203) 272-9391 may be used as a visual technique to introduce or review targeting skills. The video is a resource that supplements the information presented in this segment.
Knowledge and Skills
The student is expected to:

(D) demonstrate a side view mirror setting and describe how the setting reduces mirror blind spots and eliminates glare;

(E) describe how to place the front bumper of the vehicle at a line or curb utilizing visual reference points;

headlight glare when driving at night.

The Instructor:

. Uses Transparency T-2.35 “Mirror Blind Spot and Glare Elimination” to lead a discussion of the vision and perception requirements necessary in regard to mirror settings that eliminate blind spots and reduce headlight glare when driving at night.


. Uses Transparency T-2.36 “Standard Vehicle Reference Points” to lead a discussion of the vision and perception requirements necessary for establishing reference points from the roadway to the vehicle.

. Uses Transparency T-2.37 “Front Limitations” to lead a discussion of the vision and perception requirements necessary to establish front reference points for
  . intersections;
  . stopping position;
  . perpendicular parking.
Application of Vehicle Space Demonstration

- Student gains a perspective of space that is visible to driver.
- Student learns that the driver must look for things that can be seen.
- Because the area to the front, side, and rear is so large, reference points will help.
- Student will recognize that driving takes place in the future (targeting) and the past (mirrors). It is critical not to try to look where the vehicle is as this area is not visible to the driver.

Application of Mirror Spaces and Blind Spots

- Mirrors are detection devices and should not be used for extended periods of time while driving.
- Mirrors should be checked prior to and after any speed or position change.
- Student recognizes what is visible in the mirrors to the rear.
- A traditional mirror setting leaves a blind spot to the side and gains the same information that is available through the rear view mirror.
- The contemporary mirror setting helps to alleviate blind spot and enlarges the area visible to the driver.
- Car mirrors are not sufficient visual tools to allow a driver to back a car. This is due to the inability to monitor the rear tire movements. The mirrors would need to be much larger to be effective for backing the vehicle.

Application of Referencing to the Vehicle

- The driver is able to place front of vehicle even with a line or curb (the curb or line should appear to run into the right side corner post or under the left side mirror).

Fact Sheet F-2.7, “Standard Vehicle Reference Points” will give a great deal of information to support each of the issues listed on the transparencies.

“Reference Points” (1997). by Interactive Driving Systems, Inc., Chesire, CT 06410 (203) 272-9391 may be used as a visual technique to introduce or review reference point skills. The video is a resource that supplements the information presented in this segment.

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Knowledge and Skills

The student is expected to:

(E) describe how to place the front bumper of the vehicle at a line or curb utilizing visual reference points;

(F) describe how to place the rear bumper of the vehicle at a line or curb utilizing visual reference points;


. Uses Transparency T-2.38 “Front Limitations” to lead a discussion of the vision and perception requirements regarding establishing front reference points for a front limitation.

. Uses Transparency T-2.39, “Front Limitation,” to continue a discussion of the vision and perception requirements necessary for establishing reference points from the roadway to the vehicle for the front limitation.

  - Backing Position
  - Perpendicular Parking
Application of Referencing to the Vehicle

- The driver is able to place front of vehicle even with a line or curb (the curb or line should appear to run into the right side corner post or under the left side mirror).

- The driver is able to place back bumper of vehicle so it is lined up with any rear line or curb.

Fact Sheet F-2.7, “Standard Vehicle Reference Points” will give a great deal of information to support each of the issues listed on the transparencies.

“Reference Points” (1997). by Interactive Driving Systems, Inc., Chesire, CT 06410 (203) 272-9391 may be used as a visual technique to introduce or review reference point skills. The video is a resource that supplements the information presented in this segment.

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Knowledge and Skills
The student is expected to:

(F) describe how to place the rear bumper of the vehicle at a line or curb utilizing visual reference points;

(G) describe how to place the right side tires zero to six inches from a line or curb utilizing visual reference points;

The Instructor:

. Uses Transparency T-2.41 “Rear Limitation” to lead a discussion of the vision and perception requirements necessary to establish reference points for rear limitation.

. Uses Transparency T-2.42 “Rear Limitations” to continue a discussion of the vision and perception requirements necessary to establish reference points for rear limitation.

. Uses Transparency T-2.43 “Right Side Limitations” to lead a discussion of the vision and perception requirements necessary to establish reference points for right side limitations.

. Uses Transparency T-2.44 “Right Side Limitations” to continue a discussion of the vision and perception requirements necessary to establish reference points for right side limitations.

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Application of Referencing to the Vehicle

- The driver is able to park close to a white line, curb, or straight line to the right side of the vehicle being driven; the center line of the hood appears to be next to the line or curb.

- The driver is able to place back bumper of vehicle so it is lined up with any rear line or curb.

Fact Sheet F-2.7, “Standard Vehicle Reference Points” will give a great deal of information to support each of the issues listed on the transparencies.

“Reference Points” (1997), by Interactive Driving Systems, Inc., Chesire, CT 06410 (203) 272-9391 may be used as a visual technique to introduce or review reference point skills. The video is a resource that supplements the information presented in this segment.
Knowledge and Skills
The student is expected to:

(H) describe how to place the left side tires zero to six inches from a line or curb utilizing visual reference points;

The Instructor:
. Uses Transparency T-2.45 “Left Side Limitations” to lead a discussion of the vision and perception requirements necessary to establish reference points for right side limitations.
  . Lane Position 2
  . Curb Parking to Left Side

. Uses Transparency T-2.46, “Left Side Limitations,” to continue a discussion of the vision and perception requirements necessary to establish reference points for right side limitations.

. Uses Transparency T-2.47 “Lane Position#1” to lead a discussion of the vision and perception requirements necessary to establish reference points for the center of lane position.
  . Center of Lane
  . Three feet from left side
  . Three feet from right side

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Application of Referencing to the Vehicle

• The driver is able to park close to a white line, curb or straight line to the right side of the vehicle being driven; the center line of the hood appears to be next to the line or curb.

• The driver is able to place the right side of the vehicle three feet from a white line or the curb.

• The driver is able to place the left side of the vehicle against the yellow center line or curb.

Fact Sheet F-2.7, “Standard Vehicle Referenc Points” will give a great deal of information to support each of the issues listed on the transparencies.

“Reference Points” (1997). by Interactive Driving Systems, Inc., Chesire, CT 06410 (203) 272-9391 may be used as a visual technique to introduce or review reference point skills. The video is a resource that supplements the information presented in this segment.

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
**Knowledge and Skills**

The student is expected to:

(H) describe how to place the left side tires zero to six inches from a line or curb utilizing visual reference points;

---

**The Instructor:**

1. Uses Transparency T-2.48 “Lane Position # 1” to continue a discussion of the vision and perception requirements necessary to establish reference points for center of lane position.

   ![Lane Position # 1 Transparency](Image)

2. Uses Transparency T-2.49 “Lane Position # 2” to lead a discussion of the vision and perception requirements necessary to establish reference points for left side lane limitations.
   - Left Side of the Lane
   - 0-6 inches from the left side line

   ![Lane Position # 2 Transparency](Image)

3. Uses Transparency T-2.50 “Lane Position # 2” to continue a discussion of the vision and perception requirements necessary to establish reference points for left side lane limitations.

   ![Lane Position # 2 Transparency](Image)
Application of Referencing to the Vehicle

- The driver is able to place the right side of the vehicle three feet from a white line or the curb.

- The driver is able to place the right side of the vehicle six feet away from a line or curb.

- The driver is able to place the left side of the vehicle against the yellow center line or curb.

Fact Sheet F-2.7, “Standard Vehicle Reference Points” will give a great deal of information to support each of the issues listed on the transparencies.

“Reference Points” (1997). by Interactive Driving Systems, Inc., Chesire, CT 06410 (203) 272-9391 may be used as a visual technique to introduce or review reference point skills. The video is a resource that supplements the information presented in this segment.

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Knowledge and Skills

The student is expected to:

(I) describe the placement options in a traffic lane utilizing visual reference points

. Right Side of Lane
. 0-6 inches from right edge line

. Uses Transparency T-2.51 “Lane Position # 3” to lead a discussion of the vision and perception requirements necessary to establish reference points for right side lane limitations.

. Uses Transparency T-2.52 “Lane Position # 3” to continue a discussion of the vision and perception requirements necessary to establish reference points for right side lane limitations.

. Uses Transparency T-2.53 “Lane Positions” to lead a discussion of the vision and perception requirements establishing center of lane position reference points for placement within a lane.

. Center of Lane
. Three feet from left side
. Three feet from right side

The Instructor:

.S. Uses Transparency T-2.51 “Lane Position # 3” to lead a discussion of the vision and perception requirements necessary to establish reference points for right side lane limitations.

.Transparency T-2.51
Lane Position # 3

.Transparency T-2.52
Lane Position # 3

.Transparency T-2.53
Lane Positions

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Application of Referencing to the Vehicle

- The driver is able to park close to a white line, curb, or straight line to the right side of the vehicle being driven; the center line of the hood appears to be next to the line or curb.

- The driver is able to place the right side of the vehicle three feet from a white line or the curb.

Fact Sheet F-2.7, “Standard Vehicle Referenc Points” will give a great deal of information to support each of the issues listed on the transparencies.
Knowledge and Skills
The student is expected to:

(J) explain vehicle reference techniques to reduce the risk of a collision.

The Instructor:

. Uses Transparency T-2.54 “Lane Positions” to lead a discussion of the vision and perception requirements necessary to establish lane positions from Lane Position # 1 to Lane Position # 2 to avoid a path of travel or line of sight restriction and asks students to list when this position adjustment would be used.

. Uses Transparency T-2.55 “Lane Positions” to lead a discussion of the vision and perception requirements necessary to establish lane positions from Lane Position # 1 to Lane Position # 3 to avoid a path of travel or line of sight restriction and asks students to list when this position adjustment would be used.

. Uses Transparency T-2.56 “Possible Lane Positions” to lead a discussion of the vision and perception requirements necessary to establish lane positions from Lane Position # 1 to Lane Position # 2, 4 or 3, 5, to avoid a path of travel or line of sight restriction and asks students to list when these position adjustments would be used.

Module Two—Texas Driving Responsibilities: Preparing to Operate a Vehicle. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.
Application of Referencing to the Vehicle

- The driver is able to avoid a path of travel (POT) or a line of sight (LOS) restriction or problem to the left side of lane.
- The driver is able to avoid a path of travel (POT) or a line of sight (LOS) restriction or problem to the right side of lane.
- The driver is able to avoid a path of travel (POT) or a line of sight (LOS) restriction or problem by positioning over the yellow or white line to the left.
- The driver is able to avoid a path of travel (POT) or a line of sight (LOS) restriction or problem by positioning over the white line to the right.

Fact Sheet F-2.7, “Standard Vehicle Reference Points” will give a great deal of information to support each of the issues listed on the transparencies.

“Reference Points” (1997). by Interactive Driving Systems, Inc., Chesire, CT 06410 (203) 272-9391 may be used as a visual technique to introduce or review reference point skills. The video is a resource that supplements the information presented in this segment.
The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle; identifies and responds appropriately to alert symbols, warning symbols, vehicle control devices, and safety devices; understands and controls vehicle balance and vehicle operating space; and appropriately applies the techniques of vehicle reference points to establish roadway position and vehicle placement.

Worksheet W-2.8

“Standard Vehicle Reference Points”

Transparency T-2.57

Angle Parking

Transparency T-2.58

Standard Reference Points Review

Worksheet W-2.8

“Standard Vehicle Reference Points”

Transparency T-2.57

Angle Parking
Fact Sheets F-2.7, “Standard Vehicle Reference Points” provides information to support each of the issues listed on the transparencies.

“Reference Points” (1997). by Interactive Driving Systems, Inc., Chesire, CT 06410 (203) 272-9391 may be used as a visual technique to introduce or review reference point skills. The video is a resource that supplements the information presented in this segment.

The instructor should collect optional Worksheet W-2.8, “Standard Vehicle Reference Points” as an assessment tool for this topic area. Questions concerning this topic are located in the Module Assessment MA-2.1, Preparing To Drive.
Module Two Topic 5 Resources

Module Two, Topic 5 Transparencies:
- T-2.32, “Targeting & Visual Requirements”
- T-2.33, “Determining Vehicle Operating Space”
- T-2.34, “Traditional Mirror Views and Blind Spots”
- T-2.35, “Blind Spot & Glare Elimination”
- T-2.37, “Front Limitation”
- T-2.38, “Front Limitation”
- T-2.39, “Front Limitation”
- T-2.40, “Rear Limitation”
- T-2.41, “Rear Limitation”
- T-2.42, “Rear Limitation”
- T-2.43, “Right Side Limitation”
- T-2.44, “Right Side Limitation”
- T-2.45, “Left Side Limitation”
- T-2.46, “Left Side Limitation”
- T-2.47, “Lane Position # 1”
- T-2.48, “Lane Position # 1”
- T-2.49, “Lane Position # 2”
- T-2.50, “Lane Position # 2”
- T-2.51, “Lane Position # 3”
- T-2.52, “Lane Position # 3”
- T-2.53, “Lane Positions”
- T-2.54, “Lane Positions”
- T-2.55, “Lane Positions”
- T-2.56, “Possible Lane Positions”
- T-2.57, “Angle Parking”

Worksheets

Fact Sheets
- F-2.5, “Introduction to Targeting Concepts”
- F-2.6, “Preventing Blind Spot Crashes”
- F-2.7, “Standard Vehicle References”

Assessment
- MA-2.1, “Preparing to Drive”

Suggested Resources
- Interactive Driving Systems, Inc., P.O. Box 98, Cheshire, CT 06410.
  203/272-9391 Office  203/250-0896 FAX
## Module Two

### Topic Title: Supplemental

- Qualifies for Texas Driver Instructional Permit
- Total Parental Involvement: 4 hours

180 minutes instructional time
minutes discretionary break time

<table>
<thead>
<tr>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-credit course (32 hrs)</td>
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<tr>
<td>Multiphase course (40 hrs)</td>
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<tr>
<td>Credit course (56 hrs/semester)</td>
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</tbody>
</table>

Module Two, Supplemental is not a required program element.

<table>
<thead>
<tr>
<th>Needed Resources</th>
<th>Instructor Activities</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbook Resources</td>
<td>. Provides additional textbook resources for parental involvement.</td>
<td></td>
</tr>
<tr>
<td>Fact Sheets F-2.5</td>
<td>. Provides Fact Sheets for home based activities.</td>
<td></td>
</tr>
<tr>
<td>Fact Sheets F-2.6</td>
<td>. Provides Fact Sheets for home based activities.</td>
<td></td>
</tr>
<tr>
<td>Worksheets W-2.3</td>
<td>. Provides Worksheets for home based activities.</td>
<td></td>
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<tr>
<td>Worksheets W-2.5</td>
<td>. Provides Worksheets for home based activities.</td>
<td></td>
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<tr>
<td>Worksheets W-2.6</td>
<td>. Provides copies of BTW lessons for parent based follow up activities.</td>
<td></td>
</tr>
<tr>
<td>Classroom Lab Activity</td>
<td>. Provides access to video and resource materials for vehicle readiness, driver</td>
<td></td>
</tr>
<tr>
<td>Pre-assessment Activity</td>
<td>preparation, vehicle controls, reference points, and targeting concepts.</td>
<td></td>
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</tbody>
</table>

Optional Videos:

- “Targeting,” IDS # 2
- “Reference Points” IDS # 1

- “Teaching Your Teens to Drive” Lessons One to Three: Developing Basic Vehicle Control

Optional Textbook Resources:

- “Drive Right” Ch. 3
- “Empower Yourself” pp. 1-15
- “How to Drive” Ch. 5
- “Handbook Plus” Ch. 2
- “License to Drive” Ch. 5
- “Responsible Driving” Ch. 6

Module Two Topical Outline
The Instructor:

. Reviews W-2.3, “Control and Information Devices” during vehicle discussion and reviews W-2.5, “Family Vehicle Instrument Cluster” for use as a parent involvement activity utilizing the owner’s manual for the family vehicle or that of a friend to compare the control and information devices and symbols included in the dashboard of the vehicle with the one illustrated on the worksheet.

. Reviews Worksheet W-2.5, “Family Vehicle Instrument Cluster” which may be used as a Topic 3 assessment tool, which gives students a longer time period to complete the exercise.

. Reviews Worksheet W-2.6, “Family Vehicle Equipment” as an assessment tool for this topic area.

. Provides “Owner’s Manual” for class review based on the vehicle used at home.

. Uses Optional Classroom Laboratory to help student discover the areas visible and not visible around the vehicle as well as the areas visible in the mirror settings.

. Uses Optional In-Car Supplement BTW-2.1 to pre-assess student driving capabilities.
Outside Activity for 40 hour and 56 hour classroom would allow students to view under the hood items discussed in Topic 1 and dash panel symbols discussed in Topic 2. The outside activity would serve as a 30 minute classroom activity for this topic area.

The instructor will collect Worksheet W-2.3 “Control and Information Devices,” Worksheet W-2.4 “Control, Information, Comfort, and Safety Devices,” and Worksheet W-2.5 “Family Vehicle Instrument Cluster” and use as assessment tools for this session.

Worksheet W-2.5 “Family Vehicle Instrument Cluster” may be combined with W-2.6 in Topic 3 as an optional assessment item.

“Teaching Your Teens To Drive” (1996) AAA Association Communication provides a video, student guide, and parent guide that has three lesson segments devoted to driver preparation, starting, and moving the vehicle. It may be a valuable resource that may add to the information presented in this segment.

Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker’s message.
Classroom Supplement or Parental Involvement Activity

Learning Goals: The TSE student should think logically and creatively while integrating experience and past knowledge to form reasoned judgments concerning space occupied by vehicle and mirror visibility around the vehicle.

Performances: During this session students will: Cooperate with group members in drawing or being seated behind the steering wheel of vehicle. Position themselves in a proper location for driving the vehicle. Illustrate the area around the vehicle which is not visible to the driver, the size of the four tire patches created by the vehicle at rest, the area around the vehicle which is visible to the driver by rear and side mirrors, and the size of the three mirror zones and the two blind spot zones.

Assessment: The student portfolio will contain an illustration or picture of the area around the vehicle which is not visible to the driver, a diagram of the four tire patches, and an illustration or picture of the three mirror visibility zones and the two blind spot zones.

This activity may not be used as in-car activity time or in-car observation time.

<table>
<thead>
<tr>
<th>Instructor Activities</th>
<th>Ref</th>
<th>Student Activities</th>
<th>Materials Needed or Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Supplement:</td>
<td></td>
<td>Group activity segment</td>
<td>- Vehicles for size of the group.</td>
</tr>
<tr>
<td>• Prepare several vehicles for demonstration of area of visibility with and without mirrors.</td>
<td>Module 2</td>
<td>• Determine 1st driver.</td>
<td>- Chalking or marking devices for group as needed.</td>
</tr>
<tr>
<td>• Prepare a surface for chalking or painting of lines around each vehicle.</td>
<td></td>
<td>• Determine design or photograph use and drawing responsibilities.</td>
<td>- Forms for transferring and maintaining data.</td>
</tr>
<tr>
<td>• Organize cooperative learning groups for conduct of session.</td>
<td></td>
<td>Session activity</td>
<td>- Photography equipment, if desired.</td>
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<tr>
<td>• Supervise students in activity or assign task to paraprofessional aide.</td>
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<td>• Place 1st driver in the preferred position for driving vehicle regarding seat, steering, mirrors, and restraints adjustment.</td>
<td>- Space for drawing on a surface large enough to demonstrate the hidden area around the vehicle.</td>
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<td>• Place 2nd student outside of vehicle at front bumper.</td>
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<td>• 2nd student backs slowly away from bumper until driver sees shoes of the student (with and without mirrors).</td>
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<td>• 3rd student marks location on surface.</td>
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<td>• 2nd and 3rd students repeat activity at eight locations.</td>
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<td>• All students aid in connecting location markers and transfer to data sheet or photograph for portfolio.</td>
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<td>- Process is repeated for all drivers.</td>
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<td>• At the completion of these activities, the students should mark the areas of contact between road and tire.</td>
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<td>• Place results in portfolio for future reference.</td>
<td></td>
</tr>
<tr>
<td>Alternate activity:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Homework assignment with personal vehicle, allowing photographs of activity to be placed in the student records.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Diagrams—2.1 Vehicle Operating Space

Two or three students are needed to assist in this exercise. One student should be seated behind the wheel of the vehicle. The other students should position themselves close to the vehicle in positions illustrated below. Starting at the 1 position and repeating for 2 to 10, ask the student in the car to wave hand when he can see the shoes of the student outside the car as they walk slowly away. Mark the positions so that a chalk line can be drawn from one point to another. This will indicate an area that is one length of the vehicle to front, two lengths of vehicle to rear and one width of the vehicle to the left and two widths to the right. This space is not visible to the driver.

Outline the tire patches with chalk and then drive the vehicle out of the space to indicate how small the contact area is in relation to the space being driven down the roadway. This exercise dramatizes why the driver needs to establish a target area that is far from the vehicle, since all the decisions have to be made based on what is happening in the intended path of travel.
Two or three students will need to assist in this exercise. One student should be seated behind the wheel of the vehicle. The other students should position themselves close to the back of the vehicle. Starting at the rear view mirror position, ask the student in the car to wave a hand when he/she can see the shoes of the student outside the car as they walk slowly away. Mark the positions so that a chalk line can be drawn from one point to another. This should indicate an area that is about 200 feet to the rear for ground view. Mark the areas for the side view also recognizing the location of the mirror blind spot. Use the traditional mirror settings and the contemporary mirror settings to indicate the method to reduce the mirror blind spot to the sides with the contemporary settings.
Diagrams—2.1 Blind Zone and Glare Elimination (BGE) Mirror Settings
Prerequisites: Valid Texas Driver Instructional Permit

Learning Goals: The novice driver should be assessed for prior skill and knowledge level, for adjusting entry into in-car skill areas.

Performances: During this in-car lesson the student will demonstrate program entry skill levels by:
- performing forward and reverse movements in the offset alley exercise
- performing forward and backward movements in the tracking exercise
- performing forward maneuvers in the constant curvature exercise

Assessment: The student portfolio will contain a preassessment of tracking, steering, braking, acceleration, lane position and vision skills in three exercises used to determine entry level performance and placement in the in-car lessons.

<table>
<thead>
<tr>
<th>Instructor Activities</th>
<th>Ref</th>
<th>Student Activities</th>
<th>Materials Needed or Rear Driver Activities</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Prepare assessment site for demonstration of skills as listed in guide</td>
<td></td>
<td>Group activity segment</td>
<td>TSE vehicle prepared for on-street use</td>
<td></td>
</tr>
<tr>
<td>• Allow a fifty foot space cushion around the exercises for error control</td>
<td></td>
<td>• Observe instructor demonstration of preassessment activity</td>
<td>Cones/markers for exercises; plastic trash cans of different sizes may be substituted for cone markers</td>
<td></td>
</tr>
<tr>
<td>• Organize learning groups for conduct of session</td>
<td></td>
<td>• Ask questions pertaining to understanding of tasks</td>
<td>Chalked or painted exercise area is recommended for preassessment consistency</td>
<td></td>
</tr>
<tr>
<td>• Demonstrate activities to be assessed with limited instruction on task performance</td>
<td></td>
<td>Session activity</td>
<td>Space for surface large enough to accommodate the exercises</td>
<td></td>
</tr>
<tr>
<td>• Assess students in activity or assign task to certified on-street instructor</td>
<td></td>
<td>• Place 1st driver in the preferred position for driving vehicle regarding seat, steering, mirrors and restraints adjustment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Constant curvature exercise may be combined with the tracking exercise to conserve space on surface used</td>
<td></td>
<td>• 1st driver performs off-set alley</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Provide the assessment document for the student portfolio</td>
<td>Place Assessment on the Student Record Form</td>
<td>• Succeeding students perform maneuvers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1st driver performs tracking exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Succeeding students perform maneuvers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1st driver performs constant curvature</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Succeeding students perform maneuvers</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• At the completion of these activities, the students should assess their abilities to perform maneuvers</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Place results in portfolio for future reference</td>
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</tbody>
</table>
Diagrams—In-Car Laboratory BTW-2.1  Optional Skills Assessment

Assessment Skill Exercise One  OFF-SET ALLEY

One drive forward at each of the following speeds: 10 mph, 20 mph and 30 mph.

One drive in reverse at each of the following speeds: 5 mph, 10 mph and 20 mph.

Points are lost when cones are struck or vehicle is slowed or stopped.

Exercise value  40 points

Assessment Skill Exercise Two  TRACKING

One drive forward and reverse at each of the following speeds:
10 mph and 20 mph

Points are lost for striking cones, stopping alignment, lane positioning.

Exercise value  30 points

Assessment Skill Exercise Three  CONSTANT CURVATURE

One forward drive through with entry at each of the following speeds:
20 mph, 30 mph, 40 mph turning to the right and turning to the left.

Points are lost for improper use of brake, steering, acceleration, and lane position.

Exercise Value  30 points
### Off-Set Alley Preassessment

<table>
<thead>
<tr>
<th>Cone displacement</th>
<th>Speed</th>
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</thead>
<tbody>
<tr>
<td>Large: 5 10 15</td>
<td>Slowed 1 1 1 1</td>
</tr>
<tr>
<td>Small: 2 4 6</td>
<td>Stopped 2 2 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Points Lost:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Small: 2 4 6</td>
<td></td>
</tr>
<tr>
<td>Large: 5 10 15</td>
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</thead>
<tbody>
<tr>
<td>Small: 2 4 6</td>
<td></td>
</tr>
<tr>
<td>Large: 5 10 15</td>
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</table>

### Tracking/Targeting Preassessment

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<thead>
<tr>
<th>Cone displacement</th>
<th>2 2 2 2 2 2 Stopping Front</th>
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</thead>
<tbody>
<tr>
<td>Lane Position</td>
<td>1 1 1 1 1 1 Vehicle Not Aligned</td>
</tr>
<tr>
<td>Alignment</td>
<td>2 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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</tr>
<tr>
<td>Alignment</td>
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</table>

### Constant Curvature Reassessment

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<tr>
<th>Cone displacement</th>
<th>Braking 2 2 2</th>
<th>Steering 1 1 1</th>
<th>Acceleration 1 1 1</th>
<th>Lane Position 1 1 1</th>
<th>Points Lost</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Points Lost:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Braking</td>
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</tr>
<tr>
<td>Steering</td>
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<tr>
<td>Acceleration</td>
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<tr>
<td>Lane Position</td>
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<th>Braking 2 2 2</th>
<th>Steering 1 1 1</th>
<th>Acceleration 1 1 1</th>
<th>Lane Position 1 1 1</th>
<th>Points Lost</th>
</tr>
</thead>
</table>

<table>
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<tr>
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<th></th>
</tr>
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<tbody>
<tr>
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<tr>
<td>Steering</td>
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</tr>
<tr>
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<th>Steering 1 1 1</th>
<th>Acceleration 1 1 1</th>
<th>Lane Position 1 1 1</th>
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<tr>
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<td>Steering</td>
<td></td>
</tr>
<tr>
<td>Acceleration</td>
<td></td>
</tr>
<tr>
<td>Lane Position</td>
<td></td>
</tr>
</tbody>
</table>
Prerequisites: Valid Texas Driver Instructional Permit

Learning Goals: The novice driver should demonstrate comprehension of targeting, basic braking, smooth acceleration, and basic steering skills in a controlled risk environment.

Performances: During this in-car lesson, the student will demonstrate the ability to perform targeting skills using the Auto Control Monster Device attached to the rear of a front wheel drive vehicle or a standard equipped driver education vehicle. The student will demonstrate smooth braking and acceleration skills while moving forward. The student will perform hand to hand steering and hand over hand steering techniques while moving the vehicle.

Assessment: Instructor assessment using the Mottola Auto Control Monster Lesson Plan Guide or mark introductory skills on district in-car student record form.

<table>
<thead>
<tr>
<th>Instructor Activities</th>
<th>Ref</th>
<th>Student Activities</th>
<th>Materials Needed or Rear Driver Activities</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review facility for changes or obstructions.</td>
<td>Mod 2</td>
<td>Group activity segment</td>
<td>Shows permit at the start of lesson.</td>
<td>-------</td>
</tr>
<tr>
<td>Review objectives for lesson with drivers.</td>
<td>Mod 2</td>
<td>Review objectives, show permit, ask questions regarding lesson activities.</td>
<td>Listens to review of procedures.</td>
<td>-------</td>
</tr>
<tr>
<td>Prepare vehicle and surfaces for lesson.</td>
<td>Mod 2</td>
<td>Session activity</td>
<td>Watches and asks questions regarding procedures.</td>
<td>-------</td>
</tr>
<tr>
<td>Introduce driver readiness tasks.</td>
<td>Mod 2</td>
<td>Introduce driver readiness tasks to first driver.</td>
<td>Watches demonstration of each activity by student or instructor.</td>
<td>-------</td>
</tr>
<tr>
<td>Introduce targeting concepts.</td>
<td>Mod 2</td>
<td>Performs targeting drills.</td>
<td>Verbally reviews procedures while driver is performing techniques in each area.</td>
<td>-------</td>
</tr>
<tr>
<td>Introduce controlled braking concepts.</td>
<td>Mod 2</td>
<td>Performs controlled braking with minimal assist.</td>
<td>Prepares for driving sequence.</td>
<td>-------</td>
</tr>
<tr>
<td>Introduce progressive acceleration techniques.</td>
<td>Mod 2</td>
<td>Performs progressive acceleration with minimal assist.</td>
<td></td>
<td>-------</td>
</tr>
<tr>
<td>Introduce hand to hand steering techniques.</td>
<td>Mod 2</td>
<td>Performs hand to hand steering with minimal assistance.</td>
<td></td>
<td>-------</td>
</tr>
<tr>
<td>Introduce hand over hand steering techniques.</td>
<td>Asses</td>
<td>Performs hand over hand steering with minimal assistance.</td>
<td></td>
<td>-------</td>
</tr>
<tr>
<td>Practice targeting concepts.</td>
<td>Asses</td>
<td>Practices targeting skills with minimal assistance.</td>
<td></td>
<td>-------</td>
</tr>
<tr>
<td>Practice controlled braking concepts.</td>
<td></td>
<td>Practices controlled braking with minimal assistance.</td>
<td></td>
<td>-------</td>
</tr>
<tr>
<td>Practice progressive acceleration techniques.</td>
<td></td>
<td>Practices hand to hand steering with minimal assistance.</td>
<td></td>
<td>-------</td>
</tr>
<tr>
<td>Practice hand to hand steering techniques.</td>
<td></td>
<td>Practices hand over hand steering with minimal assistance.</td>
<td></td>
<td>-------</td>
</tr>
<tr>
<td>Practice hand over hand steering techniques.</td>
<td></td>
<td>Practices securing with minimal assistance.</td>
<td></td>
<td>-------</td>
</tr>
<tr>
<td>Practices securing tasks.</td>
<td></td>
<td>Review and assess tasks performed in lesson.</td>
<td></td>
<td>-------</td>
</tr>
<tr>
<td>Evaluate student progress in activities for record and portfolio.</td>
<td></td>
<td></td>
<td></td>
<td>-------</td>
</tr>
<tr>
<td>Repeat tasks with next driver.</td>
<td></td>
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</tr>
</tbody>
</table>
Module 2  Recommended Laboratory Session  Page 68

Prerequisites:  
Valid Texas Driver Learner’s Permit

Learning Goals:  
The novice driver should demonstrate comprehension of pre-drive, basic maintenance, driver readiness, starting, pull from curb, visual referencing, and securing for listed vehicle positions which will increase student's ability to position vehicle for basic vehicle maneuvers.

Performances:  
During this in-car lesson, the students will demonstrate the ability to perform pre-start and maintenance checks and prepare themselves and the vehicle to starting the vehicle. Using reference points, they will be able to demonstrate positioning the vehicle to its front and rear limits, in positioning the vehicle in curb alignments, vehicle lane positions, parking maneuvers, and their set up positions; and be able to position the car with turning points for the basic vehicle maneuvers.

Assessment:  
Instructor assessment of pre-drive, maintenance, readiness, starting, pulling from curb, lane positions, backing techniques, and securing on the district in-car records form. Student assessment of positions drawn on worksheet for portfolio.

<table>
<thead>
<tr>
<th>Instructor Activities</th>
<th>Ref</th>
<th>Student Activities</th>
<th>Materials Needed or Rear Driver Activities</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Review facility for changes or obstructions.</td>
<td></td>
<td>Group activity segment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review objectives for lesson with drivers.</td>
<td>Mod 2</td>
<td>• Review objectives, show permit, ask questions regarding lesson activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Prepare vehicle and surfaces for lesson.</td>
<td>Mod 2</td>
<td>Session activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Evaluate pre-drive, maintenance, and start procedures.</td>
<td>Mod 2</td>
<td>• 1st driver performs pre-drive, maintenance, readiness, and starting procedures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review, guide, and supervise front limitations technique.</td>
<td>Mod 2</td>
<td>• Performs a front limitation with minimal assist.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review, guide, and supervise rear limitation technique.</td>
<td>Mod 2</td>
<td>• Performs rear limitation with minimal assist.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review, guide, and supervise curb alignment techniques.</td>
<td>Mod 2</td>
<td>• Performs curb alignments with minimal assistance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review, guide, and supervise lane position techniques.</td>
<td>Mod 2</td>
<td>• Performs vehicle lane positions with minimal assistance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review, guide, and supervise parking techniques.</td>
<td>Mod 2</td>
<td>• Performs parking turn points with minimal assistance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review, guide, and supervise securing techniques.</td>
<td>Mod 2</td>
<td>• Performs parking maneuvers with minimal assistance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Evaluate student progress in activities for record and portfolio.</td>
<td>Place Pre-Assess on Student Record Card</td>
<td>• Performs stopping, securing procedures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeat tasks with next driver.</td>
<td></td>
<td>• Review and assess tasks performed in lesson.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Shows permit at the start of lesson.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Listens to review of procedures.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• Watches and asks questions regarding procedures.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• Watches demonstration of each activity by student or instructor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Verbally reviews procedures while driver is performing techniques in each area.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Prepares for driving sequence.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Diagrams—In-Car 2.3 Standard Visual Referencing Guidelines

Front Limitation

Right Side (0-6"")

Left Side (0-6"")

Angle Park

Right Curb (5 feet) Right Curb (8 feet)

Angle Park Turn

Right Side (3 feet)

Left Side (3 feet)

LANE POSITIONS

1

2

3

4

5
Optional Titles:

“Starting Out Right” ... DORON Video or Laserdisc
“Ins and Outs of Turns” ... DORON Video or Laserdisc
“Controlling Your Vehicle” ... SSI Safe Driver Training Series
“Turning and Parking Maneuvers” ... SSI Safe Driver Training Series

Learning Goals:

The simulation student should demonstrate comprehension of pre-drive, driver readiness, start, securing, and vehicle positioning in lane which will increase student’s ability to position vehicle for basic vehicle maneuvers.

Performances:

Performances are based on simulation video used for this section. It is recommended to start with a session that demonstrates the use of the simulator and establishes the need for procedures and good seating position. Explain the need for holding the wheel at a position that is below the center of the wheel due to airbag displacement. Demonstrate the correct seating and steering positions for vehicle control.

Assessment:

Instructor assessment of procedures, lane positions, and techniques on the district on-street records form. Student assessment of simulation activities may be added to the student portfolio.

<table>
<thead>
<tr>
<th>Instructor Activities</th>
<th>Student Activities</th>
<th>Materials Needed and Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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