

OBJECTIVES for LESSON One

- This lesson sets the standard for how well the teen will have command of vision and the control forces of the vehicle: the brake, the steering wheel, and the accelerator.
- **The teen should perform and explain each step of all Guides accurately without hesitation. The teen is to become familiar with the operating controls of the car before each driving session and until all actions are spontaneous and smooth.**
- The teen should also demonstrate consistency in moving and stopping the car smoothly, with precision.
- The teen must continue to use the Guides from this lesson until the behavioral patterns are performed routinely.
- This lesson provides the teen with the first development of visual behavioral patterns by learning how to use the targeting concepts. “Targeting” and the use of “Transition Pegs” are very important “tools” that, once learned, will be essential in the development of perceptual skills that can prevent many of the “I didn’t see it” type of crashes.

THE DRIVING SETTING

This lesson should take place in a **Parking Lot** to provide ample opportunity for the teen to learn by repetition without having interruptions from traffic.

Key Behavioral Pattern Applications

Makes Smooth Stops

A smooth braking action requires a partial release of braking pressure before the vehicle comes to a complete stop. This requires “curling” the toes back to release some of the braking pressure so that the pitch of the vehicle will be level at the moment of total stop.

Inching and Creeping Speed Control

Inching the car means to have the car move as slowly as possible by releasing very little braking pressure. The car should move only one inch at a time. Speed is controlled with the brake. Inching speed is used for parallel parking. Creeping the car means to release all brake pressure, while holding the foot over the brake pedal (covering the brake). The car will move at a walking pace by the idle speed of the engine.

Smooth Acceleration

Allow idle speed to place the car in motion by taking the foot off the brake. Then when acceleration is applied the movement is smooth.

Use of steering wheel

- Hands should be in the 9-3, or 8-4 position
- Knuckles and thumbs stay on the outside of wheel
- Hand-to-hand steering for slight steering
- Hand-over-hand for greater steering inputs

Target with Central Vision

Central vision is a narrow cone of clear visibility which allows one to make identifications. See the target to the environment with central vision.

See Vehicle with Fringe Vision

Fringe vision surrounds the central vision. While looking straight ahead we are able to see with our upper, lower and side fringe vision. See the target to the steering wheel with fringe vision.

Driving On Target

Driving on target involves the accurate use of vision and car placement in relationship to where you want the car to go. A target is a fixed object that appears in the center of the path you intend to drive. To select a target, first decide where you want the vehicle to travel, then aim for an object in the center of that path.

Recovery of Steering

Recovery of the steering wheel is the action taken to return the tires to the straight position. A novice driver will have best control when the recovery is made by turning the wheel back to the straight position. The use of transition pegs will “tell” the driver when to straighten the tires.

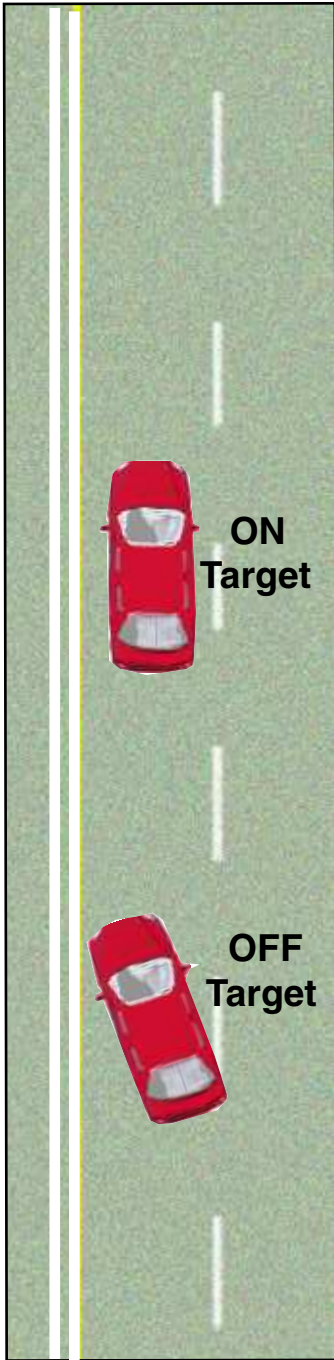
Transition Peg Introduction

A transition peg is used for recovery of the steering wheel. While making a right turn, begin straightening the tires when the rearview mirror appears aligned with the target. When making a left turn, begin recovery as the driver’s side windshield post becomes aligned with the target.

Turn Head before Steering

Develop the habit of turning your head in the direction of intended movement before turning the steering wheel. This will best allow the eyes to lead the car.

Rating: √ = Okay, X = More Practice Needed



NOTES

1: Getting Ready To Drive

While Approaching The Car

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1. Have Keys In Hand
 2. Look Under the Car
 3. Look At and Around the Car

Before Opening The Door

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1. Look Inside the Car
 2. Control the Door Swing

After Entering The Car

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1. Lock Doors - Key In Ignition
 2. Head Restraint Up To Ears
 3. Adjust Seat - Butt-In Seating
 4. Check and Adjust All Mirrors
 5. Safety Belts On All

2: Start Engine & Orientation

Starting The Engine

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1. Parking Brake On
 2. Insert Key - Foot On Brake
 3. Shift Should Be In "Park"
 4. Twist Key -Release No Delay
 5. Headlights On - day & night

Orientation to Controls -Shift In "P"

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1. Place Hands On Wheel
 2. Use Directional Signal
 3. Put Wipers On and Off
 4. Turn Hazards Lights On & Off
 5. Adjust Climate Control
 6. Put Parking Lights On and Off
 7. Use Headlights -Low & High
 8. Adjust Sun Visor
 9. Blow The Horn
 10. Use Of Gas Pedal
 11. Use Of Brake Pedal
 12. Use Of Shift

3: Moving and Stopping Smoothly

Placing The Car In Motion

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1. Right Foot On Brake
 2. Shift To Drive
 3. Release Parking Brake
 4. Check Driving Path

Inching & Creeping The Car

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1. Keep Foot On Brake
 2. Release Partial Brake
 3. Inching with Brake Control
 4. Creeping at Idle speed

Acceleration Control

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1. Idle Speed Movement
 2. Press Gas Smoothly
 3. Keep Steady Speed
 4. Increase Speed
 5. Decelerate Gradually

Braking Control

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1. Feel Braking Point
 2. Constant Pressure
 3. Normal Smooth Stop
 4. Hard Smooth Stop
 5. ABS Braking

4: On Target - Off Target

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1. Selection of Target
 2. Use of Central Vision
 3. Use of Fringe Vision
 4. Aiming for Targets
 5. Looking Into Turns
 6. Use of Steering Wheel
 7. Recovery at Transition Peg
 8. Gas and Brake Pedals
 9. Centers Wheel in Lane

Key Behavioral Patterns

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- Makes Smooth Stops
 - Smooth Acceleration
 - Use of steering wheel
 - Target with Central Vision
 - See Vehicle with Fringe Vision

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- Driving On Target
 - Recovery of Steering
 - Transition Peg Introduction
 - Turn Head before Steering

Lesson 1: Student-Centered In-Car Activities

Guide 1 Getting Ready To Drive:

Have the teen demonstrate each step from the Guide by first telling her what the step is, and then asking her to demonstrate and explain the benefits of such behavior.

Activity 1: Ask the teen to, "show me how you should approach the car, and explain why each action is desirable to develop into habit." Ask her, "why is it good to have the key in your hand while approaching the car?" If low-risk habits are to be developed, the actions must be taken many times and the reasons for taking the actions must be clearly understood by the teen. Additional activities are listed below.

1: Getting Ready To Drive—Approaching the Car

Activity 2: While approaching the car, have students evaluate the driving path the car will occupy. When driving forward, the front path of the car should be seen. When the car is to be backed, the rear path the car will travel must be seen before entering the car.

1: Getting Ready To Drive—Before Opening the Door

Activity 3: Have students demonstrate how to open the door in an easy and controlled manner without a need to swing it fully open when in a limited parking space

1: Getting Ready To Drive—After Entering the Car

Activity 4: Have student put the key in the ignition as soon as car is entered. Observe how the key is held. The student should be able to insert the key without looking.

Activity 5: Have students explain what the correct head restraint position is, and why it should be at ear level.

Activity 6: Have student keep thumb prints off the inside mirror by gripping the top and bottom edges of the mirror with the index finger and the thumb. Have the student be able to move her eyes and not the head to see the rear view.

Guide 2 Starting Engine, Orientation to Controls:

The car should be parked with the parking brake on. **Common Errors:** Novice drivers have the tendency to hold the key too long after the engine starts. You can hold your left hand in a ready position to pull the teens hand off the key as you cue her to stop the twisting action. The teen will want to look at each control while using it, for example while using the signal lever the teen may look at where her hand is moving. Observe where her eyes are looking. Have her use peripheral vision to locate the controls. **Note:** Do not introduce the use of gauges or instruments at this time while emphasis is placed on the teen learning how to look ahead of the vehicle. Gauges will be presented in the next lesson after the teen has practiced using vision outside the car.

2: Start Engine & Orientation—Starting the Engine

Activity 1: Have student apply and release the parking brake two times without looking at hands and feet, then reapply the parking brake in preparation for starting the car.

Activity 2: Have student place key in ignition and demonstrate and explain the five positions.

Activity 3: Have teen confirm that the shift is in park position.

2: Start Engine & Orientation—Starting the Engine

Activity 4: Have the student start the engine. **Note:** Have your hand ready to pull the student's hand off key if it is held too long causing a grinding of the starter.

Activity 5: Have the student turn the headlights on. Even when the training car has daytime running lights it is good to have the headlights put on to help her acquire the habit.

2: Start Engine & Orientation—Orientation to Controls

Activity 6: This activity should take place with the engine running, the parking brake on, and the shift in "park". You should ask the student to demonstrate correct operation of the controls. Avoid turning your head to look at her while talking. If you look at the student, you are inviting her to look back at you, taking the eyes off the intended path of travel. Use an eye check mirror to look at the student.

In addition to the student becoming familiar with the car's controls, you'll be able to establish how effectively she responds to your commands. You can give her a sequence of rapid-fire commands. Such as: "Put the wipers on, put the left signal on, put the headlights on, turn the wipers off, put the right signal on, put the high beams on, turn the headlights off...". By using such rapid-fire sequence commands, you'll be able to see how much more difficult it is on both you and the student to make rapid decisions. Therefore, when you are on the road and need to give directional commands, or safety commands, you will find greater success when you think ahead to where the car will be traveling, to have more time and to eliminate the need for such rapid-fire commands. Mix up the order and cadence of the above commands to determine student proficiency in responding to your directions.

Activity 7: Have the student adjust the sun visor. Explain that the edge of the visor should not be directed towards the driver's head. Have her feel the sharpness of the edge.

Activity 8: Have the student place the heel of foot on the floor with the ball of the foot contacting the pedal. Make certain that her eyes are looking outside the car, not at the foot. Ask her to apply the brake firmly, then ease some pressure off as if making a smooth stop.

Activity 9: With the shift in park, have the student press the gas pedal with gradual amounts of pressure to develop smooth acceleration. Have her pivot the foot from the accelerator to the brake and back several times.

Guide 3 Moving and Stopping Smoothly: Begin this guide in a parking lot. Continue to use this guide for future lessons until all skills are performed smoothly and consistently. Ask the student to perform one concept at a time on the conscious level as you coach her for successful behavior. For example: say, "Put your right foot on the brake. Release the parking brake. Shift to drive." You will be able to read each concept listed on the Guide in a similar manner.

Common Errors: The teen may have a tendency to look at her hands and feet while using the controls. Be alert to prevent such action. The teen, while "inching" the car, will have a difficult time maintaining a consistent inch-by-inch movement. Have her perform this exercise on three different in-car sessions. Look for small degrees of improvement rather than expect perfection on the first session.

Student-Centered In-Car Activities: Lesson 1

3: Moving and Stopping Smoothly—Moving and Stopping

Activity 1: Ask the student to demonstrate correct foot position on the brake.

Activity 2: Observe how the student uses the shift selector. Ask her to demonstrate “open palm” shifting (being able to shift without wrapping fingers around the shift level). If correct behavior is not used, ask her to review class materials.

3: Moving and Stopping Smoothly—Place Car in Motion

Activity 3: Make certain the student is able to release the parking brake without looking at it.

Activity 4: Ask the student to evaluate the path of travel the car is to occupy before the foot is taken off the brake.

3: Moving and Stopping Smoothly—Inching and Creeping

Activity 5 : Have the student move the car as slowly as possible in a steady motion without the car stopping. The purpose of this exercise is to have students develop finesse braking by releasing very slight pressure to have the car move.

Activity 6: Have the student keep the car moving, inch-by-inch, without varying the speed even when the gradation of the parking lot changes. This speed is mostly used as an exercise in brake pedal control. It also is the speed the car should move at when it is in very tight spaces such as when backing up to the rear vehicle while parallel parking.

Activity 7: Have the student demonstrate traveling at an idle (creeping) speed, which is at a very slow walking pace. This rate of speed is used when the car is stopped at an intersection and the driver is moving from a legal stop to a safety stop position to create a better view of traffic.

3: Moving and Stopping Smoothly—Acceleration Control

Activity 8: Have the student press the accelerator after idle speed begins the movement of the car. Tell her to make a smooth stop. Use the Guide to evaluate the outcome.

Activity 9: Have the student demonstrate the ability to keep a steady speed within 3 mph. Vary the speed according to the size of the parking lot. Have her increase speed in a smooth manner when asked to do so. Then, have her practice releasing partial pressure from the accelerator to feel the deceleration.

3: Moving and Stopping Smoothly—Braking Control

Activity 10: Have the student drive at 10 m.p.h. (providing parking lot is suitable) and very gradually apply the brake until the braking point is felt.

Activity 11: Ask teen to use a constant “squeezing” pressure on the brake pedal without causing wheel lock-up. Then, have her make a “smooth” stop by releasing slight braking 1-2 seconds before stopping.

Activity 12: Have the student make hard stops by applying maximum braking pressure without locking the wheels at the start of braking, and hold it until the last second, then release only enough pressure to smooth out the pitch force.

Activity 13: Ask the student to explain what the brake pedal will feel like when the ABS system activates. Have the student make another hard stop but this time ask her to perform as if the ABS system activated.

Guide 4 On Target - Off Target: This activity will require the student to drive back and forth from one end of a parking lot to the other while acquiring all of the behaviors listed. Select a target at eye level on the perimeter of the parking lot. Place a traffic cone or carton box in front of the target, leaving enough room to freely be able to turn the car around it. Then select a second target on the opposite perimeter of the parking lot. Place the second traffic cone/box there.

Common Errors: The teen will have a tendency to look straight ahead while turning. Coach her to turn her head towards the target before steering takes place. You will need to observe and coach her to use the correct steering technique. The teen will need help to develop the correct usage of central and fringe vision for seeing and driving on target.

4: On Target - Off Target

Activity 1: Have the student “aim the car on target”. As the car begins to reach the end of its targeting path, before the cone, have her smoothly stop the car, look over her shoulder for target B, and get the car aligned to that target. On other trials direct the student to turn left or right after stopping, or while moving. Give positive feedback when a behavior is performed correctly.

Activity 2: Select a target that is 90 degrees to the left. Have her check left, front, right zones, turn her head before beginning to move the car, and stop the car when it is at the transition peg (the driver’s corner post). After identifying the transition peg, continue to get on target. Repeat exercises for right turn targets and stop at the transition peg (inside mirror). Then have her make turns and give some acceleration when at the transition peg. The instructor’s transition pegs are: passenger corner post for right turn and the inside mirror for left turns.

Activity 3: Have the student look at the target, which will require using the central vision. If you have an “eye monitor mirror” you will be able to check her eye movement and easily determine if she is looking at the correct target.

Activity 4: While the student is looking at the target with central vision, she should be able to see the target to the steering wheel with her fringe vision. You can tell the student to stop in front of the cone so that the base of the cone is visible. The student should be able to see this relationship with fringe vision while central vision is looking at the target.

Activity 5: Have the student identify a target. Check the left, front and right zones to be certain the path is clear then turn her head before moving toward the target. While aiming for the targets, have her keep the car straight in its travel path. After she has success keeping the car on target, give the command to steer off target to the left or right, then get back on target. Make certain that she keeps her head focused on the target while the car is moved off target. This will simulate the car moving off target, as in a skid situation. It represents what would happen if the car went into a rear-wheel skid and a corrective action is needed.

Activity 6: After the student has demonstrated success in the above activities, have her focus on a target. At 5-8 mph, tell her to release her grip from the steering wheel, but keep her hands hovering near the wheel. You grip the wheel and quickly pull it off target. She must avoid looking at where the car is going and regain control by keeping her vision and steering focused on the targeting path she wants the car to travel. This activity can save the teen’s life if confronted with a skid situation.

Suggestions for Parent/Mentor

1. Always wear safety belts!
2. Be relaxed and keep your voice calm.
3. Follow the Guides step by step.
4. Give your teen only the practice that is described in each guide. Your route selection should be planned before the in-car session takes place.
5. For the first few sessions, start in parking lots or lightly traveled areas.
6. Sit in the front passenger seat with your left hand free to take over steering control if necessary.
7. Be clear with directions. Avoid using phrases like "Make a left, right here." When responding to a question, use the word *correct* instead of *right*.
8. Give directions for turns well in advance. Give the location first, and then the action. Say "at the next intersection make a right turn." Think ahead to where the car will be entering to detect future problems.
9. Have a driving dialogue with your teen. Ask him what he sees and what he will do well in advance of the maneuver you wish him to perform.

10. Be supportive and positive; this will promote success.
11. Feedback must be precise and immediate.
12. Be a good role model; your teen will respond to what is seen.
13. Learn your reference points from the right side of the car. Take a few minutes in a parking lot to learn how to steer the car from your "coaching" position.
14. **Select one of the ten sections on the Practice Guide** (see the next page) **and ask your teen** to explain to you what that behavioral pattern means, and how to perform it correctly. Before doing any driving, on each practice session, *begin by asking your teen to explain what one or two of the ten behaviors on the "Practice Guide" means.* If the teen is uncertain you can turn back a page or two and locate information under the "Key Behavioral Pattern Applications" section. **When a correct response is made**, give positive feedback. You should frequently ask the teen to explain or demonstrate how to perform something correctly. If the teen is not able to correctly explain or demonstrate the behavioral patterns that are stated on a guide, chances are that the in-car performance will not be effective, and in some situations it could be dangerous.

Three ways for the Parent/Mentor to help the teen control the car.



Practice in the parking lot how to give directions effectively, how to give a steering assist, and how to shift into neutral without looking at the teen or at the controls. The "open palm" method of using the shift is illustrated in the photo above.

1. The primary and most important method is to give clear and accurate directions with ample time for the teen to take a proper and safe action.

2. When the teen needs help to steer the car, put your left hand at the three o'clock position to prevent erratic steering, or to steer the car.

3. In an extreme emergency situation when you want to disengage the car's acceleration power, place your left hand on top of the shifter, as shown in the photo. With your palm open and facing down, push towards the dashboard to shift into neutral. Use the same method for a floor shift.

Use of Guides

- The Guides are organized into Lessons with a simple-to-complex structure.
- Each Lesson is a building block for succeeding lessons.
- The **teen is expected to know** how to demonstrate the key behavioral patterns.
- The teen should be able to practice one behavior at a time.
- You should give the teen practice in performing behaviors that are listed on the "Practice Guides" sheet for the lesson that the teacher currently conducted and evaluated.
- After each practice session, record the date and sign your name in the space at the bottom of the "Practice Guides" sheet that was used for the practice session.
- You can use the "Notes" box to relay information, or to pose a question for the teacher.

Student Name _____

Parent/Mentor Name _____

Rating: ✓ = Okay, X = More Practice Needed

			1. Safety belts on, doors locked, head restraint at ear level, headlights on, Starts Engine
			2. Smooth Acceleration from a stopped position, begins with idle speed.
			3. Makes Smooth Stops, front end doesn't bounce up.
			4. Smooth Steering, hands at 9-3 or 8-4 position, knuckles and thumbs on outside of wheel. Demonstrates hand-to-hand, and hand-over-hand steering.
			5. Demonstrates ability to move slowly inch-by-inch.
			6. Sees Target with Central Vision, Steering Wheel with Fringe While looking at the target is able to see the steering wheel's position to the roadway
			7. Drives effectively On Target, and detects and corrects off-target conditions.
			8. Effective use of Transition Pegs, Left turn is driver's corner post, Right turn is inside mirror.
			9. Smooth Recovery of Steering Wheel at Transition Peg
			10. Turns Head in direction of steering before turning wheel

Driving Environment: This lesson should take place in a **Parking Lot** to provide ample opportunity for the teen to learn by repetition, and for the Parent to get comfortable with directing and controlling the teen and vehicle from the passenger seat. Teen should select targets around the perimeter of the parking lot that the car will be driven towards.

NOTES

1st Date _____ 2nd Date _____ 3rd Date _____

Signed _____ Signed _____ Signed _____