

# In-Vehicle Instruction Checklist

## Approaching Car

- Searching for Obstacles, Tire condition, Leaking fluids, Wheel direction
- Door swing

## Preparing to Drive

- Phone in glove box
- Seatbelt: Snug across chest and hips
- Key in ignition
- Lock doors
- Driving position:
  - Butt back in seat**
  - Right heel on floor behind brake**
  - Top of steering wheel at shoulder height**
  - Top of steering wheel under wrists when arms extended**
- Personal Adjustments:
  - Seat position, Steering wheel, Seatbelt anchor, Head restraint**
  - Setting mirrors: move head to reduce blind-spot**
- Emergency Brake & release button
- Starting the car:
  - Foot on brake**
  - Start engine: Release key as soon as engine starts**
  - Gear shift in Park**
  - Practice moving Gear shift with foot on brake and emergency brake still on**
  - Open palm shift from Drive to Neutral**
- Lights on even during daytime (unless confirm daytime running lights – check manual)
- Gripping the wheel:
  - Hands at 9-3 or 8-4**
  - Thumbs and knuckles on outside of wheel (give yourself a thumps-up!)**

## Smooth Starts and Stops

- Inching
- Creeping
- Trail Braking
  - Practice braking and releasing pressure with toes**

## Exiting Car

- Set the parking brake
- Put the shift lever into park
- Turn off all accessories and lights
- Close the windows
- Turn the engine off
- Check for nearby traffic before opening door

## Steering Techniques

- Fixed Hand (9-3/8-4)
- Hand to Hand
- Hand over Hand

## **Moving & Targeting**

- Practice use of gas and brake while in park (keep heel on the floor)
- Foot on brake, Shift into drive, release emergency brake
- Check to make sure traffic is clear (if on street, use indicator)
- Remove foot from brake and shift foot to the accelerator
- Smooth starts/stops
- Steady speed
- Targeting:
  - Eyes on target:**
    - Head turn leads the car / Look to the new target before moving the car
    - Line up the center of the steering wheel with target
    - Keep central vision on target as car moves
    - See the wheel with fringe vision
  - Lane Positions:**
    - Center
    - Left
    - Right
    - Straddle Left
    - Straddle Right
  - Targeting into a curve**

## **Stopping**

- Search rear zone until 1-2 cars are stopped behind
- Legal Stop
- Safety Stop
- Staggered Stop

## **Gauges and Controls - Identify/Practice\***

- \*Door lock/unlock
- Speedometer
- Odometer
- Gear indicator
- Temperature gauge
- Oil pressure gauge
- Fuel gauge/fuel door marker
- \*Left and Right Indicator (blinkers)
- \*Head light/ bright light control
  - Flash bright lights**
- \*Hazard lights
- \*Windshield wiper lever (on, intermittent, wash)
- Identify/check symbols on instrument panel
- \*Horn – practice light tap and double tap, as well as “Hitting” the horn
- \*Window controls
- \*Climate control – what to do if the windows fog
- \*Re-circulate air/ fresh air
- \*Window defroster
- \*Gas cap release
- \*Hood release

## Reference Points – Know/Use

- Forward Targeting
- Right Tire
- Front Bumper
- Staggered Stop
- 3-Foot (from right)
- 6-Foot (from right)
- Left Tire
- Rear Bumper
- Rear Pivot Point
- Backing Targeting
- Transition Point (Precision Right Turn)
- Transition Point (Precision Left Turn)

## Maintenance

- Fill up the tank:
  - Identify which side the fuel door is on, and how to release the fuel door
  - Remove the gas cap
  - Choose the correct fuel type
  - Pay
  - Fill the tank
  - Re-secure the gas cap
- Open/ close/ prop open hood – Locate:
  - Oil (filler cap & dipstick)
  - Coolant
  - Washer fluid
  - Air filter
  - Battery
- Changing a Tire:
  - Pull to a safe level space/Set parking brake
  - Take out jack and spare tire
  - Loosen lug nuts while tire is still on the ground
  - Place jack in designated spot on frame and lift frame
  - Replace tire/ Tighten lug nuts in a star pattern
  - Lower car/ make sure lug nuts are tight and replace jack
- Using Jumper Cables/ Battery maintenance
- Checking and Inflating Tires – Find proper pressure on door sticker

## Basic Maneuvers

- Leaving the curb:
  - Signal
  - Check mirrors/blind spots
  - Search for a gap
  - Smooth start
  - Steering technique
  - Find target and side position
  - Cancel signal
  - Check rear zone

- Backing
  - Shifting into reverse**
  - Searching: with foot still on brake**
    - Mirrors
    - Blind spot
    - Turn over shoulder to look out the back window
  - Targeting in Reverse:**
    - Steering Technique:
      - Left hand at 12
      - Steering in direction you want to go
      - Glance to front corners
- Turning
  - Precision right turns – with full stop and without stop:**
    - Targeting
    - Proper Signaling
    - Reference Points: Forward Position & Side Position
    - Smooth Start and stop
    - Checking Left; Front; Right
    - Choosing a new target before proceeding
    - Steering Techniques
    - Transition Point
    - Adjusting Speed and Position
  - Right Turn on Red:**
    - Proper stop
    - Searching the intersection
    - Finding Gap or Hole
  - Precision left turns – with full stop and without stop:**
    - Targeting
    - Proper Signaling
    - Reference Points: Side Position
    - Smooth Start and stop
    - Checking Left; Front; Right
    - Choosing a new target before proceeding
    - Reference Points: Forward Position
    - Steering Techniques
    - Transition Point
    - Adjusting Speed and Position
  - Left Turns in traffic from shared left turn lane:**
    - Maintain speed until entering
    - Center car with reference points
    - Keep wheels straight while waiting for gap
    - Begin turn as the back of passing car is even with the driver
  - Using shared left turn lane to enter traffic:**
    - Left turn to shared turn lane
    - Search for gap
    - Enter flow of traffic to right

Parking

**Parking at a curb:**

- Signal
- Check rear zone
- Find space at curb
- Check mirrors and blind spots
- Reduce speed
- Find target and side position
- Smooth stop
- Cancel signal

**Perpendicular Parking:**

- Parking:
  - Side position - 6-foot Reference Point from edge of lines
  - Begin turning wheel when driver is lined up with beginning of spot before intended parking spot
  - Front Bumper Reference Point to finish park
- Unparking:
  - Back straight until driver is even with rear of cars to either side – then turn wheel
  - Check front swing

**Backing into a spot**

- SIDE POSITION: 2-3 feet from parked cars, signal.
- FORWARD POSITION: Your body aligned with the center of the parking space.
- 45-DEGREE TARGET: Use the outside edge of driver's side mirror to find a stationary object.
- CREEP AND TURN WHEEL FAST: Align to new target.
- LINE UP THE CAR WITH SPACE: Look over right shoulder.
- BACK TO REAR PIVOT POINT: Shift to Reverse and back to where the corner of the parked is aligned with the rear window corner post.
- INCH AND TURN WHEEL FAST: Turning wheel fully to the right.
- STRAIGHTEN WHEELS: Observe when the car is straight in the space.
- BACK TO REAR REFERENCE POINT: Look over your Left or Right shoulder.

**Parallel Parking: \*if parking in a tight space with moderate traffic**

- Check traffic to the rear, signal your intentions using your brake lights and right turn signal.
- Position your vehicle 2-3 feet from the vehicle you will be parking behind. (Line up the edge of the vehicle in the middle of the right side of the hood.) **\*Pull even with the space to make sure you will fit and to make sure cars behind you give you the room to complete the parallel park.** Pull even with the vehicle. Adjust the passenger side mirror down.
- Drive straight back until the back end of the vehicle you are parking behind is at the rear pivot point (disappears into the rear windshield's corner post/ reappears in the rear "triangle window"). Quickly turn the wheel completely to the right, continue to back slowly.
- When the "center post" (separating the front and back seat areas) lines up with the back end of the vehicle you are parking behind, straighten the wheel. Continue to back in a straight line.
- When the side mirror covers the taillight of the vehicle you are parking behind, turn the wheel quickly to the left. Continue to back slowly.
- When your car is parallel to the curb (using the side mirror to confirm) shift into drive, straighten the wheel, and drive to the middle of the parking space.

- Reversing Direction – first with no traffic, then with moderate traffic
  - Going around the block**
  - Two-point turn – Uses Reference Points and Backing Pivot Point:**
    - Backing into a street or driveway to Right
    - Turning into a street or driveway to the Left
    - Turning into a street or driveway to the Right
  - U-turn:**
    - Knowing your turning radius
    - Searching for a gap
    - From the Curb
    - At an intersection
  - Three-point turn – only performed on local roads with no traffic**
- Changing Lanes:
  - Check ahead, to the sides, and to the rear for a safe gap in traffic**
  - Signal your intention to move left or right**
  - Move to Left or Right Lane position**
  - Re-check blind areas in the direction of your intended lane change**
  - When conditions are safe, change lanes increasing speed if appropriate**
  - Enter the Right or Left Lane position**
  - Cancel your turn signal and re-check your mirrors**
  - Adjust your vehicle's speed and lane position**

## **Searching**

- Visual lead: 20-30 seconds – Searching the Target Area
- Control Zone: 12-15 seconds ahead – Evaluate the Path of Travel
- Danger Zone: 4-6 seconds ahead – Last chance to make an evasive maneuver
- Searching for gaps – practice when stopped at intersections
- Searching at intersections
  - Search Left, Front, Right**
  - Notice "Stale" Green light – anticipating change in signal - Use clues to anticipate red light:**
    - Not having seen the change to green
    - Pedestrian signals
    - Cross traffic lined up
  - Vehicle traffic**
  - Ped/Bike conflicts**
  - Practice spotting Gaps/Holes:**
    - Gap – 4-6 seconds between cars
    - Hole – 10-15 seconds between groups of cars

## **Space Management**

- Searching 6 Zones of space
- Recognizing Line-of Sight/Path-of-Travel Blockages
- Recognizing Open/Closed zones – Zone Control
- Following distance – 3-4 seconds
- Maintaining space cushion – space to the front and at least 1 side at all times
- Separating risks
- Compromising space

## **Adverse Conditions**

- Driving at night
- Driving in Fog
- Driving in Rain
- Driving in Snow
- Driving on the Parkways:
  - Short and sharp exit and entrance ramps**
  - Large changes in grade and curve**
  - Making accommodations for vehicles entering/exiting**
  - Lack of shoulder/ overpasses**

## **Emergency Maneuvers**

- Hard Smooth Stop
- Evasive Breaking (engaging ABS)
- Evasive Accelerating
- Evasive Steering
- Shifting to Neutral
- Downshifting
- Using Parking Brake to slow the car
- Skid Recovery – Eyes and wheel ON TARGET
- Off-road Recovery
- Gaming out Reactions to Emergency Situations:
  - Brake Failure**
  - Tire Blowout**
  - Engine Stalls**
  - Engine Overheats**

## **Local Driving**

- Approaching Car
- Preparing to Drive
- Leaving Curb
- Entering Traffic
- Smooth starts and stops
- Steering technique
- Signaling
- Lane position
- Changing Lanes
- Precision Turns
- Active Searching
- Controlling the Rear Zone
- Anticipating Other's Actions
- Backing
- Turn-about
- Parking at a Curb
- Parking and Unparking

## Highway Driving

- Merging onto Highway:
  - Check rear zone and keep 3-4 second following distance**
  - Search for Gap or Hole**
  - Signal and accelerate quickly or adjust speed and position to gap**
  - Check mirrors, signal, check mirrors and blind spot**
  - Merge**
  - Re-check all mirrors and rear zone**
- Matching Traffic Flow
- Steering technique
- Signaling
- Lane position
- Changing Lanes
- Visual Lead/Active Searching
- Following Distances
- Space Cushion
- 6-Zones of Space/ Zone Control
- Controlling the Rear Zone
- Anticipating Other's Actions
- Exiting Highway:
  - Signal early, maintain speed, check mirrors and rear zone**
  - Enter deceleration lane, then begin slowing [Slow down in the exit lane, not in traffic]**
  - Weave Lanes:**
    - The vehicle that is exiting has the right of way
    - However, when possible, a merging [entering] car should merge ahead of an exiting car

## Speed Control

- Maintains speed appropriate for conditions/risks
- Follows the speed limit
- Maintains constant speed on hills
- Chooses appropriate speed based on the results of searching process
- Generally matches the flow of traffic

## Sharing the Road

- Pedestrians
- Bicyclists
- Motorcycles
- Animals
- Schools Busses
- Trucks
- Emergency Vehicles
- Construction Workers

## Commentary Driving

- Signs, Signals, Markings
- Changes in "Condition" (increased risk)
- Open/Closed Zones
- Anticipating other drivers' actions
- Controlling Speed, Position and Communication



## Commentary Driving:

- Begin very simple and concrete, focusing on controlling zones of space: (The Supervising driver may have to model this.)
  - Example:
    - State 1 line-of-sight or path-of-travel blockage
    - State other zone conditions (open/closed)
    - Explain actions to get best speed, position, communication
- If student driver is ready, supervising driver should prompt commentary on specific techniques.
  - Examples:
    - At the second light, turn left and talk me through all the steps of your precision turn.
    - Explain how you are determining if you are maintaining an appropriate following distance.
    - Begin to narrate how you are communicating with other drivers.
    - When it is safe to do so, reverse directions. Decide what turn-about to use and talk me through the process.
    - Searching to your target area, describe what potential risks you anticipate and what actions you take to control them.
    - Begin to communicate the information you are getting from signs signals and markings.
    - Begin to narrate the visual information that is allowing you to anticipate the actions of other drivers in your Danger Zone.
    - When it is safe to do so, change lanes to the right and talk me through all the steps of your maneuver.
    - On this entrance ramp, narrate how you control your speed to achieve a safe and efficient merge.
    - As you prepare to get off at the next exit, narrate all the actions you take.
    - As you prepare to pass the truck in front of us, begin to narrate your actions and explain how you are “preparing for the worst” [proactively anticipating what could go wrong and taking actions to control the situation].
- Depending on how successful the student driver is, they can choose what to narrate, switching naturally between techniques as is appropriate to the driving conditions.
- Always take the time to Park and Process with the student driver. Note, comment and correct.