

Lesson 9

OBJECTIVES for LESSON Nine

- This lesson explores three high risk situations: driving at night, passing other vehicles and coping with vehicle failures.
- In order for the teen to be successful in this lesson it is necessary that the behavioral patterns from all the previous lessons be performed successfully and consistently so that they become habit.
- Night driving for the teen creates additional problems. Due to visibility limitations, driver drowsiness, passenger distractions, and aimless “cruising”, passing on two-lane roadways at night contains a very high risk. There very seldom are situations where there is opportunity for the training vehicle to pass another vehicle. However, simulated passing situations, **as presented in the Coaching Tips on pages 52-53**, will give the teen ample practice to develop the key behavioral patterns for passing safely.
- The teen is presented with simulated vehicle failures and roadway problems that divides ones attention between the driving environment and problem solving.

THE DRIVING SETTING

Nighttime conditions should exist for this lesson. Pay attention to whether there is a full moon or a new moon. Illumination from a full moon is totally different from the reduced light created with a new moon. Use all types of roadways. For Guide 32 begin by using four-lane highways with two lanes going in the same direction. Limited access highways may then be used. However, refer to Guide 34 “Getting On and Off Highways” first. After skills are developed use open secondary highways with two to six lanes of traffic. For Guide 33 begin each of the problems at speeds of only 10 m.p.h in a vacant parking lot.

Key Behavioral Pattern Applications

Night Driving: Vehicle Readiness

Properly functioning lights are essential during nighttime driving. Acquire the habit of checking your car’s lights each night before driving.

Night Driving: Driver Readiness

- To see effectively at night, avoid exposure to the sun’s rays and wear sun glasses during the day.
- At night, you are more likely to be fatigued, which could cause eye fixations.

Night Driving: Environmental Problems

- Illumination is reduced when there is a new moon as compared to a full moon. Be aware of the difference.
- Rural roadways may offer no street lighting, making you more dependent upon your headlights.
- Urban areas have distracting neon signs that could prevent you from seeing traffic lights and other vehicles.
- Change in temperature and early morning dew can result in “black ice” on freezing road surface.

Searching at Night

- Look at least 15 seconds beyond range of headlights.
- Look To Target Area For Clues that will tell you if it is open or closed. Evaluate your targeting path.
- Use High Beams when: no cars are passing; no vehicles are ahead; there are no oncoming cars; not in the city.
- Glance To Right to avoid glare from oncoming cars.
- Look For Cars Without Headlights entering from gas stations and other illuminated parking areas.
- See Curves and Intersections Early (in your target area), to know what decisions you will need to make.
- Look for Pedestrian Locations. Use association skills to anticipate where pedestrians may enter your path.

Being Passed: Tailgater Type

You can know what to expect from a tailgater ready to pass you if you know which type it is. The “charger” will pass you very quickly at the first opportunity. The “one pacer” will take more time to decide to pass and to execute the pass. The “habitual” tailgater may never attempt to pass you.

Select passing location—Adjust LP and Space

Look ahead to your target area to see what opportunities there will be for someone to pass you. Select the best opportunity for one to pass you. When you want to be passed, moving into lane position three will communicate that message and give additional space to separate from the side of your car. The driver that passed may suddenly make a speed reduction, forcing you to brake to avoid a crash. The best habit is to reduce your speed for you to control your following space.

Passing: Evaluations of Risk

There are seldom opportunities for a driver education student to practice passing other vehicles. Therefore, we need to create simulated passing situations.

Responding to problems:

- Nighttime environmental problems.
- Drowsy driving conditions and how to prevent them.
- Distracted driving events and how to prevent them.
- Looking for an unfamiliar location.
- Coping with a brake failure.
- Engine stall results in loss of power steering.
- How to cope with a tire blowout.
- How to prevent vehicle rollovers.
- How to prevent and correct skids.

Rating: √ = Okay, X = More Practice Needed

NOTES

31: Night Driving

1. Adjust For Visibility Limits

- **Vehicle Readiness**
- Clean Lights, Windows, Mirrors
- Check brake lights, signal lights
- Keep Dash Lights Low
- **Driver Readiness**
- Avoid Glaring Lts; Recovery
- Depth Perception Evaluated
- Nighttime Envir. Problems
- New Moon, dark nights
- Rural Roadways, no lights
- Urban Areas, overload

2. Searching At Night

- Look Beyond Headlights
- Look To Target Area
- Use High Beam
- Look For Cars Without Lights
- See Curve & Intersection Early

3. Interacting With Others

- Look for Pedestrian Locations
- Dim High Beam
- Communicate One Flash
- To Car - 12 Seconds away
- No Flash Passing Trucks
- Use Other Cars' Headlights

32A: Being Passed

1. Being Passed

1. Identify Type Of Tailgater
2. Plan Ahead For Passing
3. Select Passing Location
4. Adjust Lane Position
5. Communicate If Needed
6. Adjust Speed
7. Adjust Following Time

32B: Passing

1. Why Pass? - Risk vs. Gain
2. Keep At Least 3 Seconds
3. Select Best Passing Location
4. Mirrors - Head Checks - Signal
5. Check Front and Side
6. Avoid Hesitation
7. Accelerate Smoothly
8. Keep Searching
9. See Headlight
10. Return to Lane, Cancel Signal

33: Responds To Problems

1. Coping With Car Problems

- Brake Failure
- Pump Brakes
- Downshift
- Hold Parking Brake Release
- Stab Parking Brake
- Take Escape Path

• **Engine Stalls**

- Steer Firmly
- Open Palm - Neutral

• **Restart Engine**

- Shift To Drive
- Take Escape Path

2. Roadway & Driver Problems

- Locate and Park Near.....
- Locate and Stop at
- Your Tire Just Blew Out
- Emergency Vehicle from rear
- It's Beginning To Rain
- Missed Your Turn

3. Skid Detection, Correction

- Keeps head on Target
- Makes steering corrections

Key Behavioral Patterns

- **Adjust Speed at Night**
- **Adjusts to Environment**
- **Looks beyond Headlights**
- **FIND Pedestrian High risk area**
- **Identify tailgater type**

- **Select Passing Location**
- **Evaluate Passing Risk**
- **Respond to car problems**
- **Respond to roadway problems**
- **Detects and Corrects Skids**

Lesson 9: Student-Centered In-Car Activities

Guide 31 Night Driving: A large percentage of teen crashes occur during nighttime conditions. This Guide contains behavioral patterns you should experience with the teen in a nighttime setting as often as possible. However, the major reason that the majority of teen crashes occur at night is due to the "Social Setting" that occurs. Talk to the teen about how the following can increase the risk of a nighttime crash: Frolicking, Alcohol, Distractions from Passengers, Showing Off, Playing Games, "Just Driving Around". **Common Error:** Excessive speed into curves and failure to look beyond the headlights' range of illumination is a major problem. Have the teen use target area searching. Being able to know when to use high and low beams effectively will take practice.

31: Night Driving

Activity 1: With the car parked during nighttime conditions, have the student apply the brakes and look in the rearview mirror to see if there is an equal reflection of the brake lights on either side. Put the signal lights on; see if there are reflections to the front and rear. Put headlights on; see if both lights operate. Check the reflection of the tail lights. Shift into reverse to check back-up lights. Keep dash lights low.

Activity 2: Have the student test her ability to judge distance by taking a guess at what is 15 seconds away. See how accurate her estimates are, compared to those she made during the day. At night, you are more likely to be fatigued, which could cause eye fixations. Explain to the student, "when you feel your eyes getting sluggish, move them more by checking your rearview mirror, then looking out to the target area. When you find yourself not wanting to move your eyes, it is time to find a safe location to pull over and take a break."

Activity 3: Have the student adjust and dim the dashboard lights (while the vehicle is stopped) to reduce glare.

Activity 4: Show students that when backing they can gain more illumination by applying very slight brake pedal pressure to cause the brake lights to light but not stop the car. This can improve visibility while backing.

Activity 5: Have the student practice the eye movement technique of looking to the target area and checking the rear view mirror. These eye movements can serve as a benchmark to determine when she is drowsy by the eyes refusing to look into the rear mirror. Once the eyes get to this condition the only choice is to find a safe place to pull over and rest.

Activity 6: Have the student select locations that would be safe to pull over and rest if she was in a drowsy condition. Select a parking lot that is well illuminated. A quick food establishment's parking lot would be a good choice.

Activity 7: On a quiet stretch of road have the student practice using the high beam switch. Have her see the difference in illumination with high beams as compared to low beams. Whether using high or low beams, have her look beyond the headlight range to see all the information that is available.

Activity 8: Have the student practice looking to the side of the road as an oncoming vehicle approaches, even if the vehicle does not have its high beams on. Explain that she should use this technique to avoid the oncoming car's glare and to be able to see if the right-front zone offers open space if needed.

Activity 9: Have the student look to the target area to detect helpful information that is beyond the range of the headlights. Have her see the pattern of street lights that may broadcast a curve ahead, or see house lights in the target area that tell of an intersection or a sharp curve. Have her see the headlights of approaching vehicles that are coming around a curve or entering an intersection.

Activity 10: Share the following information with the teen.

• Review the "Key Behavioral Pattern Applications"

• Vehicle Readiness

- Check and clean headlight lens if grimy. Clean windows and mirrors inside and outside to minimize glare from others' headlights.
- Keep dash lights low to prevent bright interior lights from affecting your ability to see in a darkened area.

• Driver Readiness

- Avoid looking at glaring headlights and other bright lights in order to minimize the recovery time it takes your eyes to readapt to the darkness.
- At night, you are more likely to be fatigued, which could cause eye fixations. When you feel your eyes getting sluggish, move them more by checking your rearview mirror, then looking out to the target area. When you find yourself not wanting to move your eyes, it is time to find a safe location to pull over and take a break.

• Interacting with Others

- Dim High Beams: when 15 seconds away from oncoming cars; with a car in front; and when being passed.
- Communicate With One Flash of your lights: when 15 seconds away from an oncoming car with its high beams on; and to alert a car that you are going to pass. **Do Not Flash**

• **Before Passing a Truck.** With their large mirrors it becomes blinding and distracting to the truck driver.

- Use Other Cars' Headlights to tip you off to curves, intersections and other problems you may approach.

Guide 32 Being Passed, Passing: Begin with simulated situations of being passed by "pretending" there is a certain type tailgater. Ask the teen to describe and perform the actions as if there were a "charger" ready to pass. Repeat for various situations and other tailgater types. Then, while on a two lane highway, ask her to pretend that a "red truck" is in front and she is to pass it. Coach her to do each step as if she is actually passing, but without leaving your lane. If an oncoming vehicle passes your car within 10 seconds from the beginning of the "pretend" pass, it would not have been safe. Evaluate all the behavioral patterns. Repeat often. You may not find situations where a car is actually going slow enough to pass. Use the "red truck" often in various traffic environments. When you are on a four lane divided highway, you can have the teen begin in the right lane, and use your "red truck" to have the teen go from the right lane into the left lane using all the behavioral patterns as if it were a two-lane highway. **Common Error:** The most critical behavioral pattern that will need to be experienced is that of effectively searching for a safe and beneficial passing location and opportunity. During an actual passing situation the teen will not accelerate quickly, or adequately, which can result in a prolonged exposure. All of the behavioral patterns are likely to need extensive practice by the teen. Use the simulated pass with the "red truck" in all types of situations.

Student-Centered In-Car Activities: Lesson 9

32: Being Passed, Passing

Activity 1: When there is a tailgater closing the rear zone, ask the student whether it is a “charger”, a “habitual”, or a “one pacer” type of tailgater. Then, ask what is the best way to control the tailgater.

Activity 2: Use these Behaviors for Being Passed

1. Identify Type Of Tailgater

You can best know what to expect from a tailgater ready to pass you if you know which classification of tailgater it is..

2. Plan Ahead For Passing Location

Look ahead to your target area to see what opportunities there will be for someone to pass you.

3. Select The Passing Location

You can select the best opportunity for one to pass you.

4. Adjust Lane Position

When you want to be passed, moving into lane position three will communicate that message to the car in back and give him additional space to separate from the side of your car.

5. Communicate If Needed

Use of the right signal light in conjunction with moving into lane position three will be effective communication to the car in back.

6. Adjust Speed

The quicker the car in back passes you, the less risk you are exposed to. As you reduce your speed, you make the car passing you complete the pass in a shorter time.

7. Adjust Following Time/Space

When the car completes its pass and cuts in front of you it is a very risky moment. The driver may suddenly make a speed reduction forcing you to brake to avoid rear ending him. The best habit is to reduce your speed, as needed, for you to control your following time.

Activity 3: Use Simulated Passing Situations Often
There are few opportunities to pass, so practice simulated situations. From the right lane of a four lane road practice passing the imaginary “red truck” ahead. Move into the left lane as if it is the oncoming lane. Use traffic from the two oncoming lanes as if they are in your passing lane. Practice all the behaviors to pass the truck. If oncoming traffic passes before you return to the right lane, you would have had a head-on crash.

Activity 4: If four-lane roadways are not available, use a two-lane roadway. But, only have the teen move from lane positions within the same lane. She would start in lane position three, when there are no oncoming vehicles, move into lane position two. And, then move back into LP3 with an open right-front zone. Use all these behavioral patterns:

Practice these behaviors:

1. Why Pass? - Evaluate Risk vs. Gain

2. Keep At Least 3 seconds Following Time

When you are certain you will be passing, and see opportunities available, keep at least 3 seconds of following space. This will give you room to move into the passing lane and have space to return if you detect a problem that was not seen initially.

3. Select Best Passing Location

By keeping at least 3 seconds of following space, you will best be able to search for a low-risk passing location.

4. Mirrors - Head Movement Checks - Signal

Check the outside mirror on the side you will be entering; make a head movement or convex mirror check; and put on the signal before moving into the passing lane.

Activity 3: Use these Behaviors for Passing

5. Check Front and Side Zones

See at least 20 seconds beyond the vehicle to be passed to see how your front and side zones will be.

6. Avoid Hesitation

7. Accelerate Smoothly

By going 10 mph faster than the passed car, it will take about 10 seconds to complete the pass.

8. Keep Searching Zones

9. See Headlight In Rear View Mirror

Seeing one headlight on the passed car, rather than two, will allow you to get out of the dangerous passing lane sooner and in a safe manner.

10. Return To Lane - Cancel Signal

Avoid a slowdown while reentering the travel lane in front of the passed car to prevent it from gaining on you.

Guide 33 Simulated Problems: There comes a time during training when the teen should be exposed to problems that can lead to a deterioration in performance. Such situations in the “real world” traditionally create an overload of demands beyond the driver's skills, resulting in a crash. Select suitable conditions in the traffic flow to give the teen simulated problems. Evaluate how she performs, how she copes with the distraction. If successful, give another problem. At all times be alerted to the errors. If the simulated problem is not handled correctly, repeat it. If distractions lead to traffic errors, redo the applicable Guides that were presented earlier. Do the simulated problems in a parking lot.

33: Simulated Problems

Activity 1: Brake Failure

Have the student travel at 10 mph and tell her the brakes failed. She is to take the correct actions as they were practiced in class (see the Guide). Tell her to only pretend to pump the foot brake and to actually stop the car with the parking brake. Repeat the process until she has success three times in a row.

Activity 2: Engine Stalls

Have the student in a parking lot make a right turn into a wide open area (the car may not complete the turn, be certain there is nothing that will be in its path). As she is beginning to make the turn, and before she reaches the transition peg, reach over and turn off the engine. She will experience a power loss to the steering. Have her use the procedures listed on the Guide. Repeat until there are three correct responses.

Activity 3: Skid Detection and Correction

This activity must take place in a vacant parking lot. Tell the teen, “I am going to move the car off target by pulling or pushing the steering wheel from your hands. You are to loosen your grip on the wheel to allow me to move the steering wheel. Keep your head and eyes directed towards the target area. As soon as I move the car off target you must make a corrective action to get it back on target.” Make certain there is adequate space in the parking lot. Have the teen begin at 10 mph and only make slight movements off target at first. As success occurs increase speed to 15 mph and move the car more off target up to the transition pegs. When you pull the steering wheel off target, say “your tire just blew out” or “you just hit a patch of black ice” to relate the activity to a situation that may cause this skidding condition.

Three Stages of Car Control

Prevention Stage

There are three stages of car control. The easiest and best stage to have opportunity for successful car control is the prevention stage. This is the stage where the ten habits provide automatic protection. For example, while approaching a curve you: See it 30 seconds ahead in your target area, reduce your speed, select good lane positioning on your approach, look into the curve, use braking and acceleration controls effectively and all ten habits are working for you.



Detection Stage

The detection stage gives a warning that the driver is putting the car into harm's way. For example, while approaching a curve during rainy conditions, the driver gets distracted while putting the wipers on and speed is too fast. But the driver's good four-second habit easily detects a violation in the danger zone. The driver has time to brake the car while still going straight, and while within the traction capabilities of the tire's grip to the road.



Correction Stage

The driver goes too fast into the curve and fails to reduce speed until the car begins to slide to the outside of the curve. The monster is out of the cage. The driver now has less than one second to take corrective actions to get the car back in control. *What is easier, to keep the car from becoming a monster, or to get a raging monster back into its cage?*



The control of the car is dependent upon four tire patches contacting the road. Each patch is about the size of your hand. Whether they are managed or mismanaged depends upon your habits. Too much speed, too much braking, too much steering all occurring at the same time results in an out-of-control situation. The vehicle is in an out-of-balance condition.



The tire patches leave contact with the road, causing the monster to break out of its cage.

The Problem

A driver never knows of all of the risk factors that are likely to combine within a fraction of a second, calling for a demand of more traction. If only one or two risk factors are present they are not likely to result in a crash. It is when there are several risk factors occurring at the same time that the monster gets fed.

The Solution

We need to eliminate those risk factors contributed by our performance and acquire a system of habits that can serve to automatically give low-risk behavioral patterns that will provide protection against an over-accumulation of risk factors. **A driver needs the ten empowering habits there, like an insurance policy, to prevent the monster from breaking out of the cage.**

Ten EXPERT Habits Work for You to Meet Winter Driving Demands

- You will have vehicle readiness by clearing all snow and ice (LOS blockages) off your car before driving.
- You will plan for turns and curves early by applying the brake at least five seconds before beginning to turn the steering wheel.
- Once the brake is applied, you will keep your foot on the brake with partial pressure until at your transition peg; then accelerate.
- When you get within the 4-second danger zone of an intersection you will search the left, front and right zones to be sure space is open. When it's not, a reduction in speed will take place.
- When entering a traffic flow at an intersection, a search deep to the left, front, and right zones, for a hole or gap, will give you extra time that is needed to get moving when there is reduced traction.
- When stopping to the rear of a car at traffic lights and other situations, you will stop to see its rear tires, which will give you sliding room.
- When moving with a car in front, you'll keep at least 4 seconds of space, which will prevent you from crashing into skidding cars ahead of you.
- Effective mirror usage will prevent skidding while lane changing.
- If a skid does occur, your eyes, mind, and hands will have as habit the behavior of steering toward your target area, which is the single most important skill needed to regain car control. Your foot stays off the pedals.

9

Lesson

Parent-Teen Practice Guides

Student Name _____

Parent/Mentor Name _____

Rating: ✓ = Okay, X = More Practice Needed

			1. Night Driving Vehicle Readiness: Check working condition of all lights
			2. Night Driving Driver Readiness: Avoid distractions, drowsiness, stay alert
			3. Night Driving Environment: New moon, less light; rural roads, no street lights
			4. Night Driving • Look 15 seconds beyond headlight range • Search to Target Area • FIND Searching: cars with no headlight, pedestrians • Practice high beam, low beam
			5. Before being passed, identify tailgater type for best control
			6. Select best location to be passed, best LP, best communication
			7. Practice Simulated Passing Situations, use Activity 3, page 53
			8. Review and Practice weak areas from Lesson 6, page 37
			9. Review and Practice weak areas from Lesson 7, page 43
			10. Review and Practice weak areas from Lesson 8, page 49

Driving Environment: Nighttime conditions should exist for this lesson. Pay attention to whether there is a full moon or a new moon. Illumination from a full moon is totally different from the reduced light created by a new moon. Use all types of roadways. For Guide 32 use four-lane highways with two lanes going in the same direction to conduct simulated practice passing situations. Only use four-lane roadways to practice simulated passing.

NOTES

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

Signed _____ Signed _____ Signed _____

Lesson 10

OBJECTIVES for LESSON Ten

The teen is given the opportunity to practice getting on and off limited access highways. While driving on the highway, the following guides should be used: 12, 13, 14, 16, 18, 19, 21, 22, 24, 25, 26, 27, 31, 32, 33, 35. As the teen learns all of the behavioral patterns in these guides over the duration of this program, this lesson puts them into a different environment with higher speeds, which becomes a good testing situation for how well developed the behaviors are on a habitual level.

This lesson should be used over several practice sessions until all Behaviors, Procedures and the Ten Habits are well on their way to consistently successful performance. When you find areas that are weak, go back to the guide in which those behaviors were presented and give more concentrated practice to help the teen improve.

THE DRIVING SETTING

Use limited access highways such as: interstate highways, freeways, turnpikes, and parkways. In addition, practice should take place on all types of roadways in all types of environments.

Key Behavioral Pattern Applications

Getting On the Limited Access Highway

On-Ramp Behavior

- 1. Check The Rear Zone:** When planning to get onto a limited access highway, be aware of the status of the rear zone. When there is a closed rear zone, go slower to avoid abrupt stops.
- 2. Keep 4 Seconds of Space:** With a car in front, keep 4 or more seconds of space for independent action.
- 3. Slow On Ramp Speed:** A slower ramp speed gives you more time to find a gap or hole, and it prevents a slowdown or stop while in the acceleration lane.

On Acceleration Lane

- 4. Search For Gap To Enter:** With a slower speed on the ramp, you have more time to find a gap to enter.
- 5. Blind Spot Checks:** If your vehicle has a convex mirror attached to the outside, it will show vehicles not seen in existing outside mirrors. Without a suitable convex mirror, a head movement check is needed.
- 6. Signal Light On:** Put your left signal light on, much like making a left lane change.
- 7. Accelerate Briskly:** Once a gap is found, accelerate rapidly to enter the traffic flow at highway speed.

Highway Entry

- 8. Precision Lane Entry:** Use precision lane positioning to occupy the least amount of lane space while entering.
- 9. Mirror Checks:** Immediately after entering, check the mirrors to update the rear zone status.

Getting Off the Highway

- 1. Plan 12 Seconds For Exit:** Plan for your exit as early as possible. You should have all the problems associated with exiting solved at least 12 seconds before the exit.
- 2. Get Rear Zone Status:** Once your exit is located, evaluate the condition of your rear zone.
- 3. Communicate:** Use of signal lights and/or a tap on the brake pedal can alert rear traffic that you are exiting.
- 4. Change Lanes, If Needed:** Use correct precision lane changing techniques if lane changing is necessary.
- 5. Test Brakes Before Exit:** While in the deceleration lane, before committed to the exit ramp, apply brakes to test them. If there is a problem, you can stay on the highway.
- 6. Controlled Braking:** Use constant pressure for controlled braking. Reduce speed to expect a tight curve on exit ramp.

Evaluation of 10 Model Driving Habits:

1. Establish Driver-Vehicle Readiness

- Driver Fitness, Butt in seat, Safety Belts On
- Doors Locked, Windows Up
- Headlights On during daytime

2. See Path Before Putting the Car in Motion

- See the targeting path you intend to use is clear
- Turn head in direction of intended movement before turning wheel.

3. Keep the Car in Balance

- Make smooth and effective starts, stops and steering
- Use transition pegs for effective transfer of braking, acceleration and steering forces

4. Use Reference Points

- Know within 3-6 inches where your car is positioned
- Know where the sides, front and rear of the car are in relation to the intersection

5. Do the Zone Control LOS-POT Searching

- Search to the Target Area • Evaluate Travel Path for LOS-POT blockage
- FIND** LOS-POT blockage • Check other related zones

6. Turn Decisions into Zone Controlled Actions

- SOLVE** LOS-POT blockages 12 -15 seconds away.
- Gain **CONTROL** of: speed, lane positioning, communication
- Re-evaluate LOS-POT at 4-second Danger Zone
- Be prepared to make adjustments at the 4-second Danger Zone
- Know your Stopping Distance and your PONR

7. Search Left, Front, Right Zones before Intersections

- Identify LOS blockage
- Check that the left, front and right zones are clear
- When you see a red light, or stopped traffic, reduce speed to time your arrival into an open zone

8. Get Rear Zone Control

- When your foot goes on the brake, check the rear zone
- Before moving to a side, check mirrors and blind spots
- When backing, check over right shoulder and check all mirrors continuously

9. Get Control With a Vehicle in Front

- When approaching a vehicle, close in gradually
- When traveling at same speed, keep 4 seconds following space
- Stop behind vehicles to see rear tires touching the road

10. Interact Courteously With Others

- Empower yourself and reduce stress by being courteous, rather than competitive, while driving
- Send and receive communications in a timely manner

Rating: √ = Okay, X = More Practice Needed

NOTES

34: Limited Access Highways

1. Getting On The Highway

- | | | | |
|--|--|--|----------------------------|
| | | | 1. Check The Rear Zone |
| | | | 2. Keep 4 Seconds of Space |
| | | | 3. On Ramp, Slow Speed |
| | | | 4. Search For Gap To Enter |
| | | | 5. Blind Area Checks |
| | | | 6. Signal Light On |
| | | | 7. Accelerate Briskly |
| | | | 8. Precision Lane Entry |
| | | | 9. Mirror Checks |

2. Getting Off The Highway

- | | | | |
|--|--|--|-------------------------------|
| | | | 1. Plan 12 Sec. Plus For Exit |
| | | | 2. Get Rear Zone Status |
| | | | 3. Communicate |
| | | | 4. Change Lanes, If Needed |
| | | | 5. Test Brakes Before Exit |
| | | | 6. Controlled Braking |

**Guide A
Behaviors Performance Inventory**

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Place a check each time Guide A on page 58 is used.

**Guide B
Procedures Performance Inventory**

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Place a check each time Guide B on page 59 is used.

**Guide C
Ten Model Driving Habits Inventory**

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Place a check each time Guide C on inside of back cover is used.

Procedures and Behaviors on Limited Access Highway

Target Area Searching

- | | | | |
|--|--|--|-------------------------------------|
| | | | FINDS LOS-POT in Target Area |
| | | | SOLVES 15 seconds away |
| | | | CONTROLS 4-sec. danger zone |

Following Other Vehicles

- | | | | |
|--|--|--|----------------------------------|
| | | | becomes Alerted to slow vehicles |
| | | | adjusts Front Closure rate |
| | | | keeps four-seconds space |
| | | | controls the rear zone |

Lane and Speed Selection

- | | | | |
|--|--|--|-------------------------------------|
| | | | selects best legal lane for travel |
| | | | uses far-left lane only for passing |
| | | | uses lane effectively |
| | | | selects best and legal speed |

Approach To Interchanges

- | | | | |
|--|--|--|-----------------------------|
| | | | see open/closed zones |
| | | | check rear zone |
| | | | lane position/speed control |

Precision Lane Change

- | | | | |
|--|--|--|--------------------------------|
| | | | evaluate zones and blind spots |
| | | | make final blind spot check |
| | | | move to LP2 or LP3 |
| | | | enter new lane in LP2 or LP3 |

Approach To LOS Curves

- | | | | |
|--|--|--|-----------------------------|
| | | | see curve in target area |
| | | | check all zones for options |
| | | | left curve: LP3, LP1, LP1 |
| | | | right curve: LP2, LP3, LP1 |
| | | | effective speed control |

Passing/Being Passed

- | | | | |
|--|--|--|---------------------------------|
| | | | identify type of tailgater |
| | | | evaluate gain versus risk |
| | | | check all zones for LOS-POTs |
| | | | control speed and lane position |
| | | | time side zone during pass |

Key Behavioral Patterns

- | | | | |
|--|--|--|-------------------------------|
| | | | • Smooth Limited Access entry |
| | | | • Keeps 4 second space |
| | | | • Searches for Gap or Hole |
| | | | • Uses Mirrors Effectively |
| | | | • Accelerates Effectively |

- | | | | |
|--|--|--|---------------------------------|
| | | | • Uses Lane Positions on entry |
| | | | • Plans 15 seconds for exiting |
| | | | • Gets Rear Zone Control |
| | | | • Tests Brakes before exit ramp |
| | | | • Speed Controlled before ramp |

Rating: √ = Okay, X = More Practice Needed

NOTES

- ___ **Basic Skill Techniques** (Guide 3)
 - ___ Acceleration ___ Braking ___ Steering ___ Shifting
- ___ **Reference Point Usage** (Guide 5)
- ___ **Targets** ___ **Target Area** ___ **Targeting Path** (G 9)
- ___ **Target Area to Target Area Searching** (Guide 12)
- ___ **LOS-POT detection** (12 seconds, or more, ahead) (Guide 14)
- ___ **Identifying open/closed zones** (Guide 14)
- ___ **Searching Intersections** (left, front, right zones) (G 17)
- ___ **Searching into Curves and Over Hills** (Guide 25)

Using The ABC's Of Zone Control (Guide 21)

A ___ **FIND** See a LOS-POT Zone Change

B ___ **SOLVE** Check Other Zones (for options & escape path)

C ___ **CONTROL** Get The Best Control

- ___ Speed Selection ___ Lane Position
- ___ Communication

- ___ **Lane Position Usage** (Guide 21)
 - ___ Straight -- with left /right zone changes
 - ___ Curves -- approach, apex, exit positions
- ___ **Rear Zone Control** unstable, closed, open (Guide 18)
 - ___ Inside mirror (moving, stops, turns)
 - ___ Outside mirrors
 - ___ Convex mirrors (danger zone ok/not ok)
 - ___ Over-shoulder checks
 - Type Tailgater: ___ Pacer ___ Charger ___ Habitual
- ___ **Following Time/Space** (Guide 26)
 - ___ Closure Rate on approach
 - ___ Moving at same speed -- 4 seconds
 - ___ When stopped -- see the tires
 - ___ Before moving -- delay start 2 seconds
- ___ **Communication and Courtesy** (Guide 16)
 - ___ Timing ___ Technique ___ Commitment



Rating: √ = Okay, X = More Practice Needed

NOTES

- ___ **Precision Turns** (Guide 6)
 - ___ side position
 - ___ forward position
 - ___ searching intersection
 - ___ looking into turns

- ___ **Approach To Intersections** (Guide 17)
 - ___ see open/closed zones
 - ___ check rear zone
 - ___ lane position/speed control
 - ___ searching left, front, right
 - ___ staggered, legal, safety stop

- ___ **Timing Arrival for Open Zone** (Guides 20 & 28)
 - ___ Traffic Lights
 - ___ Stopped Traffic
 - ___ Side Zones

- ___ **Left Turn at Green Lights** (Guide 20)
 - ___ Rear
 - ___ Gap
 - ___ Path
 - ___ Light

- ___ **Precision Lane Change** (Guide 22)
 - ___ evaluate zones and blind spots
 - ___ make final blind spot check
 - ___ move to LP2 or LP3
 - ___ enter new lane in LP2 or LP3

- ___ **Approach To Curves** (Guide 25)
 - ___ see curve in target area
 - ___ check all zones for options
 - ___ left curve: LP3, LP1, LP1
 - ___ right curve: LP2, LP3, LP1
 - ___ effective speed control

- ___ **Passing/Being Passed** (Guide 32)
 - ___ identify type of tailgater
 - ___ evaluate gain versus risk
 - ___ check all zones for LOS-POTs
 - ___ control speed and lane position

- ___ **Getting On/Off Highways** (Guide 34)
 - ___ slowest speed on entrance ramp
 - ___ evaluate gap to enter
 - ___ effective speed on acceleration lane
 - ___ getting off the highway: plan ahead, test brakes

- ___ **Backing Techniques & Turnabouts** (Guide 11)
 - ___ creep at a walking pace
 - ___ effective searching

- ___ **Perpendicular Parking** (Guide 23)
 - ___ side position
 - ___ 45-degree target, go forward
 - ___ evaluate alignment to space
 - ___ back to pivot point, turn wheel
 - ___ forward position

- ___ **Hill Stops and Starts** (Guide 29)



Student-Centered In-Car Activities: Lesson 10

Guide 34 Limited Access Highways: While traveling on the highway, select from the following Guides — one at a time. Guides: 12, 13, 14, 16, 18, 19, 21, 22, 24, 25, 26, 27, 31, 32, 33, 35. For example: Ask the teen to make a lane change. Use Guide 22 to evaluate the performance. Repeat same command three or four times, then select another guide. It is important that the teen perform the above listed guides with competency and consistency in slower and lighter traffic flows before having him perform on the highways. When operating on the highway, it is best to have him drive in the right lane as the primary lane. Then you can give him an opportunity to make a lane change to the left lane. You can then have him make another lane change back into the right lane. You can do simulated passing situations using the imaginary “red truck” concept by having the teen move from the right lane into the left lane as if it were a two-lane highway. See Guide 32 for more directions on the simulated passing. **Common Error:** Proper speed selection on the entrance ramp will need coaching. A ramp speed of about 40 m.p.h. will provide the best opportunity to find a gap, or hole, to enter. While in the acceleration lane, coach the teen to reach highway speed before merging into the gap. Once merged, be alerted to speed selection and lane usage. Stay out of the left lane except for passing. Practice entering and exiting the highway several times. While exiting, help the teen to maintain highway speed until the deceleration lane is entered.

34:A Limited Access Highways

Activity 1, Part 1: Use these simulated activities before going on a limited access highway. When there is not a limited access highway within your teaching environment, you must use this simulated approach. Select a secondary four-lane highway, one with a high speed limit and a straight stretch of roadway that is not heavily traveled. Have the student begin from the shoulder edge, if it is suitable to travel on. Tell the teen to pretend he is on the entrance ramp. Read each of the three “On Ramp Behaviors” listed on Guide 34 and have him reenact the behaviors that should be performed. When the roadway is of suitable length, have him drive a short distance performing the on-ramp behaviors. Repeat the “on-ramp” behaviors at least three times.

Activity 1, Part 2: After the teen has consistent success performing “on-ramp” behaviors, use the same highway to go to the next stages: on acceleration lane and highway entry. With the teen driving on the shoulder and conditions permissible, increase speed to a speed that is one-half of the speed limit. Pretend to be on the acceleration lane. Cue the teen to perform all of the behaviors 4-9 on Guide 34 one at a time. Verbalize each behavior, such as, “search for a gap to enter.” And, help the teen to get correct performance. When a behavior is not performed correctly, have him stop and start over again. The “precision lane entry” will be made into the right lane of the highway, of course, when there is a suitable open zone. While on the shoulder, you must be certain that the front and right-front zones are open. Have the teen perform all behaviors from 4-9 successfully three times in a row.

Activity 1, Part 3: Have the teen demonstrate all of the behaviors for “Getting Off the Highway” as listed on Guide 34. You can have the teen while traveling in the right lane (simulated highway) use all behaviors to get back onto the shoulder of the road. Make certain there is an open zone on the shoulder to enter.

Activity 2: The teen should be able to demonstrate how to effectively get on and get off a limited access highway. Use Guide 34 to have each behavior performed successfully at least three times in a row.

Activity 3: The teen should demonstrate acceptable performance of all the guides that apply to a limited access highway environment, such as lane changes, passing and being passed. **Emphasize that the far-left lane is only for passing.**

Activity 4: While driving on the limited access highway give the teen simulated problems to solve. Ask the student, “if your car’s engine died on you at this moment, what would you do?” The student should look for an escape path and demonstrate how to keep the momentum of the car moving by avoiding braking actions until the “simulated location” to stop at is within reach. *Do not actually stop.*

Activity 5: While driving on the limited access highway after passing an exit, tell the teen, “we just missed our exit. What should you do?” At the next exit, have the teen look to see if there is an on-ramp on the other side of the highway and an overpass or an underpass that tells you that if you exit, you are able to cross over to the other side to get to the entrance ramp.

Activity 6: The more simulated problems you give the teen, the better it will prepare him to cope with actual situations. When he is thinking about, or solving the problem, it creates a mental distraction. This gives you an opportunity to see how well he is able to multi-task without having reduced performance.

Guide 35A Behaviors Performance Inventory: The purpose of this Guide is to serve as a final review of the teen’s ability to demonstrate knowledge of, and consistently perform, the behavioral patterns listed on Guide 35A, which are selections from several of the guides. Use this Guide as a check list during several in-car sessions. Select various types of roads and traffic situations.

Guide 35B Procedure’s Behaviors Inventory: The purpose of Guide 35B is to serve as a final review of the teen’s ability to demonstrate knowledge of, and the consistency to perform, the key behavioral patterns for the procedures without any coaching from you. Use this Guide during several in-car sessions. While the teen is driving, select a procedure that presents an upcoming situation. Read the behavioral patterns that are listed on the Guide and then observe the teen’s performance to see if the behaviors were performed in an acceptable manner. When correct behavior is performed, give positive feedback. With incorrect actions, redo the procedure and coach the teen for the correct action. Make a note that more practice will be needed.

Guide 35C Ten Habits Inventory: The purpose of Guide 35C is to serve as a final review of the teen’s ability to demonstrate an understanding, proficiency and a consistency to perform all behavioral patterns and procedures that will lead to the development of the ten EXPERT driving habits. Use this guide on at least three different in-car sessions. Start with the first habit, “Establish Driver-Vehicle Readiness” and evaluate whether the teen performs all of the behaviors for that habit without a need for you to coach him. Make your recording with a ✓ or an X. Then evaluate habit two. Continue this process until you have taken an inventory of how the teen performs all ten habits.

Limited Access Highways

Getting On The Highway

On Ramp Behavior

1. Check The Rear Zone

When planning to get onto a limited access highway, be aware of the status of the rear zone. When there is a closed rear zone, go slower to avoid abrupt stops.

2. Keep 4 Seconds of Space

If there is a vehicle in front, keep 4 or more seconds of space for independent action.

3. Slow On-Ramp Speed

Avoid going fast on the ramp to prevent a slowdown or stop while in the acceleration lane.

On Acceleration Lane

4. Search For Gap To Enter

With a slower speed on the ramp, you have more time to find a suitable gap, or hole, to enter.

5. Blind-Spot Checks

If your vehicle has a convex mirror attached to the outside, it will show vehicles not seen in existing outside mirrors. Without a suitable convex mirror, a head movement check is needed.

Highway Entry

6. Signal Light On

Put your left signal light on, much like making a left lane change.

7. Accelerate Briskly

Once a gap is found, accelerate rapidly to enter the traffic flow at highway speed.

8. Precision Lane Entry

Use precision lane positioning to occupy the least amount of lane space while entering.

9. Mirror Checks

Immediately after entering, check the mirrors to update the rear zone status.

Guides to use while on the highway:

12, 13, 14, 16, 18, 19, 21, 22, 24, 25, 26, 27, 31, 32, 33, 35.

Getting Off The Highway

1. Plan 12 Seconds For Exit

Plan for your exit as early as possible. You should have all the problems associated with exiting solved at least 12 seconds before the exit.

2. Get Rear Zone Status

Once your exit is located, evaluate the condition of your rear zone.

3. Communicate

Use of signal lights and/or a tap on the brake pedal can alert rear traffic that you're exiting.

4. Change Lanes, If Needed

Use correct precision lane changing techniques if lane changing is necessary.

5. Test Brakes Before Exit

While in the deceleration lane, before you are committed to the exit ramp, apply the brake to feel its effect. If there is a problem, you can stay on the highway.

6. Controlled Braking

Use constant pressure for controlled braking.

Getting On The Highway

