# **Modernized Pre-Trip Inspection**

## **Beginning Summer 2024**

## FRONT OF VEHICLE & ENGINE AREA

- 1. All Lenses: Clean, Not Broken, Not Missing
- 2. Fluid Levels
- Coolant Reservoir: Mounted Securely; No Cracks; No Leaks, Proper Fluid Level
- Engine Oil Dip Stick: Oil level indicated between the add and full marks on the stick.
- Power Steering Reservoir: Mounted Securely; No Cracks; No Leaks; Proper Level
- 3. Fluid and Air Leaks
- ALL: Not Cracked; No Leaks; Mounted Securely
- No Dripping Fluids Under the Engine
- 4. Steering System
- Steering Gear Box: Not Cracked; No Leaks
- Steering Hoses: Not Cracked; No Leaks
- Steering Linkage: No Cracks: No Indications of Leaks
- Steering System: No Missing Nuts, Bolts, or Cotter Keys

## STEERING AXIL

- 1. Tires:
- Inflation: Approximately 105 PSI, Must be checked with a tire gauge
- Condition: No Cuts; No Damages, No Bumps or Bulges
- Depth: 4/32 of an Inch
- 2. Rims: No Cracks; Not Bent; No Illegal Welding Repairs
- 3. Lug Nuts: None are Loose/Missing; No Rust, No Broken Studs
- 4. Mounts (Front and Rear): No Cracks; Intact
- 5. Leaf Springs: No Cracks; Springs are Intact
- 6. U-Bolts: No Cracks: Intact
- 7. Shock Absorbers: No Leaks; No Cracks/Damages
- 8. Brake Lines (Hydraulic) / Hoses (Air Brakes): No Leaks [AUTOMATIC FAILURE]
- 9. Brakes Rotors and Disks: No Damages; No Grease; No Contaminates
- 9. Brake Drum (Air Brakes\*): No Cracks; Not Bent; No Grease, Properly Mounted & Secure
- 10. Brake Lining (Air Brakes\*): No Cracks; Not Bent; No Grease, Properly Mounted and Secure
- 11. Brake Contaminates: None Present
- If the passenger vehicle uses air bags in the suspension system, these must be inspected for proper mounting, damage, and leaks.

## SIDE OF THE VEHICLE

- 1. Light Lenses/Covers: Proper Color; Clean; Not Broken
- 2. Reflectors: Present/Not Missing; Proper Color; Clean; Not Broken
- 3. Traffic Monitoring Devices (External Mirrors)
- Mirror Surface: Clean; Not Cracked/Broken
- Mirror Brackets: Secure; Not Bent/Broken
- 4. Battery: Secured; Cable Connectors Tight; No Corrosion; Battery Box Door is Secure
- 5. Fuel Tank: Cap is Tight; No Leaks Under the Bus; Securely Mounted; No Damages
- 6. Diesel Exhaust Fluid (D.E.F): Cap is Tight; No Leaks
- 7. Frame(s) of Bus: No Cracks; No Breaks/Damages

#### REAR OF VEHICLE

- 1. Taillight Lenses: No Cracks; Proper Color
- 2. Clearance Light Lenses: No Cracks; Proper Color
- 3. Reflectors: Present/Not Missing; No Cracks; Proper Color

#### **ENTERING THE VEHICLE**

- 1. Passenger Entry & Lift
- Service/Entry Door: Not Damaged; Operates Smoothly
- Handrail: Tight and Secure
- Entry Steps: Clear (No Trip Hazard); Not Loose or Worn
- 2. Emergency Equipment
- Fire Extinguisher: Mounted; Properly Charged; Inspection Date is Current
- Reflective Triangles: 3 Present; Mounted; Intact
- Spare Electrical Fuses (if used) or Identify Circuit Breakers
- First Aid & Body Fluid Kits Mounted; Intact; Full (Seal is Not Broken)

#### **BRAKE SYSTEM CHECKS**

- 1. Hydraulic Brake System Check [AUTOMATIC FAILURE IF NO PREFORMED CORRECTLY]
- Start the vehicle.
- Press the service brake 3 time and hold the final press for 5 seconds with steady pressure. The brake pedal should not move during the 5 seconds.
- IF equipped with a hydraulic brake reserve/backup system, (with the ignition key OFF) depress the service brake pedal and listen for the sound of the reserve systems electrical motor. Check to ensure that the warning buzzer and/or light is off.
- BUSES EQUIPPED WITH AIR BRAKE SYSTEMS WILL NOT PREFORM THE ABOVE HYDRAULIC BRAKE SYSTEM CHECK, BUT INSTEAD WILL PERFORM THE FOLLOWING AIR BRAKE SYSTEMS CHECK.

## **AIR BRAKE SYSTEMS CHECK/TESTS**

## [ONLY FOR AIR BRAKE BUSES]

## [AUTOMATIC FAILURE IF NOT PERFORMED CORRECTLY]

Prerequisites: THE VEHICLES WHEELS MUST BE CHOCKED!

- Test 1: **(Air Gauge & Governor Cutoff Check)** Build air pressure until the governor cutoff (normally 120-140 psi). When you hear the governor cutoff occur, turn the ignition key OFF. Next, TURN the IGNITION KEY to the ON position and RELEASE PARKING BRAKE.
- Test 2: **(Air Leakage Rate Test)** Apply full pressure to the service brake and hold. Check the air gauges to see if air pressure drops more than 3 psi in one minute.
- Test 3: (Air Warning Device(s) Test) Begin draining the air from the tanks by repeatedly applying the service brake. The low air warning device/alarm should activate before dropping below 60psi.
- Test 4: **(Emergency Brake Activation Test)** Continue to drain air from the tanks. The parking/emergency brake should engage when the air pressure is between 20-45psi.

If the bus passes all the tests, continue with the pre-trip inspection, & remove the wheel chocks. If the bus fails any of the tests, report the malfunction immediately and do not drive the vehicle.

# START THE ENGINE: ALLOW THE VEHICLE TO RUN FOR THE REMAINER OF THE INSPECTION.

## **BRAKE TESTS (Functionality)**

- 1. **PARKING BRAKE:** With the parking brake still engaged, shift into the DRIVE gear and then press the accelerator pedal gently. If the parking brake is working properly, the vehicles should not move.
- 2. **SERVICE BRAKE:** Release the parking brake and ensure that the gear shifter is in drive. Gently press the accelerator and allow the bus to move forward no faster than 5 m/p/h. Apply the service brake to ensure that the vehicle stops smoothly and does not pull to the right or to the left when stopping.

## MIRRORS (aka "Monitoring Devices") AND WINDSHEILD

- External Traffic Mirrors
  Clean; Adjusted Properly; and Mounted Properly
- Internal Passenger Monitoring Device (Student Mirror) Clean, Properly Adjusted & Mounted
- Windshield No Cracks; No Obstructions; Clean

#### WINDSHIELD WIPERS & WASHER

- Wiper Arm and Blades Secure; No Damages (Demonstrate Use: Turn ON and OFF)
- Windshield Washer Fluid Demonstrate

## **LIGHTING INDICATORS:** Must be turned ON and OFF to indicate they are working.

- Left Turn Signal
- Right Turn Signal
- Four Way Emergency/Hazard Lights
- Headlights (High Beam and Low Beam)
- ABS Indicator Light on Dashboard
- DEF Indicator (If Equipped)

**HORN:** Working Properly (Demonstrate)

**HEATER & DEFROSTER:** Working Properly (Demonstrate)

#### PASSENGER & SCHOOL BUS ONLY

- Yellow Student Loading Lights Demonstrate they work; Not Broken; Verify from Rear Door
- Passenger Seating Frames are firmly attached; Not Broken; & Cushions are Secure
- Emergency Exits (Windows, Rear Emergency Door) Open & Close; Buzzer/Alarm Sounds\*\*
- Emergency Roof Hatches Visually verify they are intact.
- Cameras (if equipped) Clean & Viewable
- Red Student Loading Lights Not Broken; Demonstrate they work by opening the service door.
- Stop Arm & Crossing Arm Demonstrate; Both Work & Fully Extend; Lights Function

#### LIGHT OPERATION CHECK:

Perform all light functions (FRONT, SIDES, AND REAR) by turning all lights ON & OFF. [The 3<sup>rd</sup> party instructor may verify from outside the vehicle.]

- Left Turn Signal
- Right Turn Signal
- 4-Way Emergency Flashers
- Headlights (Low Beam)

- Headlights (High Beam)
- Clearance Lights
- Taillights
- Break Lights

## [Pre-Trip Inspection Concluded]

## **Post Trip Inspection**

- 1. Set Parking Brake and Shift Gear to Neutral
- 2. Check Bus for Sleeping Students
- 3. Turn OFF all lights and electronic devices.
- 4. Secure Ignition Key
- 5. Verify there are no leaks under the bus. (Air/Tires/Fluids)
- 6. Report ALL damages/defects.