

PRE-TRIP INSPECTION FOR RECERTIFICATION



TRANSIT SCHOOL BUS (Blue Bird)

October 6, 2014

The purpose of the pre-trip inspection is to be certain the driver can identify and understand the function of the parts of the bus

Recertifying Drivers:

During the pre-trip test you will be asked to give the name of the part you are describing and how you would check the part

You will be given a maximum time limit of 45 minutes to complete the pre-trip inspection. When time expires the test will stop and a score will be calculated.

You will be allowed to use the Petermann pre-trip book when you test. However, it does not have all of the information you will need to talk about.

There is no specific order you must follow when doing the pre-trip test

You must pass the pre-trip inspection portion of the test in order to proceed with the driving evaluation. If you fail the driving evaluation you will only be required to complete the driving portion when retesting.

Helpful Hints:

STUDY THE MATERIAL – LOOK OVER THE FORMS THOROUGHLY

If you implement the procedures into your daily routine you will have no issues passing your test

If you have questions please ask!

Vehicle Overview

When approaching the bus notice the general condition:

- Bus is not leaning to one side
- There are no fresh coolant, fuel, or oil leaks under the bus
- There are no hazards around the bus

Front of Bus

Start at the top of the bus and work down

All light covers are clean, not broken or missing and are of the proper color:
Point to and name all lights:

- Amber clearance lights
- Amber and red warning lights
- Amber turn signals and hazards
- Amber parking lights (if applicable)
- Clear headlights

- Windshield is clean, not damaged, has no obstructions or illegal stickers

- Mirror brackets are tight and holds mirrors in proper adjustment
- Mirrors are clean, securely mounted with no missing nuts, bolts or loose fittings

Open right access door:

- Power steering fluid should be between add and full and no signs of leaks
- Windshield washer fluid reservoir is full, cap is on tight and there are no leaks
(Maybe located on left side on some models)



Open center access door:

- Coolant level (sight glass) is full with no signs of leaks



Open left access door:

- Windshield washer fluid reservoir is full, cap is on tight and there are no leaks



Left Side of Bus – Driver’s Side

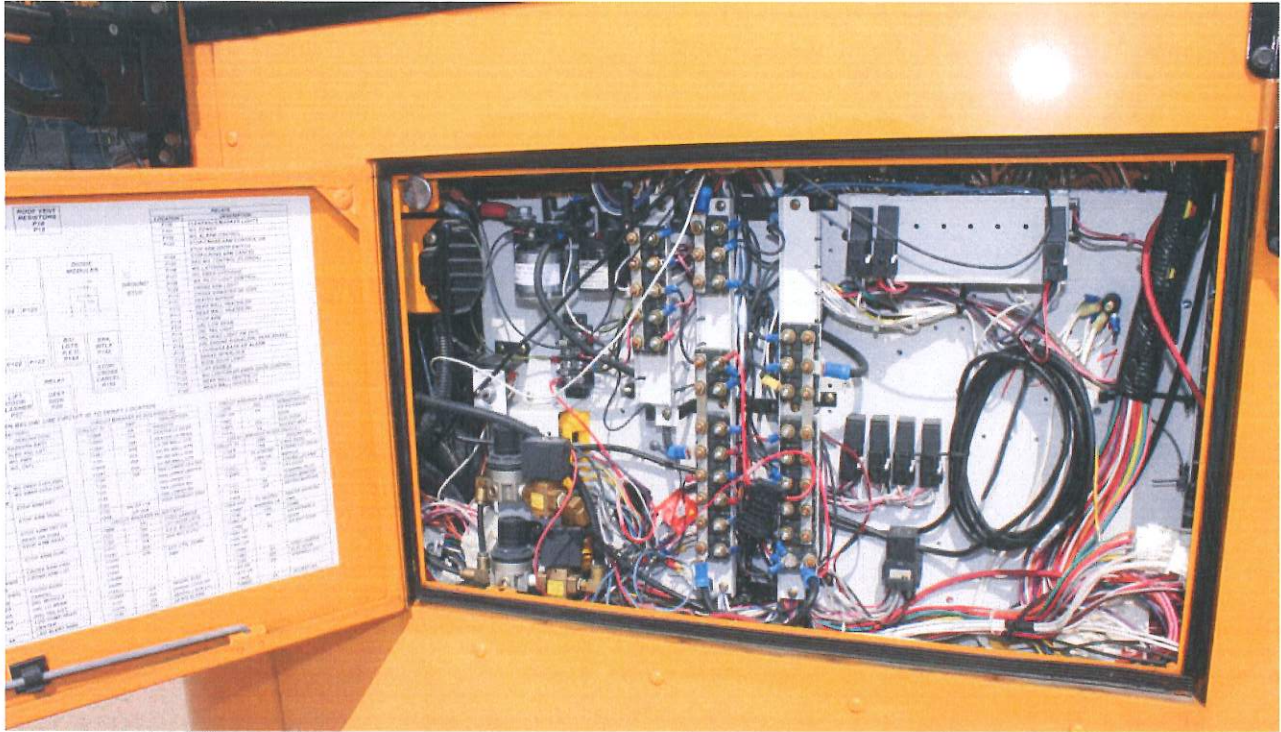
Start at top of bus and work down

- Clearance lights are clean, not missing or broken and are of the proper color:
Amber in the front and middle
Red in the rear
- Windows are clean, not broken and free of illegal stickers
- Side mounted turn signal light is secure, not broken or missing and of the proper color:
Amber
- Ohio State Highway Patrol sticker is valid
- Reflective tape is not damaged, loose or missing
- Reflectors are clean, not missing or broken and are of the proper color:
Amber in the front and middle
Red in the rear



Electrical Panel / Circuit Breakers

- Check wiring for frays, damage and foreign objects
- Bus is equipped with circuit breakers



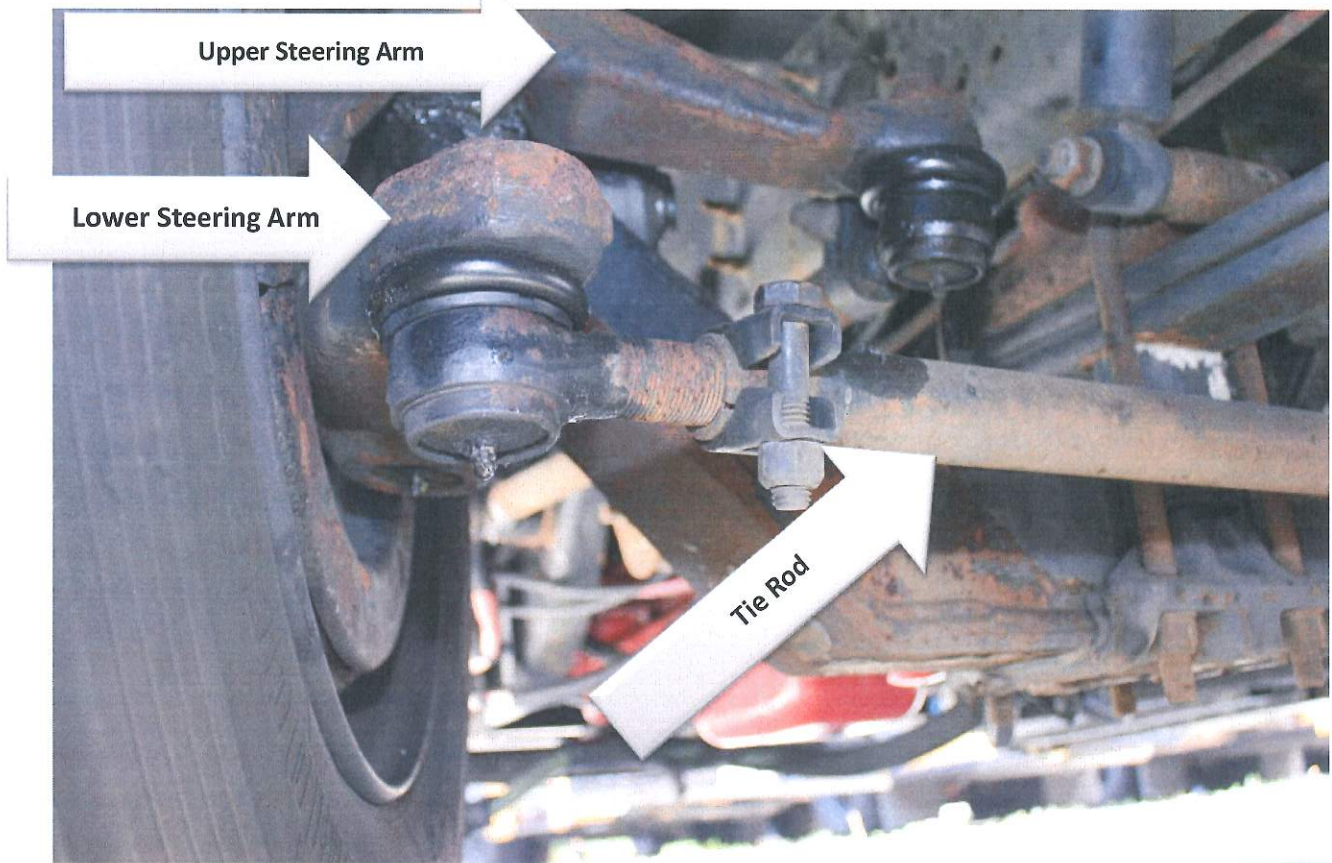
Stop Sign

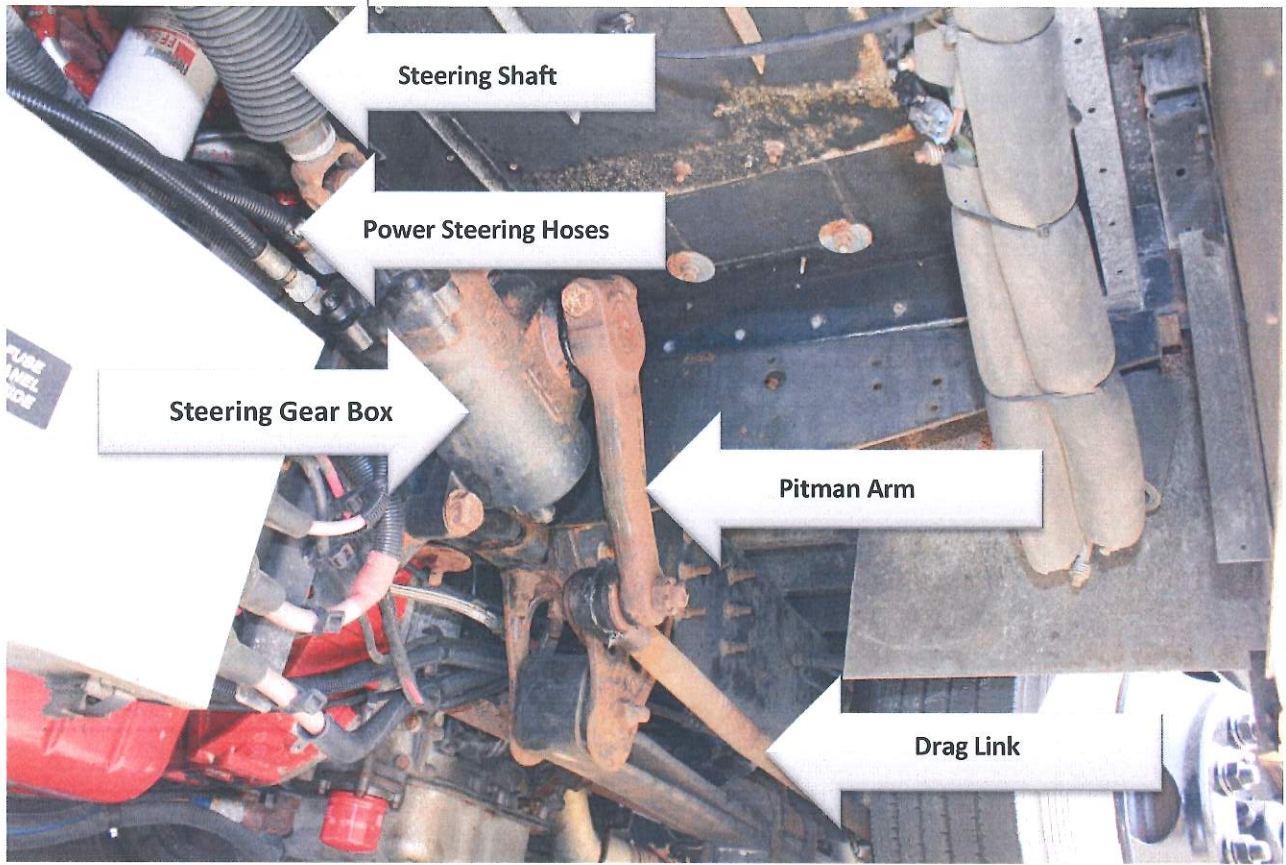
- Stop sign is mounted securely with no damage or loose fittings
- It extends fully and lights are of the proper color –Red
- There are no leaks in the air bladder
- The cable is not frayed and the cotter pin is not missing



Steering Components

- Steering gear box is securely mounted and not leaking
- Power steering hoses are secure, not damaged or leaking
- Steering Shaft - Pitman Arm - Drag Link - Tie Rod - are not worn, cracked, bent or missing nuts and bolts. Cotter pins are in place
- Steering arms are not damaged and have not missing nuts or bolts





Front Axle – Tires and Wheels

- Tread depth is at a minimum of 4/32
- No abrasions, bulges or cuts to the tread or sidewalls
- Tread is evenly worn
- Valve stem and cap are not missing, broken or damaged
- Tire inflation would be checked with a tire gauge

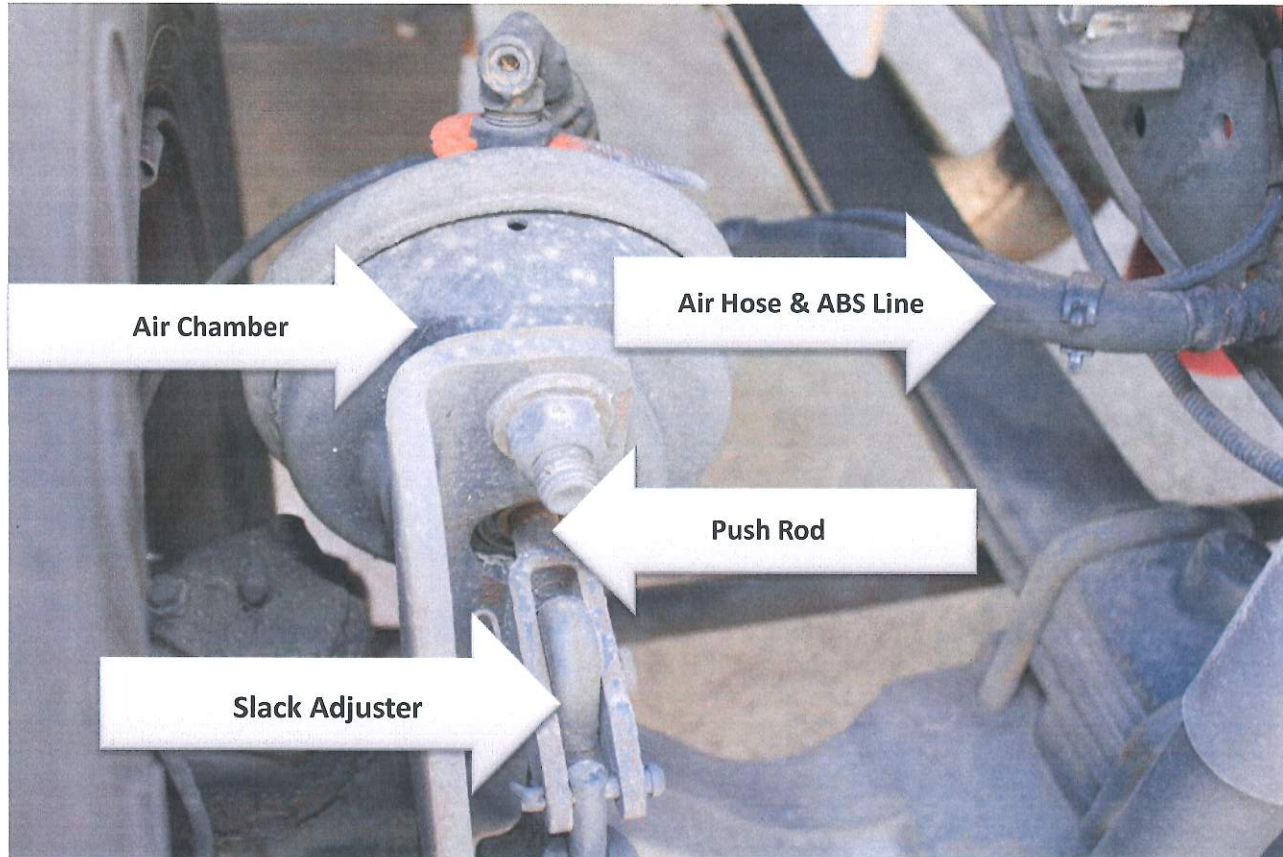
- Rim is free of cracks, bends, weld repairs and excessive rust
- Lug nuts should all be present, not loose and have no rust trails
- Hub oil seal is secure and not leaking

- Splash guard/Mud flap is securely mounted and not damaged



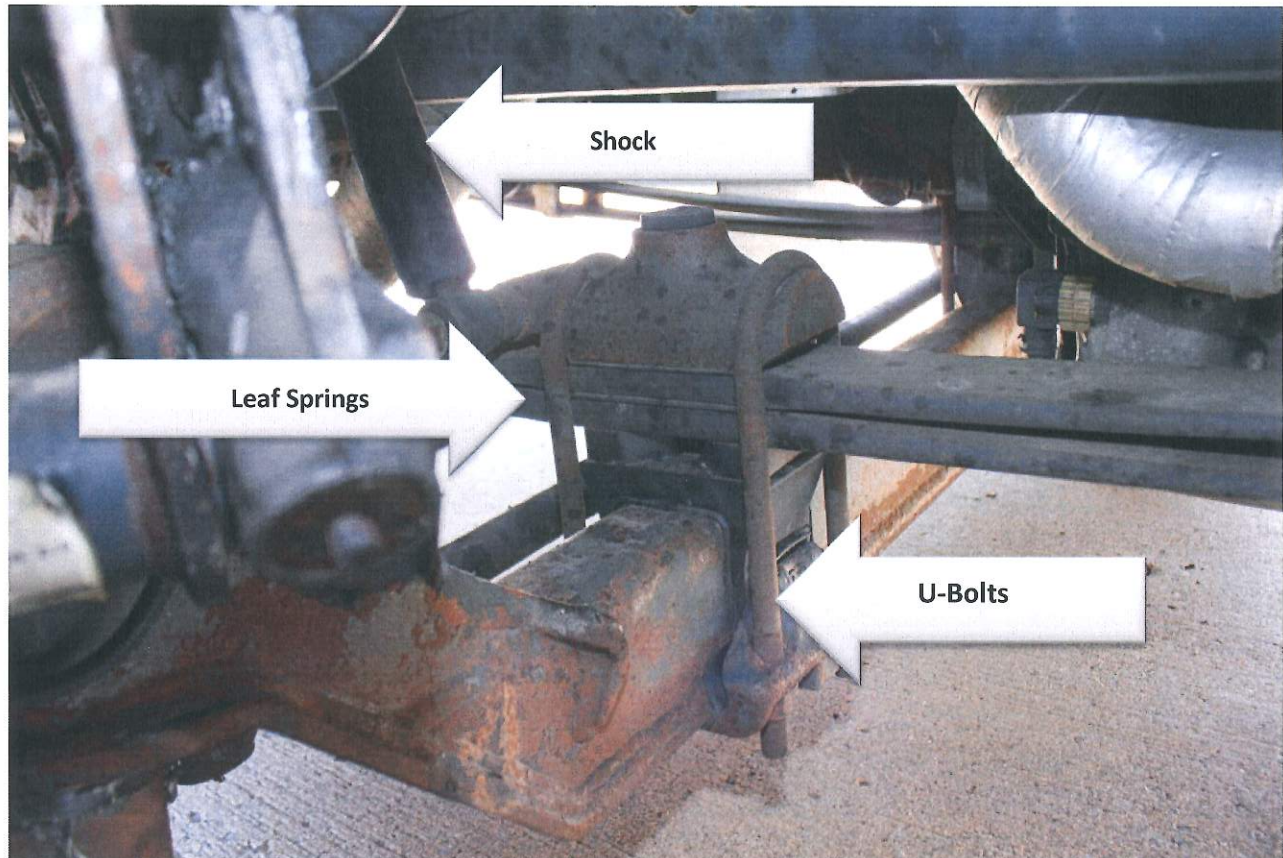
Front Axle – Brakes

- Air Hoses & ABS Lines are not cracked, worn or leaking. Hoses should be flexible.
- Air Chamber is securely mounted with no cracks, dents or leaks
- Slack Adjuster has no broken, loose or missing parts. The angle between the push rod and adjuster arm should be no less than 90 degrees when the brakes applied
- Push Rod is not bent, broken, loose or missing parts
- Brake Drums & Linings – If you could see the drums and linings check for cracks, dents, holes, loose or missing bolts. Check the linings are not worn dangerously thin.



Front Axle – Suspension

- Leaf Springs should not be missing, shifted, cracked or broken
- Spring Mounts are secure, not cracked or broken and have no missing bolts
- U-Bolts are not broken, loose or missing
- Shocks are securely bolted with no leaks



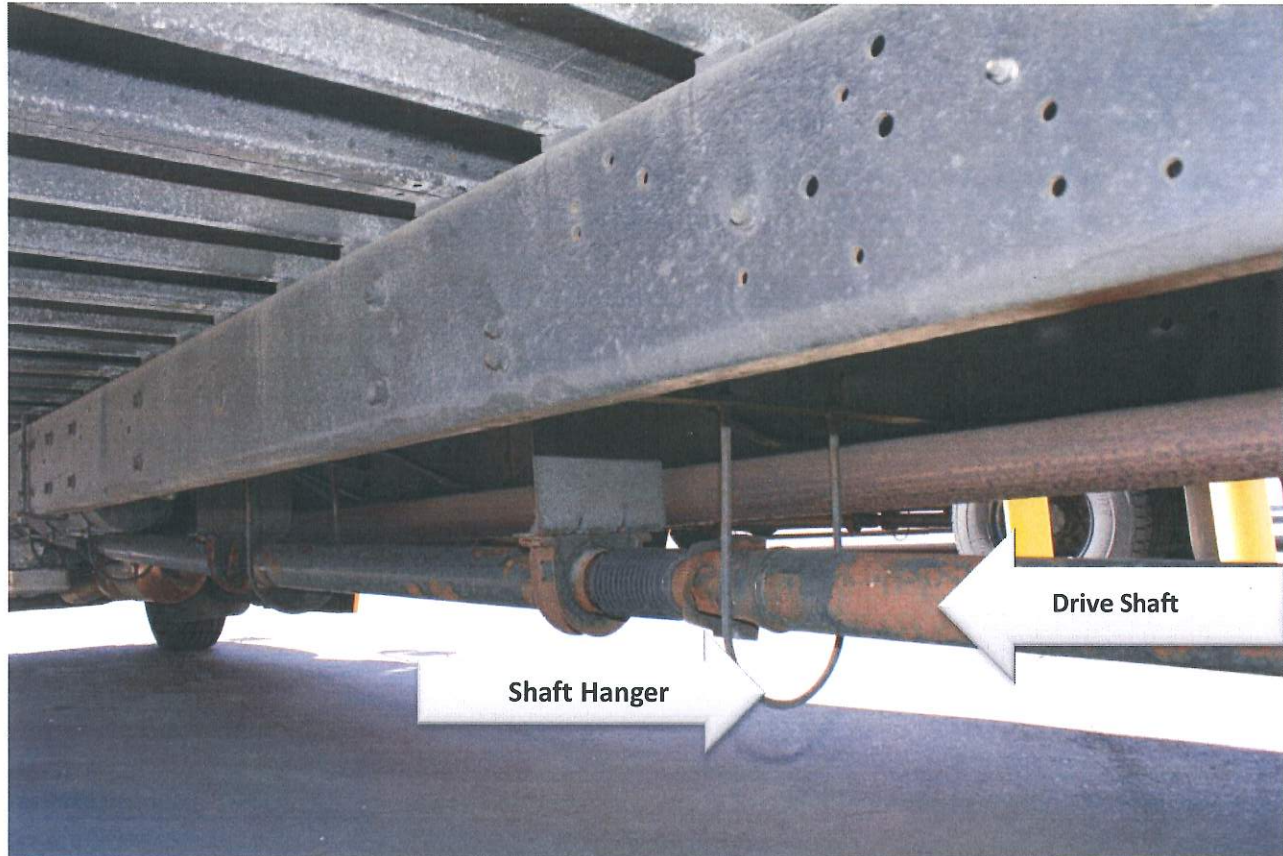
Battery Box

- Batteries are secure
- Caps are present and connections are tight
- No excessive corrosion
- No foreign objects



Under Bus – Drive Shaft

- Drive Shaft is not bent or cracked
- Shaft hangers are in place



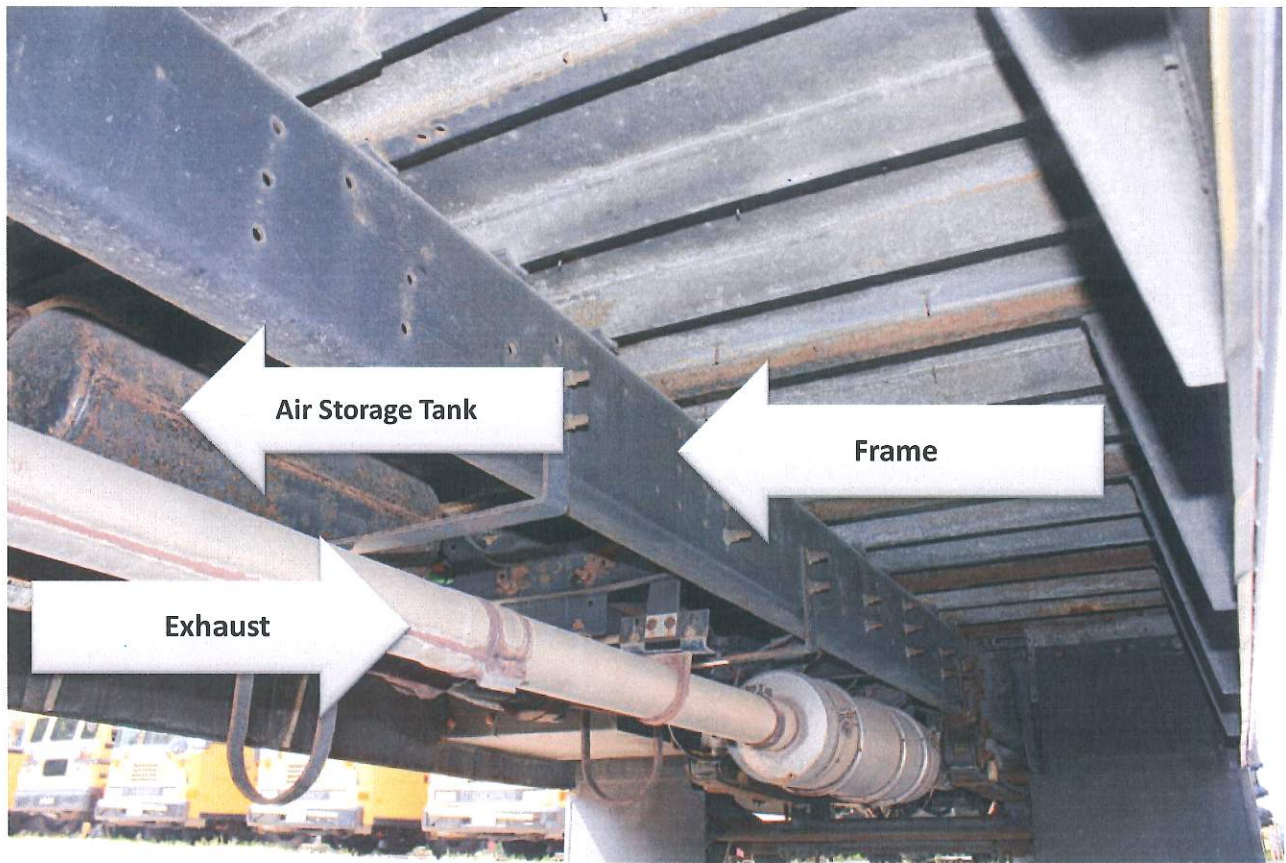
Under Bus – Exhaust/Frame/Air Tanks

- Exhaust system is connected and mounted securely
- There are no cracks, holes or dents
- There is nothing rubbing against the exhaust

- The longitudinal frame has no cracks or bends
- Cross members are not loose, cracked, bent or missing

- Floor shows no signs of breaks or holes

- Air Storage Tanks & Lines are mounted securely with no holes, damage or leaks



Rear Axle – Tires & Wheels

- Tread depth is at a minimum of 2/32
- No abrasions, bulges or cuts to the tread or sidewalls
- Tread is evenly worn
- Valve stems and caps (2) are not missing, broken or damaged
- Tire inflation should be checked with a tire gauge

- Rims should be free of cracks, bends, weld repairs and excessive rust
- Lug nuts should all be present, not loose and no rust trails

- Axle Seal is secure and not leaking

- Dual tires should be evenly separated and free of foreign objects

- Splash guard/Mud flap is securely mounted and not damaged



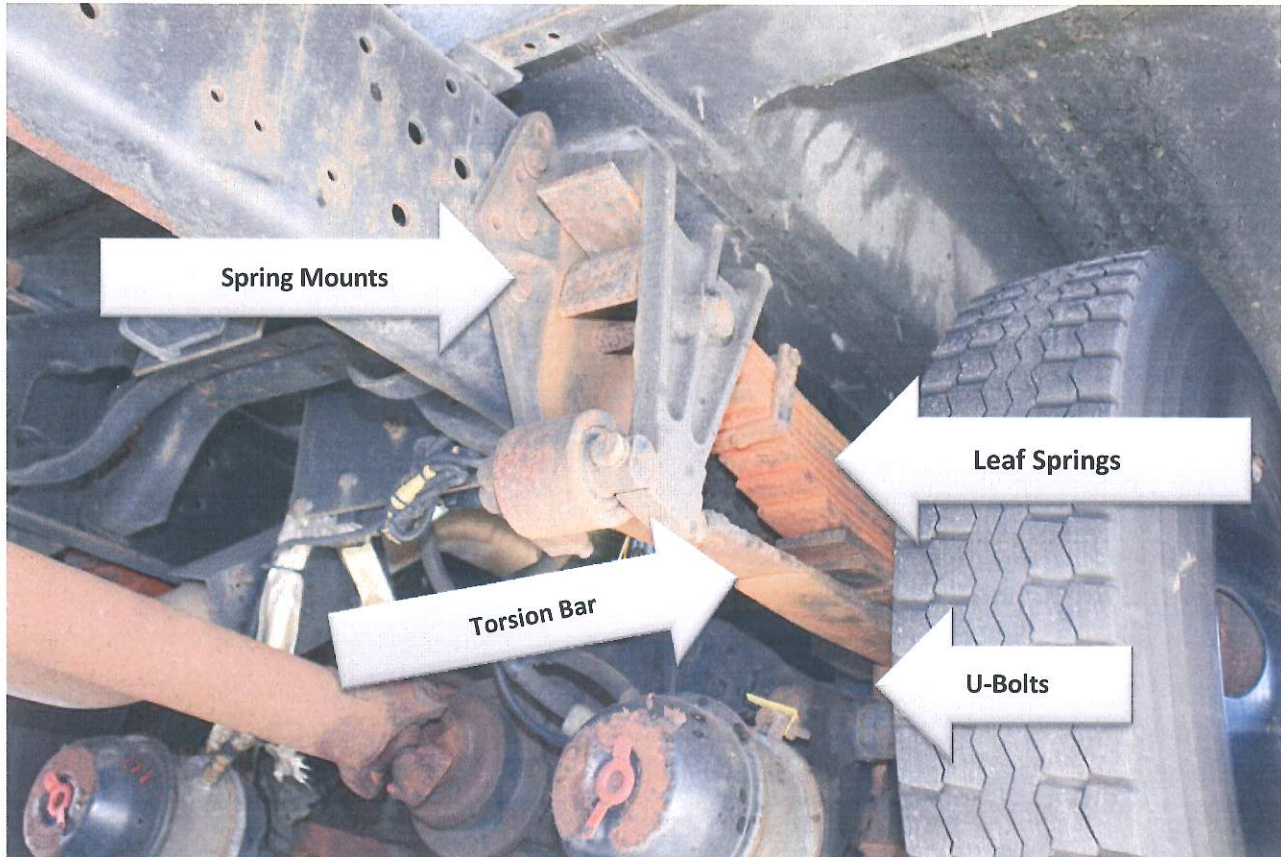
Rear Axle – Brakes

- Air Hoses & Lines are not cracked, worn or leaking. Hoses should be flexible.
- Air Chamber is securely mounted with no cracks, dents or leaks
- Slack Adjuster has no broken, loose or missing parts. The angle between the push rod and adjuster arm should be no less than 90 degrees when the brakes are applied
- Push Rod is not bent, broken, loose or missing parts
- Brake Drums & Linings – If you could see them check for cracks, dents, holes, loose or missing bolts. Check the linings are not worn dangerously thin.



Rear Axle - Suspension

- Leaf Springs are not missing, shifted, cracked or broken
- Spring Mounts are secure, not cracked or broken and have no missing bolts
- Torsion Bar is mounted securely and not damaged
- U-Bolts are not broken, loose or missing
- Shocks are securely bolted with no leaks



Rear of Bus

Start at top of bus and work down

- All light covers and reflectors are clean, secure, not broken and are of the proper color:
Point to and name all lights:
- Red clearance lights
- Amber and Red warning lights
- Amber turn signals and hazards (4-ways)
- Red tail lights
- Red brake lights
- Clear back up lights

- Red reflectors
- Reflective tape is not damaged, loose or missing



Emergency Door

- Door hinges are secure with no missing bolts
- Open door and check that the safety hinge is working properly (pull door all the way open and then pull on door)
- Glass is clean and not damaged
- Rubber seal around the door is not loose or damaged
- Buzzer sounds and the dome lights come on

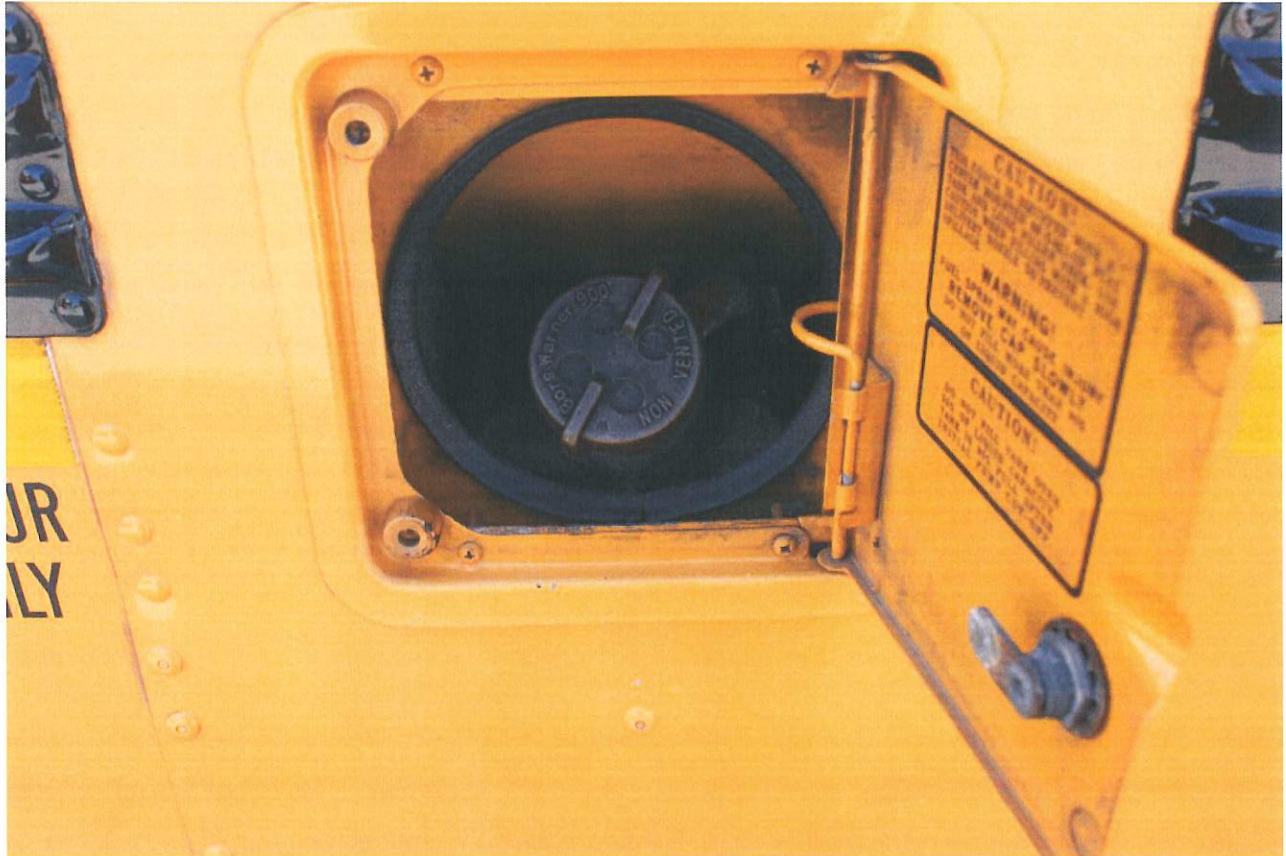
- Check floor for cleanliness

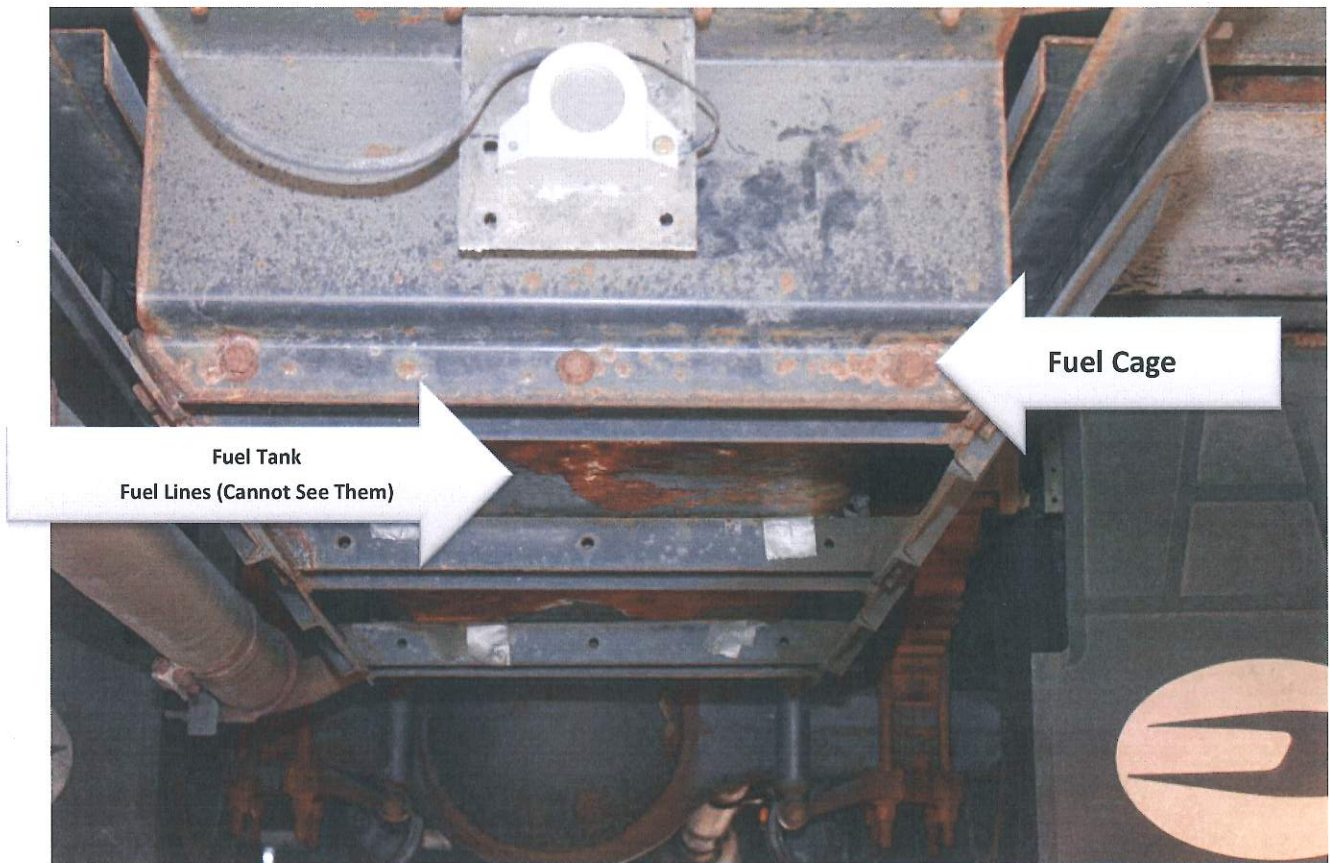
- Door closes securely



Right Side of Bus – Fuel Area

- Fuel Cap is on tight
- Fuel Cage, Tank and Lines are mounted securely with no leaks or damage





Tell examiner you would check this side of the bus the same as the other side

There are no dents, scratches or vandalism on the bus

Entry Check

- Service Door opens and closes smoothly and is not damaged
- Rubber around the door is not loose or damaged
- Glass is clean, not broken and there are no illegal stickers

- Steps are free of obstructions
- Tread is not loose or excessively worn

- Step Light is secure and the cover is not broken

- Hand Rails are mounted securely



Emergency Equipment

*Red storage box, first aid kit and body fluid kit must be opened during recertification test

- Fire Extinguisher is a 5 lb. dry chemical extinguisher and is properly charged and secure
- Red Storage Box contains three reflective triangles and six 30-minute fuses
- First Aid Kit is mounted securely, fully stocked with sealed packages
- Three Emergency Assistance Cards are present in the first aid kit
- Body Fluid Cleanup Kit is fully stocked and mounted securely
- Flashlight is in working order (turn it on and off)
- Radio Check – I would call base for radio check

**At this time switch the air door release above door to operate with switch



Windshield/Visor/Overhead Mirror

- Windshield is clean, not damaged, has no obstructions and no illegal stickers
- Visor is clean, secure and not damaged
- Overhead Mirror is clean, securely mounted and properly adjusted



Engine Compartment

- Hood & Hinges are not damaged and have no missing bolts
- Check overall condition of the engine and contents for excessive moisture
- Oil level should be between add and full
- Transmission fluid level should be between add and full when the engine is idling

- Turbo Charger is secure with no loose clamps or hoses and the housing has no cracks or leaks in the oil lines

- Alternator is mounted securely with no missing nuts or bolts. Wiring to the alternator is not frayed or damaged. Alternator is belt driven.
- Water Pump is mounted securely with no leaks and is belt driven (cannot see)
- Belts should not move more than $\frac{1}{2}$ to $\frac{3}{4}$ of an inch and have no frays or visible cracks

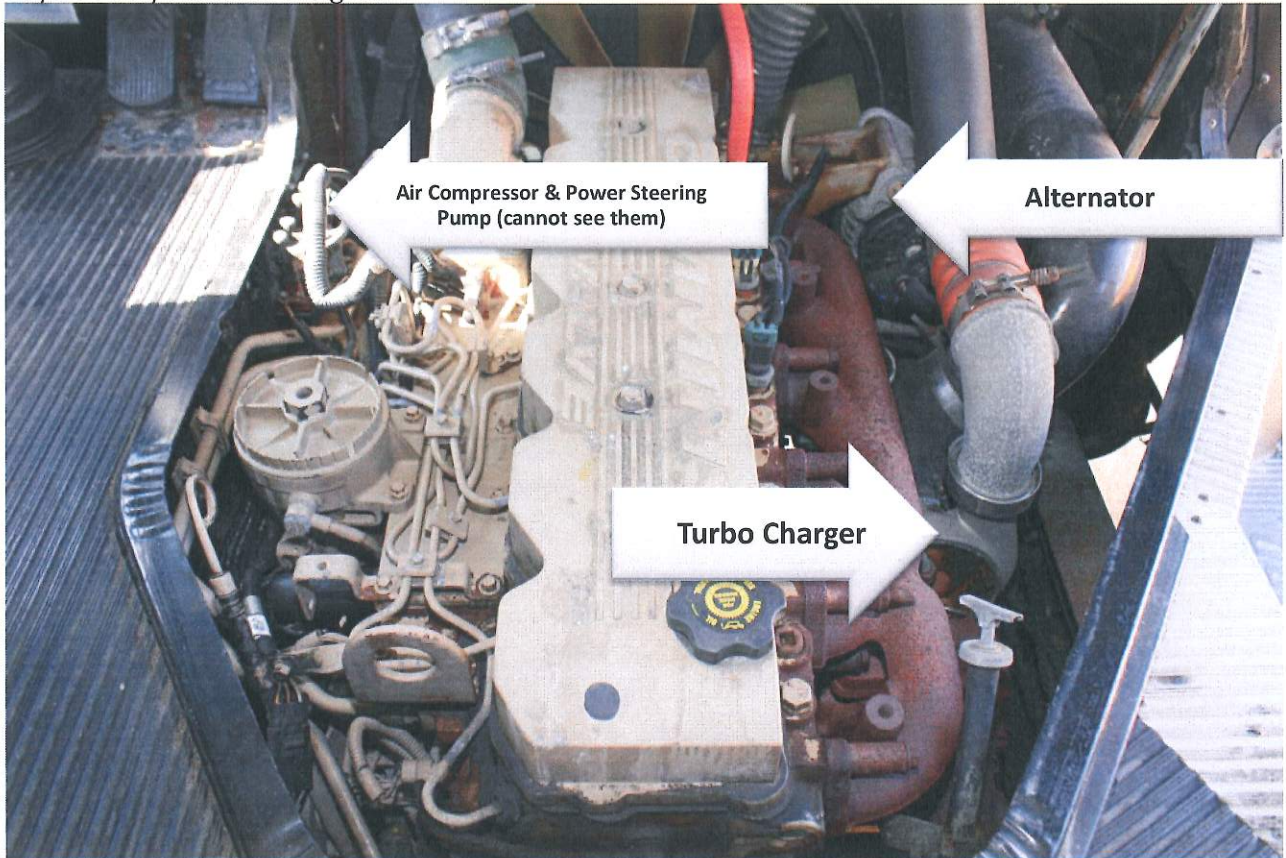
- Air Compressor & Power Steering Pump are gear driven, mounted securely with no broken or missing parts and no leaks. They are located on the upper left side of the engine. (Cannot see these in some buses)

- Hoses have no cracks or leaks and all clamps are secure and not missing
- Wiring has no frays, corrosion or excessive wear

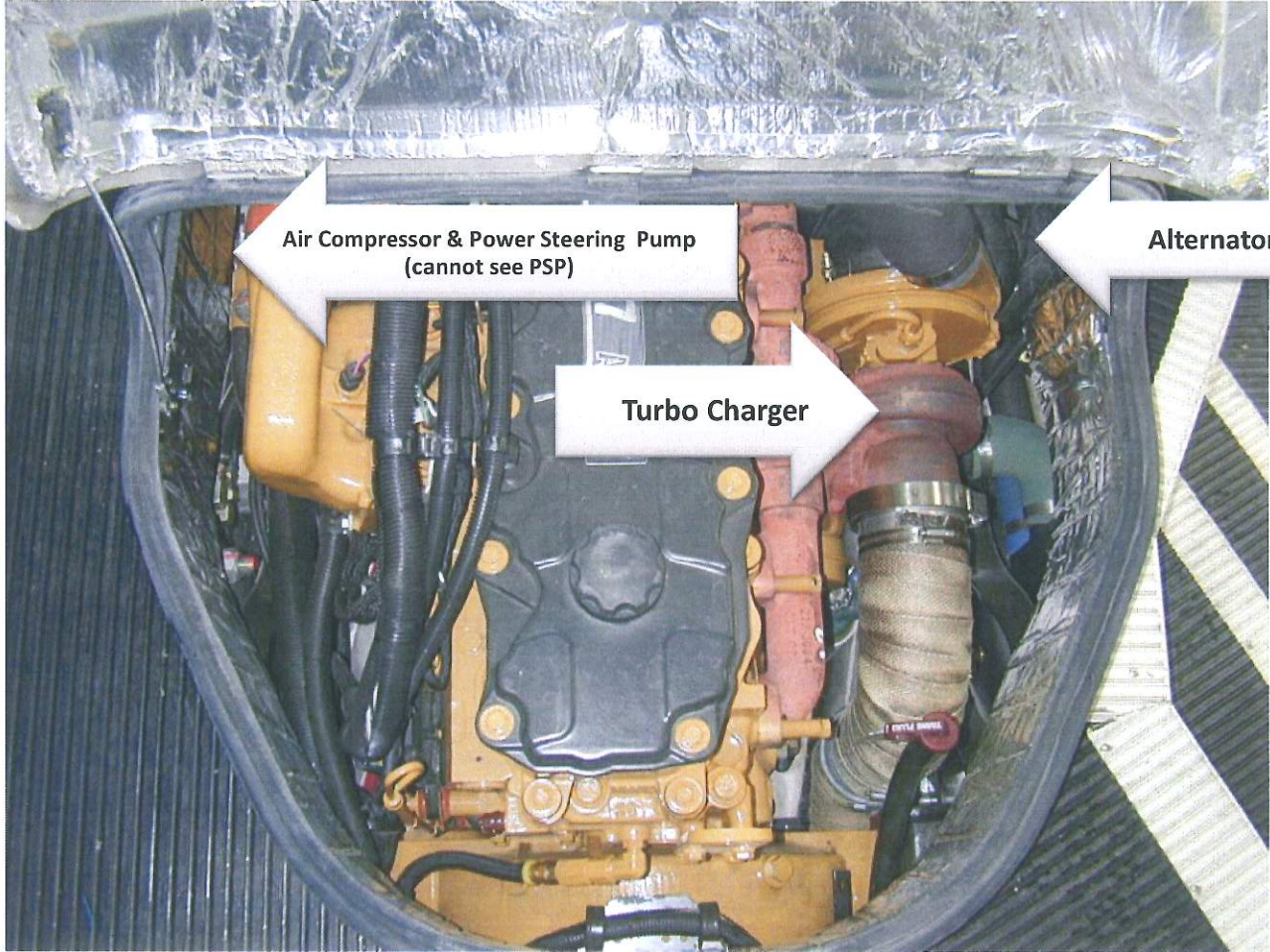
All American w/Cummins Engine:



TC/2000 w/Cummins Engine



All American w/CAT Engine



Driver's Area

Sit in driver's seat and fasten seat belt

- Driver's Seat is mounted securely and is properly adjusted
- Seat Belt is securely mounted, not frayed or damaged and latches properly
- Mirrors are clean and properly adjusted (point to and count all nine (9) mirrors out loud in proper sequence starting with the right side flat mirror)





Safe Start/ABS Light

Tell examiner you are about to perform a safe start

- Bus in is neutral
- Parking brake is set
- Turn the key and wait for the “Wait to Start” light to go out
- Start engine and look for ABS light. Tell examiner when ABS light goes out.

Headlights/Instrument Panel Lights

Turn on the headlights

Instrument Panel lights should also come on (lights behind gauges & switches)

Gauges

Covers on all gauges are clean and not cracked

Name each gauge and say if it is in normal operation range or building

- Air Pressure – Front and Rear (approximately 110-125 psi)
- Speedometer (0 mph)
- Odometer (mileage)
- Amp/Ammeter (should be at or around 0)
- Tachometer (500-800 rpm)
- Fuel – (1/2 to full tank)
- Voltmeter (around 14)
- Oil Pressure (around 30 or between Low & High)
- Engine Temperature (around 180 or between cold & hot)



Gearshift

- Go through all gears
- Gearshift should move smoothly
- Backup beeper should sound in reverse
- Reverse lights should show on the light monitor (point to monitor)
- Brake lights should also show on monitor



Indicator Lights

Indicator Lights – Check lights using the light monitor and the instrument panel on the dash
Point to each one as you activate them:

- Amber warning lights (W/L Start)
- Open service door
- Service Door opens properly
- Red warning lights
- Close service door
- Warning light master – turn switch off and try to activate amber lights – lights should not activate – turn switch back on (W/L Master)
- Warning light emergency (override)(W/L Emerg)



Switches & Indicator Lights

- Move down to heater switch panel – check defroster and all heaters on low & high
- Defroster & Heaters all work properly



Move to left side switch panel under driver's window

Operate all side panel switches starting from the bottom working up towards the windshield
Turn switches on and off:

- Vent
- Heater Master or Noise Suppression
- Mirror Defroster (indicator light is built into switch)
- Strobe Light (indicator light is built into switch)
- Fans – Left and Right
- Dome Lights (2) are working properly. Light covers are secure and not missing

- Windshield Wipers – are secured to the arms and fit firmly against the glass
- Wipers and washer fluid operate properly

- Left turn signal
- Right turn signal
- Hazard lights (4-ways)
- High beams

Steering Wheel/Horn

- Turn steering wheel back and forth
- Wheel should not have more than 10 degrees or 2 inches of play

- Sound the horn

All American driver's area





Parking Brake Test

While bus is running:

- Shift bus into drive and accelerate slightly (**DO NOT RELEASE PARKING BRAKE**)
- Parking brake should hold bus in place

Service Brake Test

- Release parking brake
- Drive forward approximately 5 mph
- Apply the service brake firmly
- Bus should not pull to one side or have a delayed stopping action

- Place bus back into the parked position (against parking block or on level ground)
- Set parking brake

- While the bus is running make sure the air pressure has built to approximately 110-125 psi
- Shut bus off

Air Brake Test – Step 1 - Air Leakage Rate – Storage Tanks

Turn key to the right (**do not start – allow gauges to reset**)

- Release the parking brake (push knob in – **KEEP FOOT OFF SERVICE BRAKE**)
- Watch the front and rear air pressure gauges
- The air loss rate should be no more than 2 psi in one minute
- You are testing the air storage tanks under the bus for leaks

Air Brake Test – Step 2 - Service Brake

- Apply firm pressure to the service brake (you will see an initial drop in pressure)
- Watch the front and rear air pressure gauges for approximately one minute
- The air loss rate should no more than 3 psi
- You are testing the service brake for leaks

Air Brake Test – Step 3 – Warning System & Emergency Brake

- Begin to rapidly pump (fan) service brake down to approximately 60 psi
- The low air pressure light and buzzer should activate at around 60 psi
- Continue pumping brakes down until the parking brake applies (knob pops out) at approximately 30 psi

After parking brake applies

- Start engine and build air pressure up until compressor shuts off at approximately 110-125

While pressure is building get out of seat and do inside walk through

Walk Through – Seats

- Seat backs and bottoms should be secured to the frame and the floor and have no damage



Walk Through – Emergency Exits

- Stop at the first emergency exit window
- Lift handle and push window open (open window fully)
- Buzzer and dome lights should activate
- Tell examiner you have three others you would check the same way

- Stop at the first roof hatch
- Push both sides of the hatch up (open to full vented position)
- Twist red knob and push on red knob with your palm to unlock hatch
- Hatch should open freely
- Buzzer and dome lights should activate
- Tell examiner you would check the other one the same way



Walk Through – Emergency Door

- Head Bumper is secure above door
- Open emergency door and push door all the way open
- Door opens freely and the safety hinge holds door in place
- Buzzer and dome lights work properly
- Door closes securely

Return to driver's seat

Operation of Lights – Front/Sides/Rear

At this time ask the examiner to go outside and check the operation of the lights
Tell examiner what lights you want checked

In the front (start at the top and work down)

- Amber clearance lights
- Amber and Red warning lights
- Warning light emergency (override)
- Left and Right turn signals
- Hazard lights (4-ways)
- Headlights – Low and high beam
- Parking lights (if applicable)

- Step light (as examiner exits bus)

On the sides:

- Clearance lights
- Stop sign lights
- Side mounted turn signals

In the rear:

- Red clearance lights
- Amber and Red warning lights
- Warning light emergency (override)
- Left and Right turn signals
- Hazard lights (4-ways)
- Brake lights
- Tail lights
- Reverse lights
- Strobe light (on top of bus)

When examiner is finished checking lights shut off strobe light and open service door
At this point your pre-trip is complete

Operation Inspection

During the driving evaluation mention the following:

- Engine has no unusual noises or vibrations
- Transmission is not slipping or shifting hard
- Suspension has no unusual noises or handling characteristics

Post-Trip Inspection

After the driving evaluation is completed and you are parked tell the examiner you would:

- Set the parking brake
- Put the bus in neutral
- Turn off all switches
- Check for students
- Check seats for damage
- Check interior for cleanliness
- Complete reports