MAINTENANCE PLAN
(Board/School Owned Buses)

Prepared by:

Chrysti Mannix, Director of Transportation

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SCHOOL BUS: means a bus that meets the requirements of a Type A1, A2, B, C or D school bus described in CSA Standard D250-2007 and that is used primarily to transport students to and from a school.

CSA Standard – **D250-07 School Buses**	A standard issued by the Canadian Standards Association. Definitions are: School Bus – a specially constructed vehicle that is designed to carry more than 10 persons (primarily children) to and from school or related events and is National School Bus Yellow as specified in Table 1. When determining seating capacity, each mobility aid space (if present) is equivalent to four seating positions. School buses are categorized as follows: **Type A** – a conversion or body constructed upon a cutaway front section vehicle with an original equipment-manufacturer chassis, supplied with a left-side driver's door. The service door is behind the front wheels. **Type A1** – a vehicle with a GVWR of 4,536 kilograms (10,000 pounds) or less; and **Type A2** – a vehicle with a GVWR over 4,536 kilograms (10,000 pounds). **Type B** – a conversion or body constructed and installed upon a van, a front section vehicle chassis, or a stripped vehicle chassis, having a GVWR of more than 4,536 kilograms (10,000 pounds). Most of the engine is beneath and /or behind the windshield and beside the driver's seat. The service door is behind the front wheels. **Type C** – a body installed upon a flat-back cowl chassis, having a GVWR of more than 4,536 kilograms (10,000 pounds). The entire engine is in front of the windshield. The service door is behind the front wheels. **Type D** – a body installed upon a chassis, having a GVWR of more than 4,536 kilograms (10,000 pounds), with the engine mounted in one of the following positions: a. behind the windshield and beside the driver's seat; b. at the back of the bus behind the rear wheels; or c. midway between the front and rear axles. The service door is ahead of the front axle.

Application:

All school buses registered to Buffalo Trail Public Schools are required to comply with the company's maintenance and inspection program policies and procedures, including:

- schools that own their own buses and/or cargo trailers
- lease operators that have their vehicles registered to the company; or
- if lease operators follow their own maintenance program, then they must;
- provide a copy of the lessee's maintenance and inspection program that meets the minimum regulatory requirements;
    - the registered owner must indicate the maintenance and inspection program is "acceptable";
    - the registered owner must monitor the lease operator to ensure the maintenance program and inspection program is being implemented.

The preventive maintenance and inspection program will address the following areas:

- daily trip inspections;
- repairs;
- routine scheduled maintenance;
- semi-annual CVIP inspections;
- record keeping of all inspections, repairs, routine maintenance, including CVSA and CVIP.

A person shall not operate or permit another person to operate a commercial vehicle if the vehicle or any equipment related to the commercial vehicle is in a condition likely to cause danger to persons or property.

No person shall change, reconstruct or modify the body or seating capacity of a school bus without the written approval of the registrar.

It is illegal to operate a vehicle on a highway with any defect that is a violation under any legislation.

BTPS's written maintenance and inspection program will be kept at the company's principal place of business/school and the original copy kept at Central Services. Copies of the maintenance and inspection program will be available at each location of the carrier where the maintenance and inspection of the carrier's commercial vehicles is carried out. A copy of the maintenance and inspection program shall be readily accessible to employees of the carriers who carry out the maintenance and inspection program. It will be available on the Transportation page of the staff side of the www.btps.ca website.

The applicable maintenance and inspection schedules under the *Commercial Vehicle Safety Regulation* (AR 121/2009) will be attached to the maintenance and inspection program at all locations of the carrier where vehicle inspections and maintenance is carried out.

The company's vehicle maintenance and inspection program will be implemented as follows:

Vehicle Maintenance:

- Applicable vehicle components must also be routinely inspected as required by Alberta's *Commercial Vehicle Safety Regulation* (AR 121/2009)**,** Alberta's *Vehicle Inspection Regulation* (AR 211/2006) and the applicable schedule(s) of NSC Standard 13 Part 2 (daily trip Inspection)**.**

- Components to be inspected are described in Schedule 2, 5 and if applicable Schedule 3 and 4 of the *Commercial Vehicle Safety Regulation* (AR 121/2009), *Vehicle Inspection Regulation* (AR 211/2006) and Schedule 2 and any other applicable Schedules of NSC Standard 13 Part 2 trip Inspection (copy attached and/or direct internet access available).

- Any component identified as being in need of repair and/or maintenance will be maintained and/or repaired as required. The records documenting the repairs and/or maintenance will be retained on the appropriate vehicle file.

BTPS will conduct regular and continuous maintenance inspections and repairs in accordance with the following intervals:

Inspection Type	Vehicle Type	Inspection Interval (State Kilometres, Time or Hours)	Comments
Trip Inspection	School Bus (all types)	Daily	Ensure inspection is carried out in accordance with the appropriate standards and complete written daily inspection form. Report all defects and document all repairs.
Lubrication (Oil Change and Greasing etc.)	Type A	10,000 or 6 months	May depend on type of oil being
	Type B	10,000 or 6 months	
	Type C	10,000 or 6 months	
	Type D	10,000 or 6 months	
Scheduled Maintenance Inspections	Type A	10,000 or 6 months	Regular maintenance interval is completed in conjunction with the semi-annual CVIP due to the low mileage of the vehicles
	Type B	10,000 or 6 months	
	Type C	10,000 or 6 months	
	Type D	10,000 or 6 months	
"CVIP" Inspection	School Bus (all types)	**Semi-Annually**	Required every 6 months before next CVIP expires - to be completed by a Certified CVIP Facility.

Scheduled Component(s)	Interval
State the intervals when each component is inspected by kilometres, time or hours. **Note** If any of the scheduled components are inspected in the "Pre-/Post-" Trip Inspections state pre-/post- for interval	

a. Body and Interior components:	
1. Bumpers	Every 6 months or 10000 km whatever comes first
2. Fenders	Every 6 months or 10000 km whatever comes first
3. Main and emergency door operation	Pre-/Post- Trip
4. Emergency door (open easily, unobstructed)	Pre-/Post- Trip
5. Door controls	Pre-/Post- Trip
6. Hood latch	Pre-/Post- Trip
7. Seats	Pre-/Post- Trip
8. Floor coverings	Every 6 months or 10000 km whatever comes first
9. Baggage racks	Every 6 months or 10000 km whatever comes first
10. Sun visors	Pre-/Post- Trip
b. Frame System components:	
11. Frame rails	Every 6 months or 10000 km whatever comes first
12. Frame members	Every 6 months or 10000 km whatever comes first
13. Body mounts	Every 6 months or 10000 km whatever comes first
14. Floor pan	Every 6 months or 10000 km whatever comes first
c. Window components:	
15. Windshield	Pre-/Post- Trip
16. Windows	Pre-/Post- Trip
17. Mirrors	Pre-/Post- Trip
d. Fuel System components:	
18. Fuel Tank	Every 6 months or 10000 km whatever comes first
19. Filler neck	Every 6 months or 10000 km whatever comes first
20. Fuel cap	Pre-/Post- Trip
e. Exhaust System components:	
21. Exhaust system:	Every 6 months or 10000 km whatever comes first
f. Suspension components:	
22. Ball joints	Every 6 months or 10000 km whatever comes first
23. Springs	Every 6 months or 10000 km whatever comes first
24. Shackles	Every 6 months or 10000 km whatever comes first
25. U-Bolts	Every 6 months or 10000 km whatever comes first
26. Shocks	Every 6 months or 10000 km whatever comes first
27. Radius rods or stabilizer links	Every 6 months or 10000 km whatever comes first

28. Shackle pins and bushings	Every 6 months or 10000 km whatever comes first
29. Nuts	Every 6 months or 10000 km whatever comes first
30. Bolts	Every 6 months or 10000 km whatever comes first
31. Cotter pins	Every 6 months or 10000 km whatever comes first

g. Drive Train components:

32. Drive shaft	Every 6 months or 10000 km whatever comes first
33. U-joints	Every 6 months or 10000 km whatever comes first
34. Slip yokes	Every 6 months or 10000 km whatever comes first
35. Slip shaft splines	Every 6 months or 10000 km whatever comes first
36. Guards	Every 6 months or 10000 km whatever comes first

h. Brake components:

37. Brake friction components	Every 6 months or 10000 km whatever comes first
38. Hydraulic components	Every 6 months or 10000 km whatever comes first
39. Vacuum system	Every 6 months or 10000 km whatever comes first
40. Mechanical components Vacuum system	Every 6 months or 10000 km whatever comes first
41. Air brake components	Every 6 months or 10000 km whatever comes first
42. Service brake pedal/system	Pre-/Post- Trip
43. Brake failure warning light	Pre-/Post- Trip
44. Emergency or parking brake control	Pre-/Post- Trip

i. Lights and Electrical components:

45. Lamps/Lights/Strobe Light	Pre-/Post- Trip
46. Reflectors	Pre-/Post- Trip
47. Battery	Pre-/Post- Trip
48. Cables/Wires/Hoses	Pre-/Post- Trip
49. Belts	Pre-/Post- Trip

j. Steering components:

50. Steering column	Pre-/Post- Trip
51. Steering box	Every 6 months or 10000 km whatever comes first
52. Steering wheel play	Pre-/Post- Trip
53. Front wheel movement	Every 6 months or 10000 km whatever comes first
54. Tie rod ends	Every 6 months or 10000 km whatever comes first
55. Drag linkage	Every 6 months or 10000 km whatever comes first

56. King pin steering linkage	Every 6 months or 10000 km whatever comes first
57. Power steering	Pre-/Post- Trip

k. Wheel and Tire components:

58. Tires (including spare)	Pre-/Post- Trip
59. Wheel Studs	Every 6 months or 10000 km whatever comes first
60. Wheel Rims	Every 6 months or 10000 km whatever comes first
61. Wheel Bearings	Every 6 months or 10000 km whatever comes first

l. Other components:

62. Instruments and gauges	Pre-/Post- Trip
63. Gauges/Switches	Pre-/Post- Trip
64. Heaters/defrosters	Pre-/Post- Trip
65. Neutral Safety starting switch	Every 6 months or 10000 km whatever comes first
66. Windshield wipers and washers	Pre-/Post- Trip
67. Horn	Pre-/Post- Trip

m. Cleanliness, Safety and Emergency Equipment:

68. Cleanliness	Pre-/Post- Trip
69. Fire Extinguisher	Pre-/Post- Trip
70. First aid kit	Pre-/Post- Trip
71. Warning devices (flags/flares/triangles)	Pre-/Post- Trip
72. Loose items secured	Pre-/Post- Trip
73. Inspection Certificate visible at header panel	Pre-/Post- Trip

n. Safety Devices

74 . Crossing Arm	Pre-/Post- Trip
75 . Stop Arm	Pre-/Post- Trip
76. Strobe Light	Pre-/Post- Trip
77. Reflective Tape	Pre-/Post- Trip

- Written Daily Inspections will be recorded in the white booklets. The current daily inspection will be kept on the bus. Old inspections with no defects reported will be kept for 6 months at the principal place of business/school.

- Deficiencies and corrections will be recorded in the white daily inspection booklets. A copy (booklets are made in carbon duplicates) will be placed in the vehicle file for 5 years (4 years previous, plus current year).

    - For example, a copy of a receipt for a repaired head light will be attached to the copy of the Daily Inspection report where the headlight defect was documented, placed in the vehicle file and documented on the Bus Maintenance Record form as Date "headlight out" and person fixing it.

- Drivers' Duty Records will be retained in the individual Driver's file.

If the scheduled maintenance is at 10,000 which occurs before the 6 months inspection the following Maintenance form will be used as an unscheduled maintenance and inspection form.

Maintenance Form (Schedule 2)

Date:_____ Time:_____ Inspector's Name:_____ Address of Inspection Shop:_____ Licence Plate Number(s):_____Vehicle Unit Number:_____ Odometer:_____ Hour Meter:_____ Signature:_____
☐ Body and Seats (S.1)

- ☐ Chassis Frame (S. 2)
- ☐ Body Frame (S. 3)
- ☐ Sliding Subframe (S. 4)
- ☐ Underbody (S. 5)
- ☐ Drive Shaft (S. 6)
- ☐ Window and Mirrors (S. 7)
- ☐ Fuel (S. 8)
- ☐ Exhaust (S. 9)
- ☐ Friction Components (S. 10)
- ☐ Hydraulic and Vacuum-assist Brake Components (S. 11)
- ☐ Mechanical Components (S. 12)
- ☐ Brake Pedal (S. 13)
- ☐ Air Brake System (S. 14)
- ☐ Park Brake (S. 15)
- ☐ Brake System (S. 16)
- ☐ Engine Controls (S. 17)
- ☐ Steering Column and Box (S. 18)
- ☐ Wheel Alignment (S. 19)
- ☐ C-Dolly Steering (S. 20)
- ☐ Steering Linkage (S. 21)
- ☐ Suspension (S. 22)
- ☐ Electrical General Requirements (S. 23)
- ☐ Windshield Wipers and Washers (S. 24)
- ☐ Heating and Defrosting System (S. 25)
- ☐ Starting Switch (S. 26)
- ☐ Lamps and Reflectors (S. 27)
- ☐ Tires (S. 28)
- ☐ Wheels (S. 29)
- ☐ Lubrication (S. 30)
- ☐ Fifth Wheel Coupling Device (S. 31)
- ☐ Trailer Hitch, Trailer Mount and Connecting Devices (S. 32)
- ☐ Rear Impact Guards (S. 33)

Maintenance Form (Schedule 5)

Date:_____ Time:_____ Inspector's Name:_____

Address of Inspection Shop:_____

Licence Plate Number(s):_____Vehicle Unit Number:_____

Odometer:_____ Hour Meter:_____ Signature:_____

Vehicle must comply with Schedule 5 (school bus maintenance standards) of the regulation as outlined below.

- ☐ Chassis Colour (S. 2)
- ☐ Exhaust (S. 3)
- ☐ Instruments and Instrument Panel (S. 4)
- ☐ Steering Gear and Linkage (S. 5)
- ☐ Tires (S. 6)
- ☐ Rear Bumper (S. 7)
- ☐ Colour (S. 8)
- ☐ Service Door (S. 9)
- ☐ Emergency Exit – General Requirements (S. 10)
- ☐ Emergency Doors (S. 11)
- ☐ Safety Equipment (S. 12)
- ☐ Floor Covering (S. 13)
- ☐ Heater (S. 14)
- ☐ Signage (S. 15)
- ☐ Inside Height (S. 16)
- ☐ Alternate Flashing Warning Lamps (S.17)
- ☐ Floor Level Side Marker Lamps (S.18)
- ☐ Interior Lamps (S.19)
- ☐ Exterior Lamps (S.20)
- ☐ Mirrors (S.21)
- ☐ Body Mounting (S.22)
- ☐ Noise Suppression (S.23)
- ☐ Rub Rails (S.24)
- ☐ Steps (S.25)
- ☐ Stirrup Steps (S.26)
- ☐ Stop Arm S.27)
- ☐ Crossing Arm (S.28)
- ☐ Sun Visor (S.29)
- ☐ Undercoating (S.30)
- ☐ Ventilation (S.31)

Maintenance Form (Schedule 3 and 4)

Date:_____ Time:_____ Inspector's Name:_____

Address of Inspection Shop:_____

Licence Plate Number(s):_____Vehicle Unit Number:_____

Odometer:_____ Hour Meter:_____ Signature:_____

Maintenance Standards for Transportation of Persons with Physical Disabilities in Buses Schedule 3 of the *Commercial Vehicle Safety Regulation* (AR 121/2009)

- ☐ Mobility Aid Securement Devices (S. 1)
- ☐ Ramps and Lifts General Requirements (S. 2)
- ☐ Ramp and Lift Controls (S. 3)
- ☐ Lift Capacity (S. 4)
- ☐ Lift Platform Requirements (S. 5)
- ☐ Warning Notice (S. 6)
- ☐ Ramp Requirements (S. 7)
- ☐ Storage of Ramp (S.8)
- ☐ Accessibility Symbol (S. 9)

Sections 2, 3, 4, 5 and 14 of Schedule 4 of the *Commercial Vehicle Safety Regulation* (AR 121/2009) apply to a school bus, if it is used to transport persons with physical disabilities.

- ☐ Masor System Required (S. 2)
- ☐ Masor System Requirements (S. 3)
- ☐ Mobility Aid and Occupant Restraint Requirements (S. 4)
- ☐ Protective Materials (S. 5)
- ☐ Signs (S. 14)

The above maintenance forms list items that are general headings under Schedules 2 of the *Commercial Vehicle Safety Regulation* (AR 121/2009). The general headings are further broken down in the schedules into specific components and detailed inspection criteria. Refer to the schedules of the *Commercial Vehicle Safety Regulation* (AR 121/2009) for guidance when conducting maintenance inspections.

Note: The items listed in this inspection and maintenance program are items that may be required to be inspected and maintained. Specific vehicles may be equipped or required to be equipped with additional items that must be inspected and maintained. Consult the legislation to determine the specific requirements for your vehicle(s).

Any equipment or safety systems installed in a vehicle by the manufacturer of the vehicle must be maintained in good working order and in accordance with the manufacturer's specifications.

Regular Maintenance

Regular maintenance done on the vehicle will be kept on the following form. Each unit will have its own form. This form is to be kept on the vehicle file.

Bus Maintenance Record	Unit:

Date	Description	Name

<u>Daily Trip Inspections</u>:

Production of the Schedules of NSC Standard 13 Part 2:

- a carrier (an owner of a commercial vehicle that holds, is issued or is required to hold a certificate) shall ensure that a copy of Schedule 2 and any other applicable

Schedules including any modifications made to the Schedule(s) is located within the vehicle and a driver shall produce the Schedule(s) when requested to a peace officer**.**

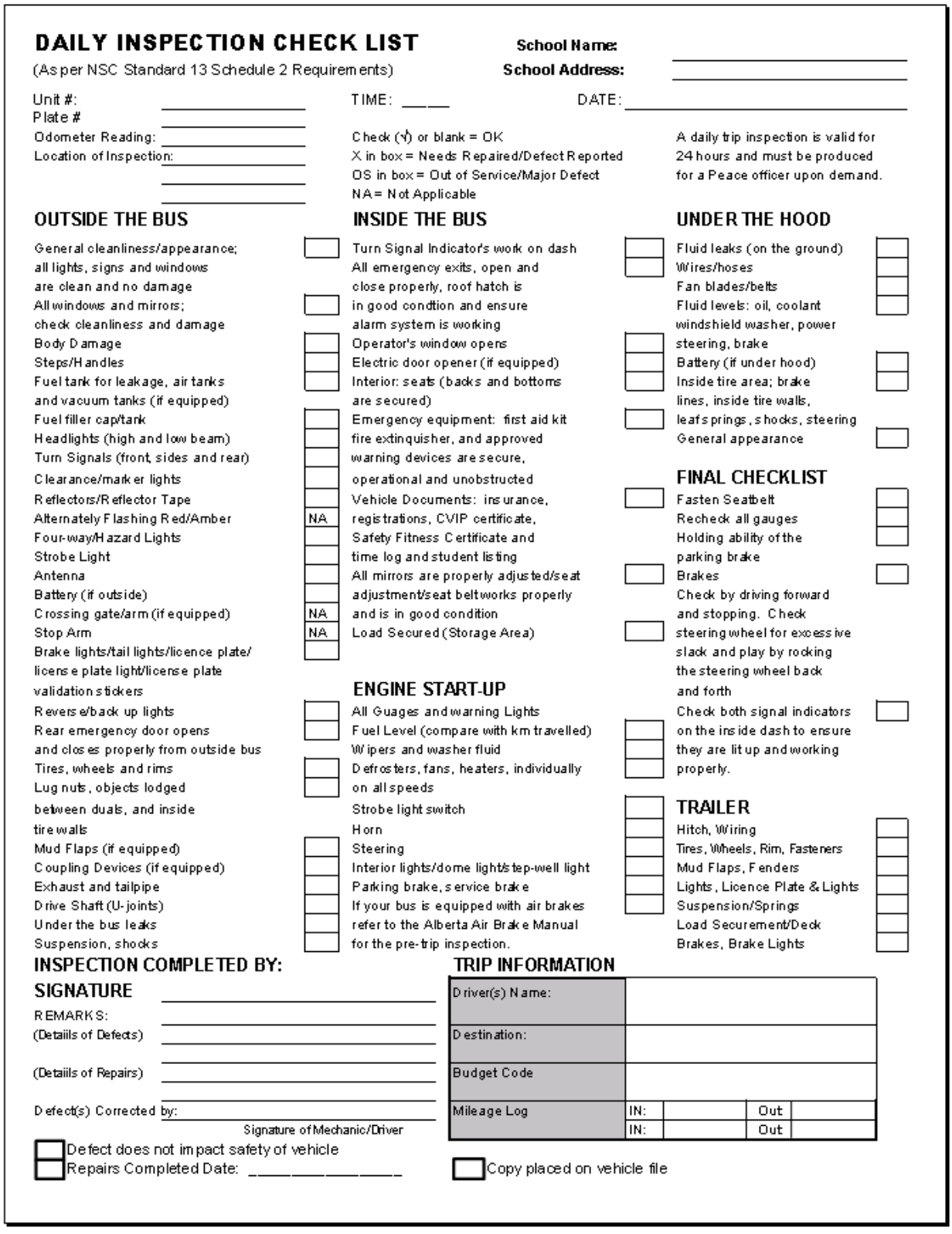
Trip Inspections:

- a daily trip inspection shall be conducted on all school buses with an original manufactured seating capacity of 11 passengers or more including the driver.
- a daily trip inspection is valid for a maximum of 24 hours from the time recorded on the trip inspection report. Vehicle components will be inspected in a Daily Trip Inspection as required by Section 10 (4) (b) *of* Alberta's *Commercial Vehicle Safety Regulation* (AR 121/2009*)*. The daily inspection must include all applicable components specified in the list of items in Schedule 2 of NSC Standard 13 Part 2 and any other applicable schedules (copy attached and/or direct internet access available). Standard 13 Part 2 will be included in the BTPS Daily Inspection Booklet
- Any of the components that are routinely inspected may be added to the "Daily Trip Inspection" and any components that are not applicable to the vehicle may be deleted from the "Daily Trip Inspection".

Completing and Production of the Daily Trip Inspection Report:

- except when specifically exempted by the legislation, the person conducting the "Daily Trip Inspection" shall prepare a trip inspection report;
- the trip inspection report must contain the following information;
    - the licence plate, identification number or unit number,
    - the odometer or hub meter at the time of inspection,
    - the name of the carrier operating the commercial vehicle,
    - the name of the municipality or location on the highway where the inspection was conducted and the time and date that the report was made,
    - any defect related to the operation of any item required to be inspected or that no defect was detected,
    - the name of the person who inspected the vehicle and a statement signed by that person stating that the vehicle has been inspected in accordance with Section 10 of the *Commercial Vehicle Safety Regulation* (AR 121/2009)
    - the name and signature of the person making the report.

The following form will be used by BTPS for the Daily Trip Inspection:



DAILY INSPECTION CHECK LIST

(As per NSC Standard 13 Schedule 2 Requirements)

School Name: _____

School Address: _____

Unit #: _____ TIME: _____ DATE: _____

Plate # _____

Odometer Reading: _____

Location of Inspection: _____

Check (√) or blank = OK
X in box = Needs Repaired/Defect Reported
OS in box = Out of Service/Major Defect
NA = Not Applicable

A daily trip inspection is valid for 24 hours and must be produced for a Peace officer upon demand.

OUTSIDE THE BUS

- General cleanliness/appearance; all lights, signs and windows are clean and no damage
- All windows and mirrors; check cleanliness and damage
- Body Damage
- Steps/Handles
- Fuel tank for leakage, air tanks and vacuum tanks (if equipped)
- Fuel filler cap/tank
- Headlights (high and low beam)
- Turn Signals (front, sides and rear)
- Clearance/marker lights
- Reflectors/Reflector Tape
- Alternately Flashing Red/Amber — NA
- Four-way/Hazard Lights
- Strobe Light
- Antenna
- Battery (if outside)
- Crossing gate/arm (if equipped) — NA
- Stop Arm — NA
- Brake lights/tail lights/licence plate/ licens e plate light/license plate validation stickers
- Reverse/back up lights
- Rear emergency door opens and closes properly from outside bus
- Tires, wheels and rims
- Lug nuts, objects lodged between duals, and inside tire walls
- Mud Flaps (if equipped)
- Coupling Devices (if equipped)
- Exhaust and tailpipe
- Drive Shaft (U-joints)
- Under the bus leaks
- Suspension, shocks

INSIDE THE BUS

- Turn Signal Indicators work on dash
- All emergency exits, open and close properly, roof hatch is in good condtion and ensure alarm system is working
- Operator's window opens
- Electric door opener (if equipped)
- Interior: seats (backs and bottoms are secured)
- Emergency equipment: first aid kit fire extinquisher, and approved warning devices are secure, operational and unobstructed
- Vehicle Documents: insurance, registrations, CVIP certificate, Safety Fitness Certificate and time log and student listing
- All mirrors are properly adjusted/seat adjustment/seat belt works properly and is in good condition
- Load Secured (Storage Area)

ENGINE START-UP

- All Guages and warning Lights
- Fuel Level (compare with km travelled)
- Wipers and washer fluid
- Defrosters, fans, heaters, individually on all speeds
- Strobe light switch
- Horn
- Steering
- Interior lights/dome light/step-well light
- Parking brake, service brake
- If your bus is equipped with air brakes refer to the Alberta Air Brake Manual for the pre-trip inspection.

UNDER THE HOOD

- Fluid leaks (on the ground)
- Wires/hoses
- Fan blades/belts
- Fluid levels: oil, coolant windshield washer, power steering, brake
- Battery (if under hood)
- Inside tire area; brake lines, inside tire walls, leafs prings, shocks, steering
- General appearance

FINAL CHECKLIST

- Fasten Seatbelt
- Recheck all gauges
- Holding ability of the parking brake
- Brakes
- Check by driving forward and stopping. Check steering wheel for excessive slack and play by rocking the steering wheel back and forth
- Check both signal indicators on the inside dash to ensure they are lit up and working properly.

TRAILER

- Hitch, Wiring
- Tires, Wheels, Rim, Fasteners
- Mud Flaps, Fenders
- Lights, Licence Plate & Lights
- Suspension/Springs
- Load Securement/Deck
- Brakes, Brake Lights

INSPECTION COMPLETED BY:

SIGNATURE _____

REMARKS: _____

(Detaills of Defects) _____

(Detaills of Repairs) _____

Defect(s) Corrected by: _____
Signature of Mechanic/Driver

☐ Defect does not impact safety of vehicle
☐ Repairs Completed Date: _____

TRIP INFORMATION

Driver(s) Name:				
Destination:				
Budget Code				
Mileage Log	IN:		Out	
	IN:		Out	

☐ Copy placed on vehicle file

The driver shall, when requested, produce a copy of the report to a peace officer.

Defects Observed During Operation of the Vehicle:

- Regardless of whether a trip inspection report is required to be prepared, if a driver observes any safety defects specified in Schedule 1, 2, 3 or 4 of NSC Standard 13

while driving the vehicle, the driver shall record the defects in a trip inspection report or in a written document and report the defect to the carrier as required.

- The driver shall produce this trip inspection report or other document when requested to a peace office.

Distribution and Retention of Trip Inspection Reports:

- the driver must forward the trip inspection reports to the home terminal of the carrier responsible for the commercial vehicle within 20 days of completion of the trip inspection report

- the carrier will ensure the driver submits the trip inspection report, as required, and deposit the original trip inspection report at the carrier's principal place of business with 30 days of receiving the report from the driver,

- the original report will be retained in chronological order by the carrier for the month it was created and an additional 6 months.

Requirement to Repair, Correct and Report Defects:

- no person shall allow a driver to drive and no driver shall drive a commercial vehicle with any uncorrected or unrepaired major defect (see the applicable Schedule (2, 3 or 4) of NSC Standard 13 Part 2 for a description of a major defect),

- a person authorized by the carrier to conduct a daily trip inspection shall document any defect on the written trip inspection report,

- the carrier or a person authorized by the carrier to conduct trip inspections shall certify on the report that the defect has been repaired/corrected or certify on the report the repair/correction is unnecessary,

- if a driver or person authorized by the carrier to conduct a daily trip inspection believes or suspects there is a safety defect in the commercial vehicle they shall report the safety defect to the carrier;
    - without delay if the defect is a major defect, or
    - in a timely manner but not later that the next required daily trip inspection in all other cases.

The following pages contain NSC Standard 13 Part 2 Schedule 2 to use to determine defects:

Schedule 2 – Bus

Application:
This schedule applies to buses designed, constructed and used for the transportation of passengers with a designated seating capacity of more than 10, including the driver, but excluding the operation for personal use, and also applies to any trailer towed by a bus.

1. Accessibility Devices	
Defect(s) *Accessibility device may not be used if:* • Alarm fails to operate. • Equipment malfunctions. • Interlock system malfunctions.	***Major Defect(s)*** • Vehicle fails to return to normal level after "kneeling." • Extendable lift, ramp or other passenger-loading device fails to retract.
2. Air Brake System	
Defect(s) • Audible air leak. • Slow air pressure build-up rate.	***Major Defect(s)*** • Pushrod stroke of any brake exceeds the adjustment limit. • Air loss rate exceeds prescribed limit. • Inoperative towing vehicle (tractor) protection system. • Low air warning system fails or system is activated. • Inoperative service, parking or emergency brake.
3. Cargo Securement	
Defect(s) • Insecure or improper load covering (e.g. wrong type or flapping in the wind).	***Major Defect(s)*** • Insecure cargo. Absence, failure, malfunction or deterioration of required cargo device or load covering.
4. Coupling Devices	
Defect(s) • Coupler or mounting has loose or missing fastner	***Major Defect(s)*** • Coupler is insecure or movement exceeds prescribed limit. • Coupling or locking mechanism is damaged or fails to lock. • Defective, incorrect or missing safety chain/cable.
5. Dangerous Goods	
	Major Defect(s) Dangerous goods requirements not met.
6. Doors and Emergency Exits	
Defect(s) • Door, window or hatch fails to open or close securely. • Alarm inoperative.	***Major Defect(s)*** *(Passengers may not be carried[1].)* • Required emergency exit fails to function as intended. _____ *1* vehicle may be moved when no passenger carried.
7. Driver Controls	
Defect(s) • Accelerator pedal, clutch, gauges, audible and visual indicators or instruments fail to function properly.	***Major Defect(s)*** *(Passengers may not be carried[2].)* • Accelerator sticking and engine fails to return to idle. _____ *2* vehicle may be moved when no passenger carried.
8. Driver Seat	
Defect(s) • Seat is damaged or fails to remain in	***Major Defect(s)*** • Seatbelt or tether belt is insecure, missing or

set position.	malfunctions.
9. Electric Brake System	
Defect(s) • Loose or insecure wiring or electrical connection.	***Major Defect(s)*** • Inoperative breakaway device. • Inoperative brake.
10. Emergency Equipment & Safety Devices	
Defect(s) • Emergency equipment is missing, damaged or defective.	
11. Exhaust System	
Defect(s) • Exhaust leak.	***Major Defect(s)*** • Leak that causes exhaust gas to enter the occupant compartment.
12. Exterior Body and Frame	
Defect(s) • Insecure or missing body parts. • Insecure or missing compartment door. • Damaged frame or body.	***Major Defect(s)*** • Visibly shifted, cracked, collapsing or sagging frame member(s).
13. Fuel System	
	Major Defect(s) • Missing fuel tank cap[1]. • Insecure fuel tank. • Dripping fuel leak. [1] vehicle may be moved when no passenger carried.
14. General	
	Major Defect(s) • Serious damage or deterioration that is noticeable and may affect the vehicle's safe operation.
15. Glass and Mirrors	
Defect(s) • Required mirror or window glass fails to provide the required view to the driver as a result of being cracked, broken, damaged, missing or maladjusted. • Required mirror or glass has broken or damaged attachments onto vehicle body.	***Major Defect(s)*** *(Passengers may not be carried[1,2])* • Driver's view of the road is obstructed in the area swept by the windshield wipers. [2] vehicle may be moved when no passenger carried.
16. Heater/Defroster	
Defect(s) • Control or system failure.	***Major Defect(s)*** • Defroster fails to provide unobstructed view through the windshield.
17. Horn	
Defect(s) • Vehicle has no operative horn.	
18. Hydraulic Brake System	
Defect(s) • Brake fluid level is below indicated minimum level.	***Major Defect(s)*** • Parking brake is inoperative. • Brake boost or power assist is inoperative.

	• Brake fluid leak. • Brake pedal fade or insufficient brake pedal reserve. • Activated (other than ABS) warning device. • Brake fluid reservoir is less than ¼ full.
19. Lamps and Reflectors	
Defect(s) • Required lamp does not function as intended. • Required reflector is missing or partially missing. • Passenger safety or access lamp does not function.	***Major Defect(s)*** *When lamps are required:* • Failure of both low-beam headlamps. • Failure of both rearmost tail lamps. *At all times:* • Failure of a rearmost turn-indicator lamp. • Failure of both rearmost brake lamps.
20. Passenger Compartment	
Defect(s) • Stanchion padding is damaged. • Damaged steps or floor. • Insecure or damaged overhead luggage rack or compartment. • Malfunction or absence of required passenger or mobility device restraints. • Passenger seat is insecure.	***Major Defect(s)*** *When affected position is occupied:* • Malfunction or absence of required passenger or mobility device restraints. • Passenger seat is insecure.
21. Steering	
Defect(s) • Steering wheel lash (free-play) is greater than normal.	***Major Defect(s)*** • Steering wheel is insecure, or does not respond normally. • Steering wheel lash (free-play) exceeds required limit.
22. Suspension System	
Defect(s) • Air leak in air suspension system. • Broken spring leaf. • Suspension fastener is loose, missing or broken.	***Major Defect(s)*** • Damaged[1] or deflated air bag. • Cracked or broken main spring leaf or more than one broken spring leaf. • Part of spring leaf or suspension is missing, shifted out of place or in contact with another vehicle component. • Loose U-bolt. [1] patched, cut, bruised, cracked to braid, mounted insecurely.
23. Tires	
Defect(s) • Damaged tread or sidewall of tire. • Tire leaking (if leak can be felt or heard, tire is to be treated as flat).	***Major Defect(s)*** • Flat tire. • Tire tread depth is less than wear limit. • Tire is in contact with another tire or any vehicle component other than mud-flap. • Tire is marked “Not for highway use”. • Tire has exposed cords in the tread or outer side wall area.
24. Wheels, Hubs and Fasteners	
Defect(s)	***Major Defect(s)***

• Hub oil below minimum level. (When fitted with sight glass.) • Leaking wheel seal.	• Wheel has loose, missing or ineffective fastener. • Damaged, cracked or broken wheel, rim or attaching part. • Evidence of imminent wheel, hub or bearing failure.
25. Windshield Wiper/Washer	
Defect(s) • Control or system malfunction. • Wiper blade damaged, missing or fails to adequately clear driver's field of vision.	***Major Defect(s)*** *When necessary for prevailing weather condition.* • Wiper or washer fails to adequately clear driver's field of vision in area swept by driver's side wiper.

Record Keeping:

- Vehicle records will be maintained on file as required by Sections 37, 38 and 39 of Alberta's *Commercial Vehicle Safety Regulation* (AR 121/2009) (copy attached and/or direct internet access available). **http://www.qp.alberta.ca/574.cfm?page=2009_121.cfm&leg_type=Regs&isbncln=9780779740727**

BTPS will review maintenance records, CVSA, CVIP and Carrier Profiles (from Alberta Transportation) to monitor, improve and update our maintenance program as required.

- Our company will maintain the following records pertaining to each commercial vehicle used in the carrier's business:

1. an identification of the vehicle, including

   a) a unit number, the manufacturer's serial number or a similar identifying mark,

   b) the make of the vehicle, and

   c) the year of manufacture;

2. a record of the inspection of the vehicle under the Vehicle Inspection Regulation (AR 211/2006), and repairs, lubrication and maintenance for the vehicle, including

   a) the nature of the inspection or work performed on the vehicle, and

   b) the date on which that inspection or work took place and the odometer or hubometer reading on the vehicle at that time;

3. notices of defect received from the vehicle manufacturer and the corrective work done on the vehicle in relation to those notices;

4. trip inspection reports prepared under section 12 of Alberta's *Commercial Vehicle Safety Regulation* .
5. unless otherwise authorized by the Registrar, we shall maintain the records at our principal place of business
6. a copy of the receipt that shows the defect was corrected shall be stapled to a copy of the Daily Inspection and placed on the vehicle file and documented on the Bus Maintenance Record form

We shall ensure that the records required to be maintained under this section are true, accurate and legible.

Trip inspection reports will be retained for the month they are created and an additional 6 months. The other records identified above will be retained for the year they are created and an additional 4 years. All records will be kept for 6 months after the vehicle is retired or disposed of.

A person authorized by the carrier to conduct a daily trip inspection shall certify on the trip inspection (pre-trip or post-trip) or report that any major defect has been repaired/corrected or certifies on the report that repair/correction is unnecessary; a driver shall not drive or be permitted to drive until all major defects have been repaired.

Detailed Bus Inspections

All CVIP inspections are to be conducted at a licensed mechanical shop or approved facility. Unscheduled inspections are to be completed by the operator/shop mechanic/Safety Officer and major defects must be reported to and corrected by a licensed mechanic. The information contained within this document is to be followed when doing all vehicle inspections. All specifications should be checked for accuracy as pertaining to each unit**.**

Bus inspections are done as per the Vehicle Safety Inspection Program inspection methods and standards.

Section 3(1) of AR 118/89 states that the driver of a commercial vehicle shall inspect the vehicle before operating it at the beginning of a work shift and after he/she ceases to operate it at the end of the work shift. Each trip inspection must include an inspection of at least all items listed under Section 3(2):

a) lighting devices and reflectors;
b) tires;
c) coupling devices;
d) wheel and rims;
e) service brake, including the trailer brake connections;
f) parking brake;
g) steering mechanism;
h) horn;
i) windshield wipers;
j) rear vision mirrors;
k) emergency equipment

Because the pre-trip and a post-trip inspection is required by BTPS to be in writing, then each is considered to be an ”inspection” as specified by Section 8 of AR 188/89 and must be retained for the six months as required by Section 9. In addition, any vehicle deficiency reports generated as a result of a trip inspections must contain at least the information specified in Section 8c including: vehicle identification, nature of inspection, date and odometer reading.

Bus Inspection –Interior, body, door and seats

The following items must be checked and found to be in proper working order

- ✓ Bumpers are securely mounted and have no broken, bent or sharp edges.
- ✓ Fender is in place and moldings or other sheet metal parts have no broken, bent or sharp protruding edges.
- ✓ Main and emergency doors operate easily and close securely.
- ✓ Emergency door is unobstructed and opens easily from inside and outside.
- ✓ Door controls operate smoothly and the seals are in good condition.
- ✓ The hood latch holds the hood securely in the case of front opening hood the safety catch is operative.
- ✓ Each seat is securely mounted and retains its position in accordance with CSA standard.
- ✓ All floor coverings are in good condition, with no loose edges.
- ✓ Where applicable, baggage racks shall be securely mounted.
- ✓ Inside sun visor on the driver’s side, and where applicable the inside visor on the passenger’s side shall be firmly mounted and not shake out of position.
- ✓ Bus registered as a School Bus is yellow chrome and black in accordance with CSA standard.
- ✓ All bus signs are clean and legible.
- ✓ The seating capacity of the bus is in accordance with the manufacture’s recommendation.

Bus Inspection –Frame

The frame of a bus should be inspected for cracks, loose rivets and loose bolts

- ✓ Chassis frame rails or members shall not be cracked nor have loose or missing connecting fasteners or rivets.
- ✓ Body mounts are in place and secure.
- ✓ The floor pan shall not be perforated by rust or other damage.

Bus Inspection –Windshield and windows
The windshield and all windows of a bus shall be inspected for material damage, discoloration and clarity of the glazing and the condition and security of mounting of each mirror on a bus shall be inspected
The following items must be checked and found to be in proper working order

- ✓ Opaque material or any other material is not used in place of glazing in the windshield or in the front 2 side windows to the right of the driver, and the first side window to the left.
- ✓ Glazing material is not cracked, crazed, discolored, fogged, and does not have exposed sharp edges and does not have any parts missing.
- ✓ The windshield does not have any star or crack running from edge to edge in the area swept by the wiper blades or in an area, which partly impairs the operator's field of vision.
- ✓ The emergency window release operates smoothly and the seals are in place and in good condition.
- ✓ The inside rear view mirror, left outside mirror, right outside mirror and cross over mirror where applicable is securely mounted and give the operator and unobstructed view.
- ✓ No mirror is cracked or broken or have a reduction in its reflective surface.

Bus Inspection –Fuel System
The fuel system of a bus shall be inspected, the complete accelerator linkage system and carburetor or injection pump controls and links are to be inspected while the engine is running and the vehicle is stationary.
The following items must be checked and found to be in proper working order

- ✓ The mounting and the attachments of the fuel tank and fuel lines are secure.
- ✓ The filler neck and cap are secure
- ✓ The fuel system does not leak
- ✓ All fuel line hose clamps are in position and secure
- ✓ The return spring is in place and not damaged
- ✓ No component is missing, damaged, worn or out of adjustment so as to prevent the engine speed returning to idle while the transmission is in neutral and the accelerator pedal is released.

Bus Inspection –Exhaust System
The exhaust system including the muffler, tail pipes, exhaust pipes, heat shields and support hardware shall be inspected
The following items must be checked and found to be in proper working order

- ✓ No component of the exhaust system shall be missing, perforated, patch affixed other than by welding, or insecurely mounted
- ✓ The bus has a muffler

- ✓ No joint or seam is leaking
- ✓ No component is causing charring or other heat damage to wiring, brake line, fuel line or combustible material o f the bus
- ✓ All exhaust connections except flange type shall have exhaust clamps
- ✓ The tail pipe extends not more than one inch beyond the rear of the bumper

Bus Inspection –Brake Friction

As per the CVIP Section 3 of the Commercial Vehicle Inspection Manual:

(A) Once a year the brake friction components shall be inspected by removing front wheels, drums or rotors.

(B)The front brake linings or pads and drums or disks are to be inspected and the condition and thickness of the brake linings, drums or rotors are to be determined and measurements recorded and brought up to proper specification at that time.

(C) Every year the rear brake drums or rotors are to be removed and inspected. The condition and thickness of the brake linings or pads, drums or rotors are to be determined and measurements recorded and repairs made at that time if needed to bring up to specification

(D) A period of 6 months must expire between the time that an inspection takes place pursuant to clause (A) and an inspection takes place pursuant to clause (B)

The following items must be checked and found to be in proper working order.

- ✓ A drum or disc shall not have any external crack on the friction surface, other than a normal heat check crack, which may reach the edge of the drum or periphery of the disc.
- ✓ A drum or disc shall not have any mechanical damage to the friction surface other than normal wear
- ✓ Bonded lining shall not be worn to 1.6mm or less at the center of the shoe
- ✓ Riveted Linings not worn more to 3.2mm or less at the center of shoe
- ✓ Riveted linings not worn to 1.6mm above rivet when wheels and drums removed
- ✓ Wire backing shall not be visible in a friction surface
- ✓ A disc pad will not be worn to 1.6mm above the rivet with the wheels and disc removed
- ✓ Will not be worn to 1.6mm or less at the thinnest point on bonded pads
- ✓ Not worn to 3.2mm or less at the thinnest point on riveted pads
- ✓ No rivet shall be loose or missing
- ✓ The brake lining shall not be broken, cracked or loose on the shoe or pad not so worn as to indicate a defective drum, disc or warped shoe
- ✓ Oil or grease shall not be present in a lining or pad friction surface
- ✓ A ventilated disc shall not have broken or visible cracked cooling fins

- ✓ A drum disc must not be worn out of round or machined beyond the limits as stamped on the drum or disc by the manufacturer

- ✓ Each automatic adjuster must be functional and perform in accordance with its design specifications.

Bus Inspection –Hydraulic Components of the Brake System
The following items must be checked and found to be in proper working order.

The master cylinder or wheel cylinder shall not leak and the brake cylinder piston must move when moderate pressure is applied to the brake pedal

- ✓ Each wheel cylinder piston must be connected to the brake shoes in accordance with the manufacturer's design

- ✓ The hydraulic hose and tube must not
  - o Be abraded, restricted, crimped, cracked or broken

  - o Leak

  - o Rub against the bus structure, nor have contact with moving components during the operation or the vehicle, or

  - o Have missing clamps and or supports

- ✓ No connection should leak

- ✓ The fluid level in a reservoir must be up to the fill level specified by the manufacturer

- ✓ The master cylinder push rod must be adjusted in accordance with the manufacturer's specifications

- ✓ All mechanical components of the brake system of a bus must be inspected

- ✓ All mechanical parts must not be misaligned, badly worn, bent, broken or missing

Bus Inspection –Service Brake Pedal
The following items must be checked and found to be in proper working order.

- ✓ The pad or anti-skid surface of the service brake pedal must be inspected

- ✓ The pedal position must be observed while the pedal is depressed and released, and

- ✓ The pedal travel of the hydraulic mechanical or power assisted hydraulic service brake must be tested and in the case of a power assisted hydraulic service brake it shall be tested while the engine is running.

- ✓ The service brake pedal pad must be present, secure and not badly worn

- ✓ When firm foot pressure is maintained on the service brake pedal for one minute it shall hold its position

- ✓ No pedal or other component shall bind or cause high friction

- ✓ The pedal lever assembly shall be aligned and positioned in accordance with the manufacturer's specifications

Bus Inspection –Brake failure warning lights
The following items must be checked and found to be in proper working order.

- ✓ On a motor vehicle with dual braking, the brake failure warning light must function in accordance with the manufacturer's specifications
- ✓ The brake failure warning light must not turn on when maximum manual force is applied while the engine is running
- ✓ Air brake light or warning device must come on when the air pressure is lowered below 382kpa (55)
- ✓ Hydro-boost warning light must function in accordance with the manufacturer's specifications

Bus Inspection –Emergency or Parking brake
The following items must be checked and found to be in proper working order.

- ✓ The parking brake while set but not held by hand in the fully applied position must hold the bus from being moved by the bus engine and power train when the engine is at a light throttle setting (800 rpm).
- ✓ The mechanism in the off position must fully release the brake
- ✓ Pull cables must not be worn, stretched or frayed and must operate freely
- ✓ Parking brake drum disc or facing must not be broken, nor worn thinner than 2 millimeters in thickness when measured at its thinnest point in the rivet head or shoe

Bus Inspection –Bus vacuum system components which include hoses, tubes, supports, hose clamps and brake booster breather filters must be inspected and tested by exhausting the vacuum system by applying the brakes several times while the engine is stopped, then starting the engine while normal foot force is applied to the brake system and after the engine has built up a vacuum the brake pedal must be applied and released several times
The following items must be checked and found to be in proper working order.

- ✓ Hoses, tubes or connections must not leak nor be restricted, abraded, crimped, cracked, broken nor rub against any structure nor have damaged or missing clamps or supports
- ✓ The brake booster or hydro-vac breather filter must be clean
- ✓ If a bus is equipped with a vacuum pump, the drive belt must be adjusted to the tension specifies by the manufacturer and not be worn or frayed
- ✓ The vacuum pump air cleaner must be clean
- ✓ The vacuum tank reserve system must be capable of holding 38 centimeters of vacuum for 15 minutes

- ✓ The vacuum reserve shall be sufficient to permit 2 full applications of the service brake after the engine is stopped
- ✓ The brake pedal when depressed under a foot pressure of 187 Newton's to 267 Newton's must have 30% or more of the total available pedal travel remain
- ✓ The brake pedal must move towards the applied position when the engine is started while foot force is maintained on the brake pedal in the vacuum system test
- ✓ A hard pedal condition must not be present
- ✓ The brake vacuum booster piston seal, valves or diaphragms must not leak

Bus Inspection – Service Brake System
To assure compliance with service brake system standards the bus must be inspected and tested on a substantially level surface by stopping the bus when maximum service brake pressure is applied at a speed of no less than 8 kilometers per hour and no more than 30 kilometers per hour - OR - By the use of a brake dynamometer or meter

- ✓ No component of the service brake system should fail
- ✓ The bus shall not pull to the right or left when the brake is applied
- ✓ The bus must release immediately when pressure is released from the pedal
- ✓ Braking efficiency must be within the manufacturer spec

Bus Inspection – Lamps and Reflectors

All lamps and reflectors must be inspected and tested

- ✓ A headlamp alignment inspection is to be done and must be accordance to manufacture's specifications
- ✓ Every filament to every bulb or unit must light when switched to the "on" position
- ✓ A circuit must not interfere with another circuit
- ✓ All lenses and reflectors must be in place, unbroken and correctly mounted
- ✓ Every lamp must be securely mounted
- ✓ A lamp must not be coated with a colored lacquer
- ✓ A lamp must not be modified by the attachment of any device to lamp or to the bus that reduces the effective area of the lens or the brightness of the light
- ✓ The turn signal lamp switch and the flasher shall operate in accordance with the manufacturer's specifications and the indicator lamp must flash
- ✓ The high and low beam switching must operate in accordance with the manufacture's specifications
- ✓ Where applicable the alternate flashing lamps must operate correctly from both front and rear lights on the 4 lamp or the 8 lamp systems, as the case may be.

- ✓ Where applicable stop arm lamps must flash when activated

- ✓ The hazard warning lamps unit shall operate in accordance with the manufacturer's specifications and the indicator lamp must flash

- ✓ The engine, headlight, stop and taillight, and hazard warning lamp wiring harness must not be damaged by abrasion or deterioration

- ✓ The battery cables must be in good condition, free of corrosion and firmly attached to the battery, starter and engine.

- ✓ The battery must be free of corrosion and in good condition and securely attached to the bus.

- ✓ The alternator belts must be adjusted in accordance with the manufacturer's recommendations and must not be cracked or frayed
- ✓ A headlamp alignment inspections to be done and must be accordance to manufacture's specifications

- ✓ The center of a headlamp on the high beam high intensity zone must not be above or more then 10 centimeters below the horizontal center line of the lamp and not more than 10 centimeters to the left or right of the vertical center line of the lamp when measured on an aiming screens in accordance with the Society of Automotive Engineers J602 Standards or the manufacturer's specifications

- ✓ The top edge of a head lamp on the low beam high intensity zone shall not be more than 5 centimeters above or below the horizontal center line of the lamp and the left edge of the low beam high intensity zone must not be to the left or more than 15 centimeters to the right of the vertical center line of the lamp, when measured on an aiming screen in accordance with the Society of Automotive Engineers J602 Standards or the manufacturer's specifications.

Bus Inspection – Horn
Horn must be tested to assure compliance with standards

- ✓ The horn must be secure on its mounting

- ✓ The horn operation mechanism must function in accordance with the manufacturer's specifications

Bus Inspection – Neutral Safety Starting Switch
Neutral safety starting switch must be inspected to assure compliance with standards

- ✓ Neutral starting safety switch must operate only when the gear selector is in the "P" or "N" position.

Bus Inspection – Windshield Wipers

- ✓ Each part of the windshield wiper system must be in place and not worn or in such condition that its effectiveness in impaired.

- ✓ Each wiper blade must move over its full designed range of travel

- ✓ The windshield washer system must function in accordance with the manufacturer's specifications

Bus Inspection – Instruments, gauges and instrument lights

- ✓ All instruments must be functional and clearly visible to the operator.
- ✓ A lens must not be scratched or cracked or impair the legibility for the operator
- ✓ All gauges must be functional and clearly visible to the operator

Bus Inspection – Interior heaters and heater motors and defrosters

- ✓ Interior heaters must function in accordance with the manufacturer's specifications
- ✓ Heater motors and fans must function in accordance with the manufacturers specifications
- ✓ The windshield defroster system must deliver air to the windshield, the driver's side window and the door glass panels unless the bus is equipped with frost resistant glass panels.
- ✓ Roof ventilation must function as designed by the manufacturer
- ✓ All heater hoses and radiator hoses must be in good condition

Bus Inspection – Steering Mast Jacket, Steering Shaft, Coupling and Spline.
The steering mechanisms must be inspected when the front wheels are off the ground by manipulating the wheels from full left travel to full right travel and in the case of a vehicle having power steering the inspection must be carried out while the engine is running and if there is power steering with a belt driven power steering pump the belt must be inspected

- ✓ The steering column and steering box must be securely mounted to the body and frame
- ✓ The steering mast jacket bearings and bearing adjustment must meet manufacturer's specifications
- ✓ The steering shaft coupling and spline must be secure with no visible separation of flex couplings or visible sign of wear at the splines or U joints
- ✓ The steering column and shaft energy absorbing section must not be damaged and sheer fasteners must be in position in accordance with the manufacturer's specifications
- ✓ Free movement of the steering wheel must not exceed 7 centimeters at the steering wheel rim when the front wheels are stationary and in the straight ahead position
- ✓ There must be no endplay in the worm or sector of the steering box as per manufacturer specifications.
- ✓ Sector bushing wear must not exceed 0.381 millimeters
- ✓ The front wheels must turn from full right to full left and back again without interference, jamming or roughness in the mechanism

- ✓ The rod ends and drag linkage ends must not have vertical or lateral play beyond manufacture's specification
- ✓ Kingpin Play (horizontal movement, vertical movement or condition) must be accordance to manufacture's specification
- ✓ The pin eyes must not be out of round
- ✓ The steering linkage must not be damaged or repaired
- ✓ The steering linkage must not be modified so as to adversely affect the steering so that the vehicle's steering is no longer in accordance with the manufacturer's alignment specifications
- ✓ The power steering drive belt must not be cut, frayed, cracked and must have the tension set in accordance with the manufacturer's specifications
- ✓ A hose must not have cracks, peeling, exterior damage or expansion at crimping points
- ✓ The power steering cylinder must not be damaged
- ✓ The cylinder ball joints must be adjusted and aligned in accordance with the manufacturer's specifications
- ✓ The power steering cylinder seal must not leak

Bus Inspection – Front Suspension and Rear Suspension
The front suspension must be inspected for alignment and for wear and damage while the front wheels of the vehicle are off the ground and the front suspension joints are not under load and the rear suspension must be inspected for tracking wear and damage

- ✓ A non-load carrying ball joint must not show visible movement
- ✓ A load carrying ball joint must not have wear in excess of the manufacturer's specifications
- ✓ The rear axle must track in accordance with the manufacturer's specifications
- ✓ Springs, shackles, U bolts, center bolts, shock absorbers, radius rods or stabilizer links must not be loose, bent, broken, disconnected or missing
- ✓ Shackle pins and bushing must be within manufacture's specification
- ✓
- ✓ A shock absorber must not leak nor shall it be loose
- ✓ Nuts, bolts and cotter pins must not be loose, worn or missing

Bus Inspection – Drive Shaft and Universal Joints

- ✓ The drive shaft and the universal joint must not be damaged nor have any loose, missing or damaged bolts or retainers
- ✓ The drive shaft slip yokes and stub shaft splines must not be worn more than 20% of the original spline width
- ✓ The driver shaft guards must be undamaged and securely fastened to the chassis

Bus Inspection – Wheel stubs, Rims and Wheel Bearings

- ✓ Bolts, lugs, spacers, lock rings and nuts must not be defective or missing
- ✓ Rims must not be bent, cracked or damaged so that they do not operate in accordance with good shop practice
- ✓ Wheel bearings, cones and cups must not be pitted or worn, beyond the manufacturer's specifications
- ✓ Wheel bearings must be adjusted in accordance with the manufacturer's specifications

Bus Inspection – Tire

- ✓ On vehicles of 4500 kilograms gross vehicle weight or more, the front tire tread depth must not be less than 2 millimeters
- ✓ Snow lug grip tire must not be smooth for over 30% of it center
- ✓ A tire must not have exposed cord at worn spots
- ✓ A tire must not have cuts or snags deep enough to expose the cord, or affect the safety of the tire
- ✓ A tire must not have any abnormal visible lump, bulge or knot related to tread or sidewall separation, failure or partial failure of the tire structure including the bead areas
- ✓ A tire must not have been re-grooved or re-cut below the original new tire groove depth except a tire, designed for re-cutting and marked as being so designed
- ✓ A tire must not be a smaller size than is marked on the vehicle placard or so oversized that it contacts the bus body structure
- ✓ A studded tire must not have less than one half the number of studs that are on the corresponding tire on the same axle
- ✓ A bus must not be fitted with both radial ply and bias ply tires unless it is in accordance with the tire manufacturer's specifications
- ✓ Dual tires must not be in contact with each other or differ from each other by more than 13 millimeters in diameter
- ✓ A tire must have the correct air pressure
- ✓ The load capacity of the tires must be equal to or greater than the gross vehicle weight-rating limit of the bus
- ✓ Every tire valve and valve stem must function in accordance with the manufacturer's specifications and must not be worn or damaged
- ✓ A recap tire must not be used on front wheels

- ✓ Tread Depth shall be measured with a tire tread depth gauge throughout a continuous circumferential band on the tread of all major grooves of the tread width
- ✓ A) Front tires must not be less than 3.2mm of tread in any spot, were bars exposed
- ✓ B) Rear tires must not be less than 1.6mm of tread in any one spot, wear bars exposed
- ✓ The tread wear indicators must not contact the road surface

Inspection – Cleanliness Inside and Outside

- ✓ The bus must be clean inside and outside
- ✓ All loose items in bus must be tied down or stored in attached containers
- ✓ Windows must be clean inside and outside
- ✓ The bus engine compartment must be free of excess oil and grease
- ✓ The inspection certificate must be visibly located at the header panel

Bus Inspection – Fire Extinguisher Inspection
Ensure its security of mounting and availability, its gauge must be inspected for full charge, and its date of service must be inspected

- ✓ The fire extinguisher must meet the requirements of the CSA Standard
- ✓ The fire extinguisher must be securely mounted in a suitable bracket in the forward end of the bus, easily accessible to the driver or near the entrance door
- ✓ If the fire extinguisher is not in view, its location must be plainly marked and if it is in a locked compartment the key must be readily available to the driver and the compartment must buzz if it is locked when the bus is running
- ✓ The fire extinguisher must have a gauge to read the state of charge and it must read in the designated zone for full charge
- ✓ The inspection mechanic must remove the fire extinguisher form its bracket, and tip upside down and shake it at the time of the bus inspection

Bus Inspection – First Aid Kit
Must meet the CSA Standard and contains:

- ✓ 4 packets containing 4 hand cleansers, and 12 items of gauze.
- ✓ 150 adhesive dressings 25 millimeters x 75 millimeters, individually wrapped
- ✓ 8 compress dressings, 50 millimeters
- ✓ 6 compress dressings, 100 millimeters
- ✓ 2 eye dressing kits (1 eye shield and 2 gauze pads)
- ✓ 3 gauze dressings, 4 ply, minimum 914 millimeters x 914 millimeters square

- ✓ 2 gauze bandages, 50 millimeters x 548 millimeters (packets)
- ✓ 1 adhesive tape, 25 millimeters x 457 millimeters (packets)
- ✓ 6 triangular bandages
- ✓ 1 metal splint 70 millimeters x 610 millimeters rolled
- ✓ Scissors
- ✓ Non-rusting tweezers
- ✓ 12 safety pins, 50 millimeters and
- ✓ Is mounted in a location readily accessible to the driver but if it is not in view its location must be plainly marked and if it is in a locked compartment a key must be readily available to the driver and the compartment must buzz if it is locked when the bus is running

Bus Inspection – Flares and Flags or Triangles
Must meet the CSA Standard be securely mounted and stored on the bus

- ✓ Triangles are that they meet the requirements of CSA Standard and that they are securely mounted or stored on the bus
- ✓ The main and emergency exits must operate easily and must close securely
- ✓ The emergency door must be unobstructed, and must be easily opened from inside and outside the vehicle