

Dear Student:

This is a training aide to help you earn your CDL license. This is the exact study sheet that is used in Indiana. Different school districts or CDL schools use different sheets but the information is the same. Some have more information and some less. This sheet has been developed by experience, trial and error. If you learn it you will pass.

When you take your test make sure to point to and/or touch the items you are describing. Be prepared for the examiner to ask you a few questions about the parts. Also prepare for examiners to “move you along” if they have heard enough to qualify that you know what you are doing.

This study sheet is set up in two columns. Parts and Problems. That is what the examiner wants to hear. Point to the part, they describe how you would check the part to make sure it is serviceable. You talk about the part, then the problem.

Thank you for your purchase and good luck.

Parts

Problems

FRONT OF BUS

Overall check of the bus:

As I approach the bus I will do an overall check of my bus looking for obvious damage. No leaks under my engine compartment.

Lights:

Clearance Lights

Warning Lights (2 Amber, 2 Red)

Turn Signals and Hazard Lights

Parking Lights

High and low beam Headlights

All lights work, Lenses are the proper color, not cracked, broken or missing.

Mirrors:

Securely mounted, not cracked, clean,

Cooling System:

(open panel) Fluid level proper for operation. No leaks.

Power Steering Pump, Cylinder and Hoses:

(open panel) Fluid level proper for operation.
No damage. No leaks.

DRIVER'S SIDE FRONT

Lights:

Clearance Lights (2 Amber, 1 Red)
Side Turn Signal and Hazard Lights
Reflectors, (2 Amber, 1 Red)
Stop Arm Lights

All lights work, lenses are the proper color, not cracked, broken or missing.

(2) Stop Arms:

Securely mounted, not damaged, no loose fittings.

Steering System:

Steering Gear Box & Hoses

Securely mounted, not damaged, or leaking. No missing nuts or bolts.

Pitman Arm,
Drag Link,
Steering Knuckles,
Tie Rod Ends

Securely mounted, not damaged, loose or worn.

Castle Nuts & Cotter Pins

Not damaged. None missing.

Front Suspension System:

Spring Mounts

Securely mounted to the frame, not damaged.

Leaf Springs

In alignment, not damaged or missing.

U-bolts, Bushings and Brackets
Shock Absorbers

Not damaged, missing or worn.
Securely mounted, at the top and bottom, not damaged or leaking.

Front Brake System:

Air Line Hoses

Securely mounted, not damaged, cracked or leaking.

Brake Chambers

Securely mounted to the bracket, no dents, no leaks. C clamp secure around the chamber.

Slack Adjuster and Push Rod

Securely mounted, not damaged. Push Rod has no more than 1" inch free play when the break is released. No missing parts.

Brake Drum

Not damaged or cracked. No oil or grease present.

Brake Lining

Not damaged or cracked. No oil or grease present. Lining cannot be worn dangerously thin.

Front Wheel Assembly System:

Tires

Properly inflated, no damage, no cuts or bulges on the sidewalls. Tread is worn evenly, minimum tread depth allowed is 4/32" inch.

Rims

Not cracked, bent or welded. No rust.

Lug Nuts

None missing. Tight. No rust.

Inner and Outer Hub Oil Seals

Bolts are tight. Not leaking.

UNDER THE BUS

Luggage Compartments:

Not damaged, opens properly, latches securely.

Frame:

Check along the entire frame, straight, no cracks, bends or welds. No damaged, loose or missing cross members. No holes in the floor.

Drive Shaft:

Drive Shaft

Not bent or cracked.

U-Joints and Shaft Couplings

Secure, free of foreign objects.

Exhaust System, Muffler and Tailpipe:

Check along the entire exhaust, securely mounted, no cracks, holes or leaks.

DRIVERS SIDE REAR

Rear Suspension System:

Airbags and Air Line Hoses

Securely mounted, top and bottom, no damage, no leaks.

Spring Mounts

Shock Absorbers

I would check the way as I checked in the front.

Rear Brake System:

Air Line Hoses

Brake Chambers

Slack Adjuster and Push Rod

Brake Drum

Brake Lining

I would check the same way I checked the front.

Rear Wheel Assembly System:

I would check the rear wheel assembly the same as the front EXCEPT:

(2) Tires

Minimum tread depth allowed is 2/32" inch.

Wheels

Evenly spaced with no obstruction between the tires.

Inner and Outer Axle Seals

Checked the same as the Hub Oil Seals.

Rims, Lug Nuts

Checked the same as the front.

Mud Flap

Securely mounted, not damaged.

BACK OF THE BUS

Lights:

Strobe Light on top of the bus.

Clearance Lights (3 Red)

Warning Lights (2 Amber 2 Red)

Turn signals and Hazard lights

(4) Break and Tail lights

Back Up lights

License Plate lights

Reflectors (2 Red)

Reflective Tape

All lights work, Lenses are the proper color, not cracked, broken or missing.

Emergency Door:

Opens fully, Door Hold Open works properly, Hinges, Handle and Door Seal not damaged. Door latches properly.

DOOR SIDE OF THE BUS

Say, "I will check this side of the bus the same as the other side."

Fuel Tank:

Cap

Secure

Mounting Straps

Not damaged, securely mounted.

Tank

Not damaged and there are no leaks.

Door & Door Seal:

Door is clean, no cracks. Door Seal is not damaged.

Passenger Entry:

No obstructions, no loose treads, no loose screws. Hand Rails are securely mounted. Step Light works, not damaged.

[Take a moment to make sure you have not missed anything outside. Once inside you will not be able to correct mistakes or add to the outside presentation.]

INSIDE THE BUS

Engine Compartment:

Water Pump:	Securely mounted, not damaged or leaking. It is belt driven.
Alternator:	Securely mounted, not damaged, wiring not frayed or loose. It is belt driven.
Serpentine Belt:	Deflection should be between 1/2" to 3/4" inch. Not damaged, cracked, frayed or worn.
All Hoses:	Securely mounted, not damaged or leaking.
Power Steering Pump:	Securely mounted, not damaged or leaking. It is gear driven.
Air Compressor, Governor and Hoses:	Securely mounted, not damaged or leaking. The Air Compressor is gear driven.
Manifold and Exhaust Pipe:	Securely mounted, not damaged or leaking. No cracks or holes.
Transmission Fluid & Oil Dipsticks:	Fluid level is in the proper operating range. No leaks.

Safety Equipment:

First Aid Kit	Properly supplied.
Body Fluid Clean Up Kit	Properly supplied.
Fire Extinguisher	Fully charged when the arrow is in the green area.
Three Reflective Triangles	(Point to them)
Extra Fuses In Bulkhead	(Point to them)

Interior of the Bus:

Aisle Way	Check that the Aisle way is clear. No loose or missing metal strips or screws.
Seat Backs, Bottoms and Frames	Securely mounted. No loose or missing screws. (Check as many as are required.)
(6) Emergency Windows (2) Emergency Hatches (1) Emergency Door	(open one window) "they open fully, buzzer works and closes properly."

Driver Compartment

Seat Belt: Securely mounted, not damaged, fastens properly.

Mirrors: Flat driving, convex, student and crossover mirrors. Properly adjusted inside and outside.

Safe Start the Bus: Say, "I will now perform a "Safe Start". "Bus has been parked in Neutral, parking brake On, Door closed, ABS light activates to show my ABS (anti-lock break system) is working. "I will now start the bus." (Start the bus)

Motors: Turn each one on and then off to verify that they work.

Defrost

Booster Pump

(4) Cabin Heaters

Driver Heater

Driver Fans

Windshield Wipers and Washers.

Works properly. Blades not worn or damaged. Washer works.

Windshield: Clean, free of obstructions, not cracked or broken.

Read Your Gages:

1. Temperature Gage

Reads below 210 and is normal.

2. Air Gages

Reads approx. 120 psi and are normal.

3. Voltmeter

Is charging between 12 and 14 volts.

4. Oil Pressure

Reads approx. 40 psi. and is normal.

Parking Brake: (Say it before you do it,) Say, "Next I will check the parking break. I will put the bus in drive and accelerate. The bus should not move." (accelerate) "Bus did not move."

Service Brake Check: (State it now, you will be asked to do it later during the "skills".) I would pull forward at 5 mph, apply the brake. The bus should not pull to either side and it stops when breaks applied.

Horn: "It works"

Dash Lights

Headlights, High Beams

(Activate Each Light)

Work outside and on the dash.

Clearance Lights

Come on when the headlights are on.

Left Turn Signal, Right, Hazards

Work outside and on the dash.

Panel Lights

Student Lights

Amber Warning Lights, Work outside and on the panel.

(Open Door) Red Lights, Work outside and on the panel.

Door opens properly.

Stop Arms come out and Red Lights work.

(Point to Step Light) Step Light works.

(Close Door) System Shuts Down Properly.

Strobe Light

Used during poor visibility.

[You have completed your walk around pre-trip. Look around to see if you have forgotten to say anything. Include it NOW. After you start your Air Brake Check, the examiner will not allow you to add any pre-trip items.]

Air Brake Check: I will now start my air brake check. (bus will be running) SAY IT, THEN DO IT!

1. To Start the test I will Pump my brakes to aprox. 90 psi., and wait for Air Compressor to restore the lost air. Governor shuts off the compressor between 120-140 psi. (when you hear the air dryer engage say,.....) "The governor has shut off the air compressor, the needles stopped increasing."

Next I will check for leaks in the system. I will Turn bus OFF, key back ON, release emergency brake, (push it IN knob) Hold foot brake down for 1 minute to make sure air pressure does not drop more than 3 psi. After a minute you say, "I have had no loss of air." **Then take your foot off of the break.**

2. Next I will demonstrate that the low air pressure warning light and alarm work. I will Pump the foot brake down to approx. 60 psi. (Light appears, Alarm sounds.)
3. Next I will demonstrate that the emergency pop out valve works. I will Pump foot brake down to approx. 40 psi. and the valve should pop out, activating the emergency breaks. (Valve Pops) "That concludes my airbrake check."

Student Stop:

1. 200 ft from the stop I will activate the Amber Warning Lights.
2. Observe to insure the traffic is stopping.
3. Come to a complete stop.
4. Set Parking Break.
5. Shift to Neutral.
6. Activate Red Warning Stop Lights, Stop arms come out and open door.
7. Check that Traffic has stopped.
8. Dismiss the non-crossing students when it is safe to exit.
9. Continue checking that the Traffic remains stopped.
10. When the non-crossing students are out of the danger zone I will dismiss the crossing students to exit the bus and wait for my signal it is safe to cross.
11. When it is safe to do so, I will signal the crossing students to cross. When all the students are safe, I close door. This will shuts down the lights and retract the stop arm.
12. Shift into drive.
13. Release break, check traffic to insure it is safe to merge and proceed.

Stop/Start or Emergency Stop: After you are instructed to pull off you should.....

1. Check traffic.
2. Right turn signal.
3. Steer to the roadside, Break smoothly. Come to a full stop **without coasting.**
6. Transmission in neutral, Apply emergency brake. Cancel turn signal, Activate 4 way flashers. Remove feet from pedals.
4. Vehicle should be parallel to the curb or shoulder and safely out of the traffic flow.

5. Do not block signs, driveways, fire hydrants, etc.
7. When returning to the road, Check traffic, Check all mirrors, turn off flashers, and turn on left turn signal.
8. Release the emergency brake, select Drive, accelerate Move forward. **Do not turn wheel before vehicle moves forward.** Steer and accelerate smoothly into the proper lane when safe.
9. Once in the flow of traffic, cancel your left turn signal.