



Commercial Drive Test Pre/Post Apparatus Inspection Guide

Rev. 7-19-22

The following information is a guide to help you prepare for your Commercial Drive Test, and Pre/Post Test Inspection. You will drive over a pre-approved test route that has a variety of traffic situations. At all times during the test, you must drive in a safe and responsible manner. The examiner will be scoring you on specific driving maneuvers as well as on your general driving behavior. You will follow the directions of the examiner. Directions will be given to you so you will have plenty of time to do what the examiner has asked. You will not be asked to drive in an unsafe manner. You may be asked to simulate a traffic situation. You will do this by telling the examiner what you are or would be doing if you were in that traffic situation.

START UP

- Fasten seatbelt for yourself and occupants
- Never stall or race engine
- Verbalize all dashboard gauges and condition of apparatus
- Release parking brake

URNS

You have been asked to make a turn;

- Check traffic in all directions
- Use turn signals and safely get into the lane needed to make the turn
- Observe bike lane when crossing into lane for right hand turn

As you approach the turn;

- Use turn signals to warn others of your turn
- Slow down smoothly, change gears as needed to keep power, but do not coast unsafely. (manual transmission)

If you must stop before making the turn;

- Come to a smooth stop without skidding
- Come to a complete stop behind the stop line, crosswalk or stop sign
- If stopping behind another vehicle, stop where you can see the rear tires of the vehicle ahead of you.
- Keep the front wheels aimed straight ahead
- Your vehicle must not roll backward
- Yield to traffic/pedestrians

When ready to turn:

- Check traffic in all directions
- Keep both hands on the steering wheel during the turn
- Do not change gears during the turn (manual transmission)
- Keep checking your mirror to make sure the vehicle does not hit anything on the inside of the turn
- Vehicle should not move into oncoming traffic
- Vehicle should finish turn in the correct lane

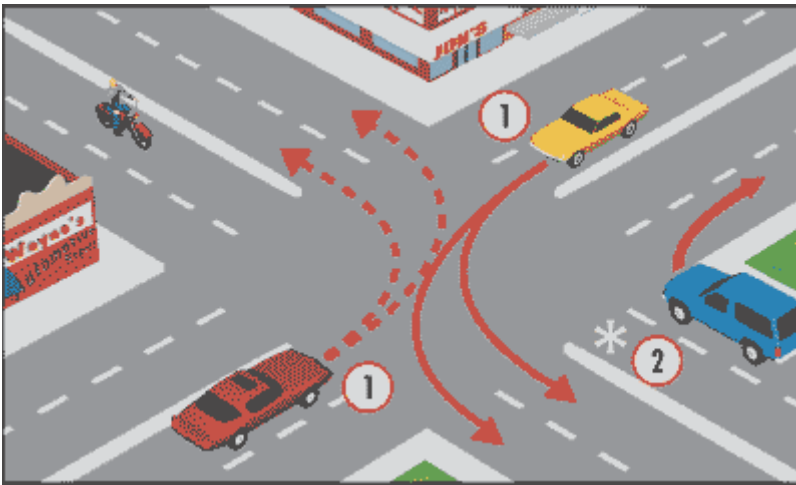
After turn

- Make sure turn signal is off
- Get up to speed of traffic, use turn signal and move into far right lane when safe to do so (if you are not already there)

Examples of Right and Left Turns

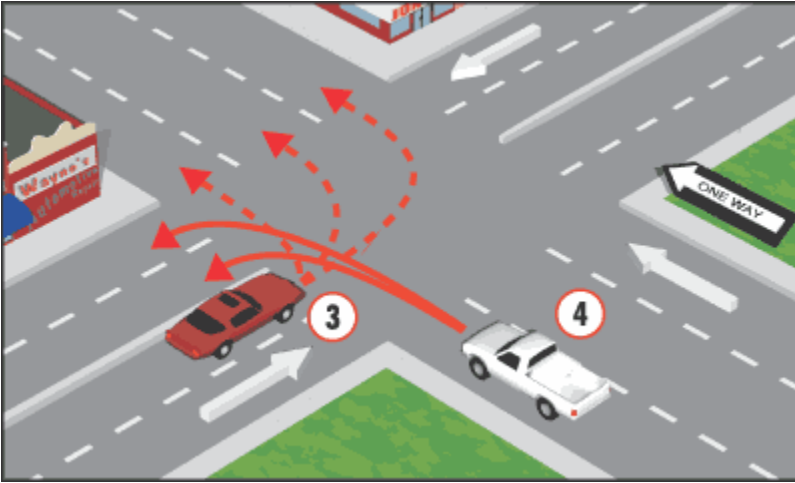
Numbers on the cars in the diagrams refer to numbered sentences on these pages. Always use your turn signals.

1. Left turn from a two-way street. Start the turn in the left lane closest to the middle of the street. Complete the turn, if safe, in either lane of the cross street (shown by the arrows). Use the center left turn lane if one is available. A left turn may be made from the other lane, if permitted by signs or arrows.



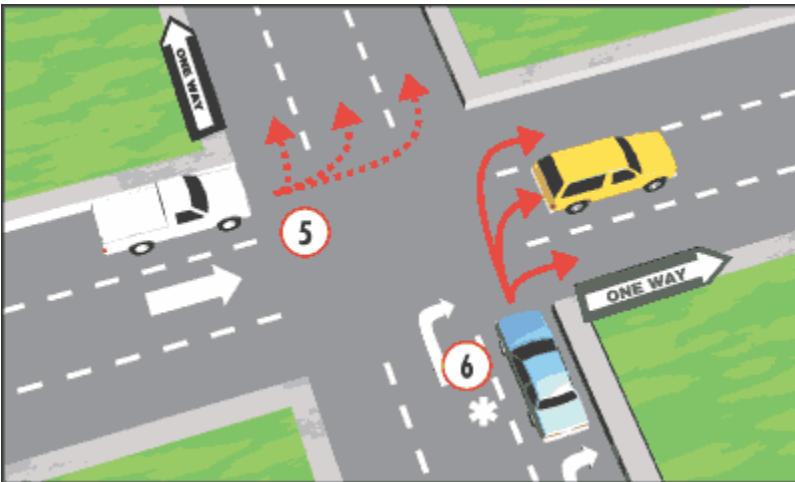
2. Right turn. Begin **and** end the turn in the lane nearest the right edge of the road. Do not swing wide into another lane of traffic. Watch for pedestrians, motorcyclists, and bicyclists between your vehicle and the curb. Sometimes, signs or pavement markings will let you turn right from another lane as shown by the graphic.

3. Left turn from a two-way street into a one-way street. Start the turn from the lane closest to the middle of the street. Turn into any lane that is safely open, as shown by the arrows.



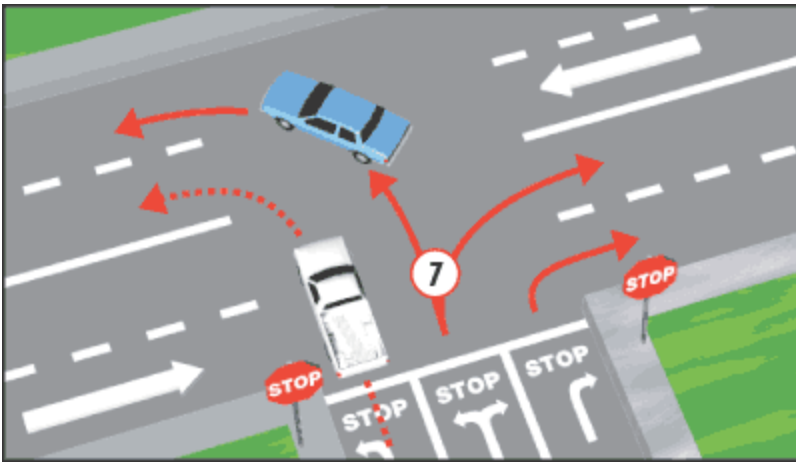
4. Left turn from a one-way street into a two-way street. Start the turn from the far-left lane. Turn into either of the lanes that are safely open, as shown by the arrows.

5. Left turn from a one-way street into a one-way street. Start the turn from the far-left lane. Watch for pedestrians, motorcyclists, and bicyclists between your vehicle and the curb because they can legally use the left turn lane for their left turns. Turn into any lane that is safely open, as shown by the arrows.



6. Right turn from a one-way street into a one-way street. Start the turn in the far right lane. If safe, you may end the turn in any lane. Sometimes, signs or pavement markings will let you turn right from another lane, as shown by the graphic.

7. Turn at a "T" intersection from a one-way street into a two-way street. Through traffic has the right-of-way. You may turn either right or left from the center lane. Watch for vehicles, motorcyclists, and bicyclists inside your turn.



Right Turns. Here are some rules to help prevent right-turn accidents:

- Turn slowly to give yourself and others more time to avoid problems.
- If you are driving a truck or bus that cannot make the right turn without swinging into another lane, turn wide as you complete the turn. Keep the rear of your vehicle close to the curb. This will stop other drivers from passing you on the right.
- Do not turn wide to the left as you start the turn. A following driver may think you are turning left and try to pass you on the right. You may crash into the other vehicle as you complete your turn.
- If you must cross into the oncoming lane to make a turn, watch out for vehicles coming toward you. Give them room to go by or to stop. However, do not back up for them, because you might hit someone behind you. See Figure 2.13.
- Upon a highway having an additional lane or lanes marked for a right turn by appropriate signs or markings, the driver of a vehicle may turn right from any lane designated and marked for that turning movement. CVC 22100(3)

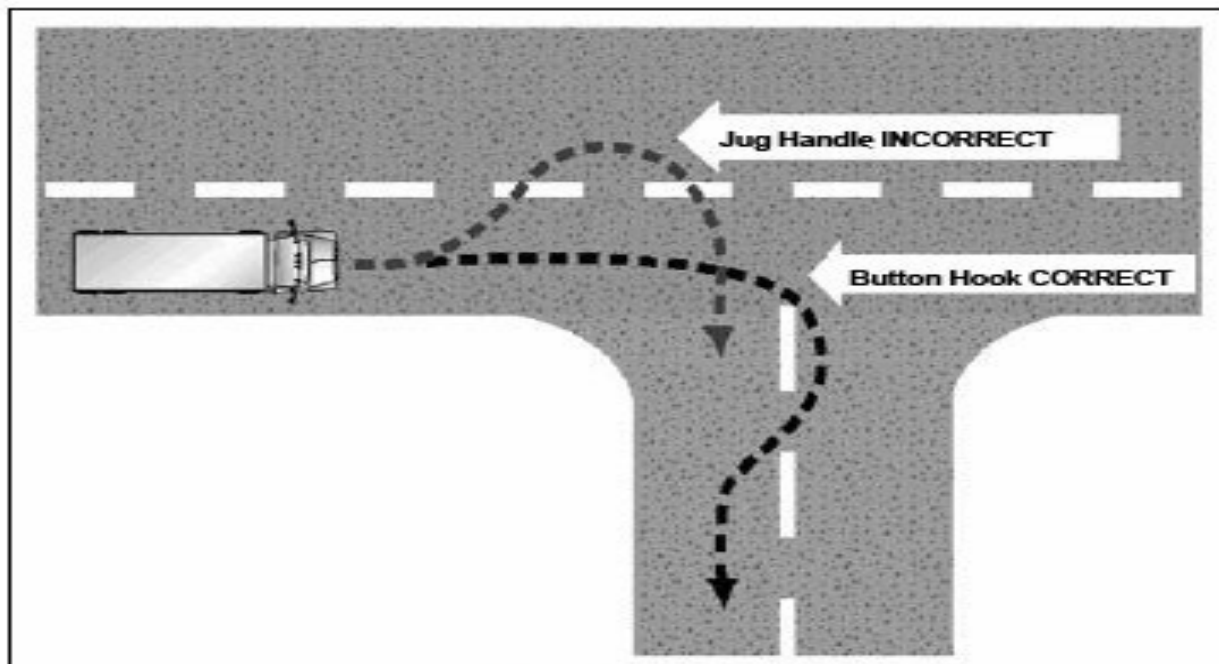


Figure 2.13

INTERSECTIONS

As you approach an intersection:

- Check traffic thoroughly in all directions
- Decelerate gently

If you must stop at an intersection:

- Come to a smooth stop without skidding
- Come to a complete stop behind the stop line, crosswalk or stop sign
- If stopping behind another vehicle, stop where you can see the rear tires of the vehicle ahead of you.
- Keep the front wheels aimed straight ahead
- Your vehicle must not roll backward

When driving through an intersection:

- Check traffic thoroughly in all directions
- Decelerate and yield to any pedestrians and traffic in the intersection
- Changing lanes while proceeding through the intersection is not recommended
- Keep your hands on the wheel

Once through the intersection:

- Continue checking traffic
- Accelerate smoothly
-

URBAN / RURAL VEHICLE SPACING

During this part of the test, you are expected to make regular traffic checks and maintain a safe following distance (see diagram below for Heavy Vehicle Spacing). Your vehicle should be centered in the proper lane and you should keep up with the flow of traffic but do not exceed the posted speed limit. You need at least 1 second for each 10 feet of vehicle length at speeds below 40 mph. At greater speeds, you must add 1 second for safety. Over 40 mph, you would need 5 seconds for a 40-foot vehicle and 7 seconds for a 60-foot vehicle.

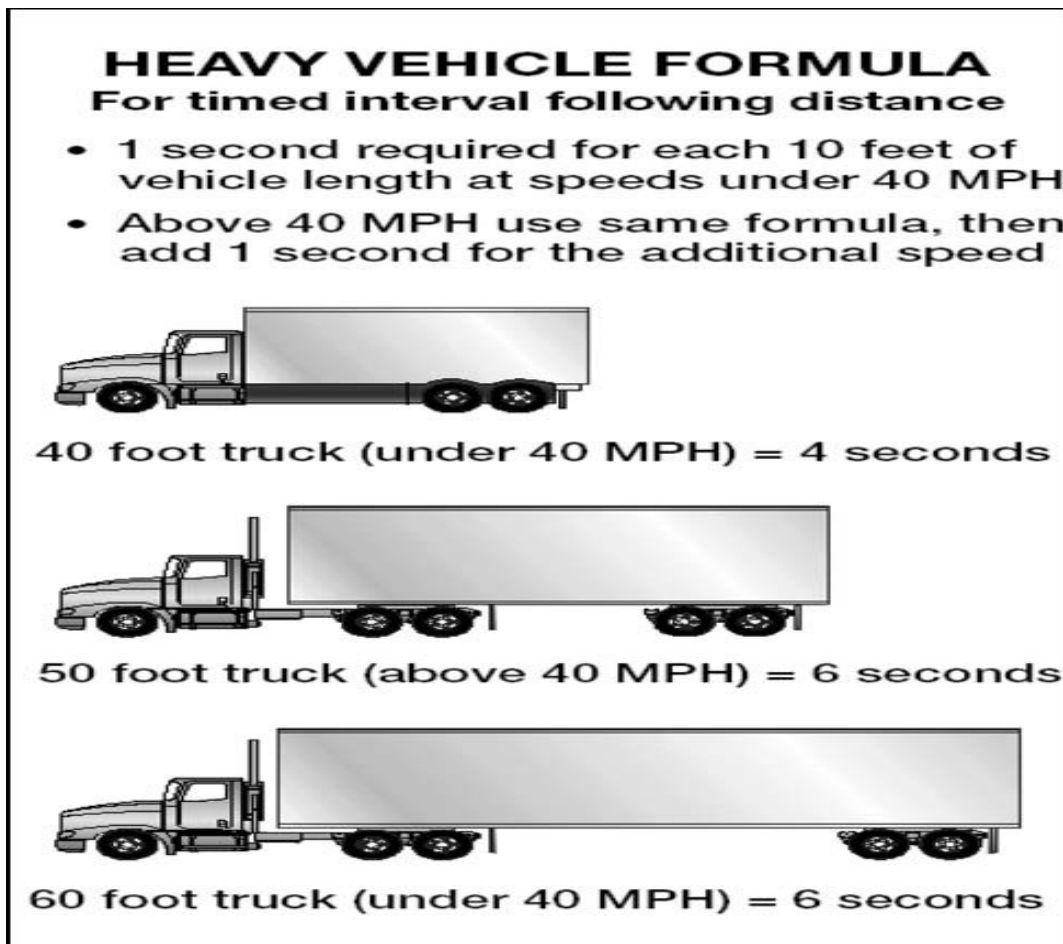


Figure 2.12

LANE CHANGES

During a multiple lane portion of the drive test, you will be asked to change lanes to the left, and then back to the right. You should make the necessary traffic checks first, then use proper turn signals and smoothly change lanes when it is safe to do so.

FREEWAY DRIVING

Before entering the freeway;

- Check traffic thoroughly in all directions
- Use proper turn signals
- Merge smoothly into the proper traffic lane

Once on the freeway;

- Maintain proper lane position (slow lane unless passing)
- Maintain proper distance
- Maximum Speed is 65 mph unless you are driving a Truck or tractor with three or more axles then maximum speed is 55 mph.
- All signs are to be followed this includes speed limits, advisory speed signs, road hazards, construction zones, etc.
- Continue to check traffic in all directions

You may be instructed to change lanes:

- Continue to check traffic in all directions
- Use proper turn signals
- Change lanes smoothly when it is safe to do so

When exiting the freeway:

- Continue to check traffic in all directions
- Use proper turn signal
- Decelerate smoothly
- Once on the exit ramp, you must continue to decelerate within the lane markings and maintain adequate following distance

STOP / START

For this maneuver, you will be asked to pull your vehicle over to the side of the road and stop as if you were going to get out and leave the vehicle

- Check traffic thoroughly in all directions
- Turn on your right turn signal
- Decelerate smoothly
- Brake evenly, change gears as necessary (manual transmission)
- Bring your vehicle to a full stop without coasting

Once stopped:

- Vehicle must be parallel to the curb or shoulder of the road and safely out of traffic flow
- Vehicle should not be blocking driveways, fire hydrants, intersections, signs, etc.
- Cancel your right turn signal
- Activate 4-way flashers
- When parking on a hill, properly chime wheels to the curb, follow department policy when backing apparatus.
- Apply parking brake
- Move the gearshift to neutral
- Take your feet off the brake and clutch pedals

When instructed to resume:

- Check traffic thoroughly in all directions
- Turn off 4-way flashers
- Turn on left turn signal
- When traffic permits, you should release the parking brake, put the gearshift in gear and pull straight ahead (don't turn the wheel before your vehicle starts to move)
- Continue checking traffic in all directions, especially to the left
- Steer and accelerate smoothly into the proper lane when safe to do so
- Once your vehicle is back into the flow of traffic, cancel your left turn signal

CURVE

When approaching a curve:

- Check traffic thoroughly in all directions
- Before entering the curve, reduce speed so further braking or shifting is not required in the curve
- Keep the vehicle in the lane
- Continue checking traffic in all directions

UPGRADE / DOWNGRADE

As you approach and proceed on an upgrade:

- Select the proper gear to maintain speed and not lug the engine
- Check traffic thoroughly in all directions
- If not already there, move to the right lane
- Use 4-way flashers when applicable, when traveling too slowly for the flow of traffic
- If traffic behind your vehicle has reached 5, pull to the curb and allow traffic to pass
- Accelerate/Decelerate/Brake smoothly

As you approach and proceed on a downgrade:

- Downshift as needed to help control engine speed and test brakes by gently applying the foot brake to ensure they are functioning properly
- Check traffic thoroughly in all directions
- Use 4-way flashers when applicable, when traveling too slowly for the flow of traffic
- Increase the following distance and observe the following downhill braking procedures
 - Select a "safe" speed, one that is not too fast for the weight of the vehicle, the length and steepness of the grade, the weather and road conditions
 - Once a safe speed has been reached, apply the brake hard enough to feel a definite slowdown
 - When speed has been reduced to 5 mph below the "safe" speed, release the brakes
 - Once the speed has increased to the safe speed, repeat the procedure to the bottom of the grade, cancel 4-way flashers
- When operating any commercial vehicle, do not ride the clutch, race the engine, change gears, or coast while driving down the grade

RAILROAD CROSSING

Before reaching the railroad crossing, all commercial drivers should:

- Decelerate, brake smoothly, and shift gears as necessary
- Look and listen for the presence of trains/trolleys'
- Check traffic thoroughly in all directions

- Do not stop, change gears, pass another vehicle, or change lanes while any part of your vehicle is in the crossing
- If you are driving a bus, or a vehicle displaying placards, you should be prepared to observe the following procedures at every railroad crossing
 - As the vehicle approaches a railroad crossing, activate the 4-way flashers
 - Stop the vehicle within 50 feet but not less than 15 feet from the nearest rail
 - Listen and look in both directions along the track for an approaching train/trolley. If operating a bus, you may also be required to open the window and door prior to crossing the tracks
 - Keep hands on the steering wheel as the vehicle crosses the tracks
 - Do not stop, change gears, or change lanes while any part of your vehicle is proceeding across the tracks
 - cancel 4-way flashers

School Zone

- When driving within 500 to 1,000 feet of a school while children are outside or crossing the street, the speed limit is 25 mph unless otherwise posted.
- Also, if the school grounds have no fence and children are outside, never drive faster than 25mph.
- “When Children are present” the posted school speed limit is in force when while children are in marked crosswalks, waiting at the curb or shoulder to cross the road, or are walking along the roadway on the sidewalk or shoulder
- Yield to traffic/pedestrians/children
- Yield to stopped bus when red light flashing

BRIDGE / OVERPASS / SIGN

After driving under an overpass:

- You may be asked to tell the examiner what the posted clearance or height was

After going over a bridge:

- You may be asked to tell the examiner what the posted weight limit was

If your test route does not have an overpass or bridge:

- You may be asked about another traffic sign
- When asked, be prepared to identify and explain to the examiner any traffic sign which may appear on the route

HAZARDOUS ROADS/WORK ZONES

- When approaching an authorized emergency vehicle stopped on the roadside or a work zone, proceed with cautions by slowing and yielding the right-fo-way by changing into a lane not next to that of the authorized emergency vehicle or work zone if safety and traffic conditions permit. If a lane change is unsafe, slow down and proceed with caution while maintaining a safe speed for traffic conditions. Decrease your speed for adverse weather or road conditions and decrease your speed even further when a worker is close to the roadway.

During the driving test you must;

- Wear your safety belt
- Obey all traffic signs, advisory signs, signals, and laws
- Complete the test without an accident or moving violation

Brake / Lane Usage;

- Do not ride or pump the brakes
- Do not brake harshly. Brake smoothly using steady pressure
- Do not drive the vehicle over curbs, sidewalks, or lane markings
- Stop behind the stop lines, crosswalks or stop signs
- Complete a turn in the proper lane on a multiple lane road
- Move or remain in the far-right lane unless the lane is blocked
- When stopped behind a vehicle you must be able to see the rear wheels. If you cannot see them your too close.

Steering methods:

- **Hand-to-Hand**-also called “push/pull” steering is recommended when using a vehicle with an air bag on the steering wheel. Start with hands at 9 and 3 o’clock , or 8 and 4 o’clock.
- **Hand-Over-Hand Steering**- This method of steering can be used when turning at low speeds, parking, or recovering from a skid. When using this method, start with your hands at 9 and 3 o’clock, or slightly lower at 8 and 4 o’clock. Depending on the direction you are turning, one hand will push the wheel up, while the other hand will let go, reach across the other arm, grasp the wheel, and pull up.
- **One Hand Steering** is only recommended when turning while backing, or operating vehicle controls that require removing a hand from the steering wheel.

Clutch / Gear Usage (manual transmission)

- Always use clutch to shift
- Do not rev or lug the engine
- Do not ride the clutch to control speed, coast with the clutch depressed, or pop the clutch
- Do not grind or clash gears
- Select gear that does not rev or lug engine
- Do not shift in turns

Shut down Procedures

- Set parking brake
- Turn off all lights
- Observe all gauges
- Place transmission in neutral
- Shut down engine
- Turn off battery switch
- Place wheel blocks properly

Driving Skills

Three of the six following CDL skills are examples of what is required when you take initial DMV skills test.

Straight line backing

- You will back your vehicle 100 feet in a straight line between two rows of cones without touching or crossing over the boundaries

Offset Backing Right

- You will pull forward from a lane and stop at a barrier, you will then back up so your vehicle is positioned in the lane to the right of the lane you started in. you must continue backing until the front of the vehicle has cleared the forward set of cones.

Offset Backing Left

- You will pull forward from a lane and stop at a barrier, you will then back up so your vehicle is positioned in the lane to the left of the lane you started in, you must continue backing until the front of the vehicle has cleared the forward set of cones.

Alley Dock

- You will back your vehicle from the sight side into an alley, bringing the rear of the vehicle within three feet of the rear of the alley without going beyond side boundary.

Parallel Park (sight side)

- You will park in a parallel parking space that is on your left. You will drive past the space and back into the space getting the entire vehicle (tractor and trailer for class A) completely into the space.

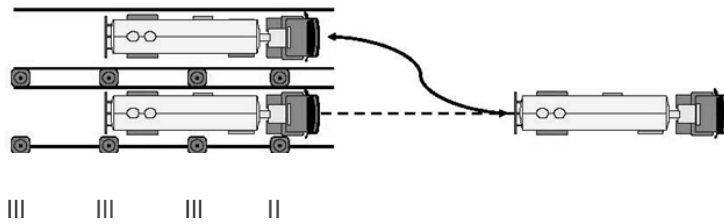
Parallel Park (conventional)

- You will park in a parallel parking space that is on your right. You will drive past the space and back into the space getting the entire vehicle (tractor and trailer for class A) completely into the space.

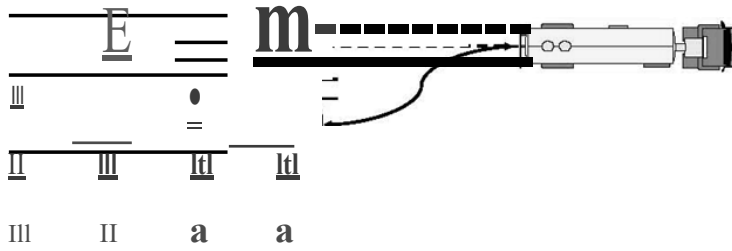
Straight Line Backing



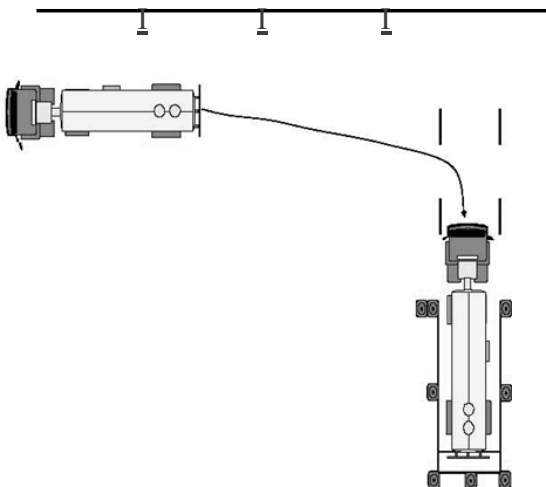
Offset Back/Left



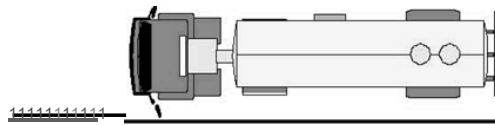
Offset Back/Right



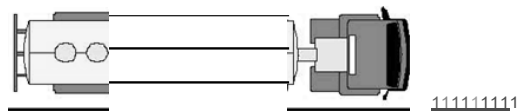
Alley Dock



Parallel Park (Sight Side)



Parallel Park (Conventional)



Pre/Post Inspection

Inside Cab Check

- **Emergency Equipment**
 - 10 B:C rated fire extinguisher, fully charged
 - 3 reflective triangles
 - Spare fuses
- **Safety Belts**
 - Proper operation; anchorage
 - Latch and unlatch properly
- **Steering Wheel**
 - No more than 10 degrees free play; secure
- **Horn**
 - All horns operational
- **Gearshift/Clutch**
 - Working properly
 - Secure
- **Heater & Defroster**
 - Proper operation
- **Lights & Turn indicators**
 - Left and right turn signals
 - 4 way flashers
 - high beams
- **Wipers & Washer**
 - Condition of blades
 - Adequate fluid
 - Operational
- **Water Temperature Gauge**
 - Rising properly
 - No overheating
- **Oil Pressure Gauge**
 - Proper pressure
- **Volt Meter**
 - Should read around 14 volts
- **Fuel**
 - Adequate fuel level
 - Proper gauge operation
- **Mirrors**
 - Clean; not damaged
 - Properly adjusted

- **Windshield**
 - Clean; not damaged
 - No illegal stickers, decals
- **C O A L S & Parking Brake**
 - See Air Brake Instructions

Engine Compartment

- **Oil Level**
- **Coolant Level**
- **Transmission Fluid Level**
- **Power Steering Fluid Level**
- **Steering Gear Box**
 - Secure; not leaking
- **Steering Linkage**
 - Secure; lubed
 - turning properly
- **Alternator/ Water Pump Belt**
 - Secure
 - Not frayed or damaged
 - Not loose; proper tension
 - No more than ¾" deflection
- **Hoses**
 - Secure, no missing clamps
 - Not leaking
 - Not damaged
- **Wiring**
 - Not damaged or frayed
- **Air Compressor & Governor**
 - Secure
 - Not leaking
 - Gear driven

All Light Check

- **Lights and Reflectors**

Visual check, may ask examiner to assist

 - L = Left Signal
 - R = Right Signal
 - 4 = Emergency Signal
 - HL = Headlights
 - HB = Headlights High Beams
 - C = Clearance lights
 - TL = Tail Lights
 - BL = Brake Lights

Outside Check

Front

- **Lights & Reflectors**
 - Clean; not damaged or broken
- **Leaks**
 - No visible leaks

Sides & Under Truck Check

- **Doors & Mirrors**
 - Proper operation
 - Securely mounted
- **Battery Box**
 - Secure
 - No corrosion; adequate fluid
- **Frame**
 - No illegal welds
 - Not bent or damaged
- **Drive Shaft**
 - Secure couplings
 - Not bent or damaged
- **Fuel Tank**
 - Secure; Straps
 - No leaks
 - Cap on tight
- **Exhaust System**
 - Secure; Undamaged
 - No carbon trails; leaks

Rear of Truck/Trailer Check

- **Apron**
 - Clean of debris
 - No structural damage
- **Mounting Bolts**
 - Secure; undamaged
- **Air/Electrical Lines**
 - Secure; not damaged
- **Safety Devices**
 - Secure; not damaged
- **Splash Guards**
 - Secure
 - Not damaged or torn
 - Extends to center of axle

- **5th Wheel**
 - Skid plate lubed
 - Locking jaw over king pin
 - No gap
 - Locking pins in place
- **Tongue Storage/Catwalk, Steps**
 - Secure, no debris
 - Not damaged
- **Landing Gear**
 - Secure, handle in place
 - In the proper position
 - Not damaged

All Suspension Check

- **Spring Mounts**
 - Secure; no missing parts
- **U bolts**
 - Not missing or broken
- **Leaf Springs**
 - Not missing or broken
 - No distorted coils
- **Shock Absorbers**
 - Securely mounted to frame
 - Not leaking
 -

All Brakes

- **Slack Adjusters**
 - Proper adjustment 90°
 - Push rod 1" maximum movement
- **Brake Chamber**
 - Secure; undamaged
- **Hoses & Lines**
 - Not cracked; worn; frayed
 - Secure couplings
- **Drums & Linings**
 - No cracks; dents;
 - Minimum ¼" thick
 - No oil; debris

All Tires

- **Rims**
 - Not damaged; bent
 - No weld repairs
- **Tires (ICD)**
 - Inflation
 - Overall condition
 - Minimum tread depth
 - 4/32 front; 2/32 rear
 - Matching size
 - Valve stem; cap
 - No re-grooved on front
- **Lug Nuts**
 - None missing; loose
 - No rust; cracks
- **Hub Oil/ Axle Seals**
 - No leaks; seals
- **Space**
 - Free of debris
 - Tires not rubbing

Basic Air Brake Inspection

<h3>Cut In</h3>	<ul style="list-style-type: none">• With full air tanks, (or with needle stopped) pump the service brake to reduce air pressure by approximately a maximum of 10 psi (1 pump) and wait 20 seconds.• Step on the accelerator to 1500 rpm's and see if the needle of the air gauge begins to rise denoting the compressor has turned on. If not, repeat the procedure until the needle of the air gauge begins to rise denoting the compressor has turned on.• <u>CUT IN</u> must occur before the minimum of 100 psi.• Inform the examiner at what psi the needle began to rise and the compressor turned on.• If cut in doesn't happen by 100 psi, turn the vehicle in for repair.
<h3>Cut Out</h3>	<ul style="list-style-type: none">• Watch the needle rise and stop, (denoting the compressor has turned off).• <u>CUT OUT</u> must occur by the maximum 140.• Inform the examiner at what psi the needle stopped, and the compressor turned off• If cut out doesn't happen by 140 psi, turn the vehicle in for repair
<h3>Applied Air Leakage</h3>	<ul style="list-style-type: none">• With full pressure in the air tanks (cut out)• Shut the engine off• Turn the key to "accessory"• Release the parking brake (s)• Apply the service brake• Let the gauges settle• After initial air loss, wait for 1 minute• <u>APPLIED AIR LEAKAGE</u> must not drop more than 3 psi for a straight truck or 4 psi for a combination tractor/trailer.• Inform the examiner what psi is acceptable to lose and how much psi the vehicle has lost.• If the apparatus loses more than the allotted psi, turn the vehicle in for repair.
<h3>Low Pressure</h3>	<ul style="list-style-type: none">• Pump the service brake until the red light appears and the alarm sounds.• <u>LOW PRESSURE</u> must occur between 75 and 55 psi.• Inform the examiner at what psi the audio and visual alarms appeared.• If the low-pressure alarms have not come on by 55 psi, turn the vehicle infor repair.
<h3>Spring Brake</h3>	<ul style="list-style-type: none">• With the parking/emergency brake, and/or tractor protection (class A) valve in the off position (open), pump the service brake to reduce air pressure until the parking brake/tractor protection valve pops out (closes)• <u>SPRING BRAKE TEST</u> must occur between 45 and 20 psi• If the spring brake does not pop on by 20 psi turn the vehicle in for repairs

Parking Brake

- With the parking brake engaged, and the engine on, place the transmission in drive. Release the service brake if applied. Accelerate foot throttle no more than 1000 rpm, gently pulling against the parking brake, testing if the parking brake will hold (vehicle should not move)
- If the vehicle moves, turn the vehicle(s) in for repair

Service Brake

- With the parking brake and the trailer protection valve in the off (closed) position, put the vehicle in drive, accelerate to 5 mph and apply the service brake to see if the vehicle(s) stops and/or pulls to one side or the other.
- If the vehicle does not stop or pulls to one side or the other, turn the vehicle in for repair

Anti-lock Brake System (ABS) Check

- On all ABS equip vehicles, when starting the vehicle, check to ensure the ABS lighting indicator illuminates and promptly turns off.
- On combination vehicles when starting the vehicle, check the driver's side of the trailer to ensure the ABS light indicator illuminates and promptly turns off.
- If the ABS light remains illuminated, turn the vehicle in for repairs.

Air Pressure Build Up Test

- Engine must be running at normal operating idle.
- With air pressure below 80 psi, watch the gauge when the gauge reads 85 psi time the compressor build up to 100 psi.
- The compressor must build the air from 85 psi to 100 psi within 45 seconds.
- Inform the examiner how many seconds it took for the air pressure to build from 85 psi to 100 psi
- If the buildup doesn't happen within 45 seconds, turn the vehicle in for repair