**Williamson County Schools Transportation**

**Vehicle/School Bus Inspection**

**SECTION A** (Attempt to Point and Touch all items listed)

**FRONT INSPECTION** - Front of bus and as approaching bus:

* Look for puddles on the ground & dripping fluids from the engine & transmission
* Look through sight glass… check **COOLANT** for “adequate level”

**LIGHTS**

* Theleft and right signal lights are not damaged, are clean the proper color and are part of my 4-way Flashers.
* The headlights serve as my high and low beams and are not damaged, are clean and are the proper color.
* The clearance lights are not missing, damaged, are clean and are the proper color.
* Reflective Tape is present and affixed securely

**OIL** - Check Oil level with the dipstick, the oil level is within safe operating range and is above the refill mark

**POWER STEERING** - The Power Steering Pump is belt driven and is secure and not leaking. Check the power steering fluid with the dipstick that the power steering fluid is above the refill mark. Check the belt for cracks, fray, loose fibers or signs of wear, there should be between ½” to ¾” play at the center of the belt.

**WATER PUMP** - The Water Pump is belt driven and is securely mounted and not loose. Check the belt for cracks, fray, loose fibers or signs of wear, there should be between ½” to ¾” play at the center of the belt.

**ALTERNATOR** - The Alternator is belt driven and is securely mounted, the wires are securely fastened and are not melted, burned or frayed. Check the belt for cracks, fray, loose fibers or signs of wear, there should be between ½” to ¾” play at the center of the belt.

**AIR COMPRESSOR** - The Air Compressor is gear driven and is securely mounted and is not leaking.

**HOSES** - Inspect hoses for condition and for leaks.

**STEERING** (INSPECTED FROM DRIVER’s SIDE)

**STEERING BOX**-The Steering Box is securely mounted and not leaking, there are no missing nuts or bolts. The hoses are not damaged or leaking.

**STEERING LINKAGE**-The steering links, arms and rods from the steering box to the wheel are not worn or cracked. The joints and sockets are not loose or worn and there are no missing nuts, bolts, or cotter keys.

**FRONT AXLE** (INSPECTED FROM SERVICE SIDE)

**TIRES** (***ICD – Inflation, Condition, Depth***)

* The Tread is wearing evenly and has sufficient Tread Depth of no less than 4/32”
* The Sidewalls have no cuts, gouges or bulges/knots.
* The Valve Stem & Cap are secure, not missing, damaged or leaking, check proper inflation with tire gauge.

**RIMS -** are not bent or damaged, no illegal welds, no rust trails indicating the rim is loose on the wheel.

**LUG NUTS -** no missing or loose Lug Nuts, no cracks or distortions. No rust or shine indicating one may be loose.

**HUB OIL SEAL -** not leaking, if there is a sight glass check that the oil level is adequate.

**FRONT SUSPENSION**

**SPRINGS/AIR/SHOCKS –** Leaf Springs are not missing, cracked, broken or shifted. Shock absorbers are secure and not leaking.

**SPRING MOUNTS/TORQUE –** Mounts & Hangers are secure, not cracked or broken, the bushings & bolts are not missing or damaged. If equipped, the torque arm, torsion bars & other types of suspension are securely mounted, not damaged.

**U-BOLTS -**  no missing, broken or loose U-Bolts.

**FRONT BRAKES**

**BRAKE HOSES/LINES -** Brake Hoses & Lines not cracked, worn, or frayed, the couplings/fittings are secure and not leaking.

**BRAKE CHAMBER -** mounted securely, not cracked, dented or leaking, no loose or missing clamps.

**SLACK ADJUSTER and PUSH ROD -** securely mounted, not loose, bent or broken, no missing parts, no more than 1” travel when pulled by hand with brakes released.

**BRAKE DRUM -** not cracked, dented, or have holes, no missing bolts. The **BRAKE LININGS** are not worn dangerously thin. There are no contaminants such as debris or oil or grease.

**SECTION B** (Attempt to Point and Touch all items listed)

The **SERVICE DOOR AND HINGES** are not damaged, operates smoothly and closes securely. Hinges are secure and seals intact.

**MIRRORS -** securely mounted with no loose fittings, not damaged and free of dirt.

**LIGHTS AND REFLECTORS**

* Signal Light is not damaged, are clean and are the proper color and is part of my 4-way
* Reflectors are clean, none missing or broken and are the proper color(red on back, amber elsewhere)
* Reflective Tape is present and affixed securely
* Clearance Lights are not missing, damaged, are clean and are the proper color

**FUEL TANK/CAP –** Fuel tank is secure, cap is tight, tank and cap are not leaking.

**DRIVE SHAFT -** not bent, twisted or cracked, U-Joints secure and free of foreign objects

**EXHAUST SYSTEM –** tightly connected, securely mounted, no loose clamps, no damage or signs of leaking like rust or soot, there are no cracks, holes, or severe dents.

**DEF –** DEF Tank is no less than 1/8 tank and is part of my exhaust system.

**FRAME –Longitudinal Frame Members** not cracked, no broken welds, holes or other damage; **Cross Members** not loose, cracked, bent, broken, or missing; **Box and Bus Floor** have no breaks or holes.

**REAR AXLE**

**REAR WHEELS/TIRES** (***ICD – Inflation, Condition, Depth***)

The Tread is wearing evenly and has sufficient Tread Depth of no less than 2/32”

The Sidewalls have no cuts, gouges or bulges/knots.

The Valve Stem & Cap are secure, not missing, damaged or leaking. Check here for the proper inflation with a tire gauge.

**RIMS -** are not bent or damaged, no illegal welds, no rust trails indicating the rim is loose on the wheel.

**LUG NUTS -** no missing or loose Lug Nuts, no cracks or distortions. No rust or shine indicating one may be loose.

**REAR AXLE SEAL -** not leaking, if there is a sight glass check that the oil level is adequate.

**BUDD** **SPACING -** is free of foreign objects

**REAR SUSPENSION**

**SPRINGS/AIR/SHOCKS –** Leaf Springs are not missing, cracked, broken or shifted. Shock absorbers are secure and not leaking. If equipped, Air Bags are not damaged or leaking.

**SPRING MOUNTS/TORQUE –** Mounts & Hangers are secure, not cracked or broken, the bushings & bolts not missing or damaged. If equipped, the torque arm, torsion bars & other types of suspension are securely mounted, not damaged.

**U-BOLTS -**  no missing, broken or loose U-Bolts.

**REAR BRAKES**

**BRAKE HOSES/LINES -** Brake Hoses & Lines not cracked, worn, or frayed, the couplings & fittings are secure and not leaking.

**BRAKE CHAMBER -** mounted securely, not cracked, dented or leaking, no loose or missing clamps.

**SLACK ADJUSTER and PUSH ROD -** securely mounted, not loose, bent or broken, no missing parts, no more than 1” travel when pulled by hand with brakes released.

**BRAKE DRUM -** not cracked, dented, or have holes, no missing bolts. The **BRAKE LININGS** are not worn dangerously thin. There are no contaminants such as debris or oil or grease.

**REAR OF BUS**

**SPLASH GUARDS -** securely mounted and not damaged.

**REAR DOOR** – door and hinges are not damaged, opens, closes, and latches properly

**LIGHTS AND REFLECTORS**

 **-** The **left and right signal lights** are not damaged, are clean, the proper color and are part of my 4-way Flashers..

* The **brake lights** are not damaged, are clean and are the proper color
* The **tail lights** are not damaged, are clean and are the proper color
* The **reflectors** are secure and not damaged(Red in back, Amber Elsewhere)
* **Reflective Tape** is present and affixed securely.
* The **clearance lights** are not missing, damaged, are clean and are the proper color. (Red in back, Amber Elsewhere)

**PASSENGER ITEMS / School Bus Specific…**(Attempt to Point and Touch all items listed)

**REAR OF BUS STUDENT LIGHTS**

* The Strobe light is not broken and is operational
* The alternating ambers are not damaged and are operational.
* The alternating Reds are not damaged and are operational.

**BAGGAGE** **COMPARTMENT -** Doors and hinges are securely mounted and opens/closes easily.

**FRONT OF BUS – STUDENT LIGHTS**

* The alternating ambers are not damaged and are operational.
* The alternating Reds are not damaged and are operational.
* **STOP ARM** is secure to the frame, no loose fittings or damage, extends fully, and lights are operational.
* **STUDENT ARM** is secure and functioning properly in conjunction with the stop arm.

The **step light** is working and not damaged.

The **steps and treads** are not loose or worn excessively

The **hand rails** are secure

**Emergency kit** and the **Body Fluid** **kit** are present

**INTERNAL INSPECTION** move key to the auxiliary on position (Observe ABS LIGHT coming on/off)

Walk to the back of the bus, **check seats** for broken **frames** and that they are firmly attached to the floor, check seat **cushions** are firmly attached to the frame.

At back of the bus, explain there are 7 **emergency exits** on the bus, 4 windows, 2 roof hatches, and the emergency door. Open and close emergency exit, identify it operates smoothly and closes securely from the inside and that the warning device works properly.

Walk back to the front of the bus ensure the service door is in “Normal” position. Sit in driver’s seat,
**SEAT/SAFETY BELT –** Securely mounted, not ripped or frayed, latches and is properly adjusted
 **STUDENT MIRROR** is secure, not dirty and properly adjusted. Put on seat belt.

**LIGHT TEST –** ask examiner to assist outside the bus to do your light check, open window and LOUDLY call out the light being tested. BE SURE TO CLOSE SERVICE DOOR! *\*You are not testing the Reverse Lights\**

FRONT: Alt Amber, Alt Red, Stop Sign Lights, Stop and Student Arms work together, Left, Right, 4-way, Headlights, High Beams, Clearance Lights Operational

REAR: Strobe Light, Alt Amber, Alt Red, Lights on back of Stop Sign, Left, Right, 4-way, Tail Lights, Brake Lights, Clearance Lights Operational

**SAFE START –** KEY TO OFF - Brake applied and in Neutral. Safe Start Bus

* Key to On Position, Identify the **ABS Light** has come on and off and then START ENGINE
* Identify where **emergency equipment** is – **Triangles, Spare Fuses, and Fire Extinguisher** (secure and fully charged)
* **AIR** **GUAGE**, is working properly and shows that the air compressor is building the air pressure to approximately 120-140 psi or as specified by manufacturer, to governor cut-off.
* **TEMPERATURE GUAGE**, is working and shows temperature rising to the normal operating range.
* **OIL** **PRESSURE** **GUAGE**, is working and shows the pressure is rising.
* **AMMETER**/**VOLTMETER** is charging
* **LIGHTING INDICATORS** – Left Turn, Right Turn, 4-Way Flasher, High Beam, DEF Tank indicates above 1/8 tank
* **HORNS** – sound both city and air horns
* **HEATER**/**DEFROSTER** switch demonstrate the heaters and defrosters work
* **WINDSHIELD** is clean, has no illegal stickers and free of obstructions or damage to the glass
* **MIRRORS** are not dirty and are adjusted properly.
* **WIPERS**/**WASHER** the Wiper arms and Blades are not damaged and operate smoothly, the Windshield Washer is operating correctly

**BRAKE CHECKS**

**PARKING BRAKE CHECK**

With the parking brake engaged, place vehicle in gear and gently press accelerator to ensure bus does not move. Place foot back on service brake!!!

**SERVICE BRAKE CHECK**

This procedure is designed to determine that the brakes are working correctly and that the vehicle does not pull to either side and that it stops when the brakes are applied.

* Pull forward at no more than 5 mph. The bus should not pull to either side and stops smoothly when I apply my brakes.

SECURE THE BUS (Shift lever in Neutral, Parking Brake engaged, headlights off, service door closed)

**AIR BRAKE SYSTEM CHECK**

Failure to perform all components of the air brake check will result in an automatic failure of the vehicle inspection test.

1. *(If you do not hear the air puff/governor cut off announce you are waiting for it))*The air pressure built up to approximately 120-140 psi or manufacturer specification, [“I am waiting for”/”to”] governor cut-off pressure (**MUST HEAR AIR “PUFF),** keep foot on service brake pedal, shut engine off, back to on position, and release the parking brake. (rapid order, as if one movement). Once you have fully applied the service brake and the air gauge stabilizes, ask Instructor/Tester to time you for one minute while you observe for more than 3 PSI pressure loss. After the one minute, announce you have not lost more than 3 PSI.
2. Begin fanning off the air pressure by rapidly applying and releasing the foot brake… the audible and visible warning devices should activate when the air pressure drops below 55 PSI. (CONFIRM ALARMS ACTIVATE).
3. Continue to fan off air pressure. When the air pressure reaches between 40-20 PSI, the parking brake valve should close (pop out). (CONFIRM Parking Brake pops out)

Restart Engine to rebuild air pressure (Use either cruise control high idle switch OR depress accelerator). (optional: the air pressure has now rebuilt to approximately 120-140 psi or manufacturer specification, to governor cut-off pressure.)

**\**If you believe you missed part of the AIR brake test, ASK FOR A REDO. If you missed any other aspect of the vehicle inspection, this is the time to call them out.***

**If you are confident you have not missed any part of the air brake test and have covered all aspects of this vehicle inspection, announce “I have now completed my vehicle inspection”.**

TURN BUS OFF, immediately unbuckle and walk to back of bus to turn off child safety device,