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VEHICLE MECHANICAL-SAFETY
INSPECTION
MANUAL

Certified Vehicle Mechanical Inspector
This Manual is developed to guide inspectors, mechanics, and other persons responsible for ensuring the safe transportation of Passengers. To assist in identifying critical vehicle items and to provide criteria for placing a vehicle in a:

- “Pass Inspection” (safe for transportation);
- Provide guidance on items that need repair or maintenance or;
- Does not meet standards (Out Of Service) category.

Reasonable effort has been made to update the inspection procedures in accordance with new technologies.

**PROCEDURE:**
The Bus company administrator or owner avails the vehicle for inspection as outlined in this manual and the vehicle Construction Standards.

**INSPECTION SCHEDULE**
- Vehicles are inspected by Certified Vehicle Mechanical inspectors;
- Mechanics should be present for minor repairs to be made at the time of inspection.
- All defects should be recorded at the time of inspection even if they were repaired during the inspection.

**INSPECTION SEQUENCE**
The sequence of inspection should be:
1. Exterior
2. Interior
3. Engine Compartment
4. Undercarriage/ Brakes

A summary report is then provided to the company representative or owner at the time of inspection for action.

**SPECIAL INSPECTIONS**
All vehicles involved in a crash should be inspected as soon as possible; reported to the Police and the local inspection team.
Vehicle Inspection Procedures

I. EXTERIOR
   A. Front Bumper and Attachments
   B. Rear Bumper and Attachments
   C. Passenger-Bus Markings
   D. Reflectorized Material
   E. Emergency Door
   F. Emergency Exit Window
   G. Emergency Roof Exit
   H. Body Sheet Metal and Paint
   I. Glass and Mounting
   J. Directional Signals
   K. Back-up Lamps
   L. Backing Warning Systems
   M. Stop and Tail Lamps
   N. Flashing Warning Signal Lamps (Student Pick-up Lamps)
   O. Clearance, Marker, Identification Lamps
   P. White Strobe Light (Optional)
   Q. Reflectors
   R. Headlamp Assembly

II. INTERIOR
   A. Service Door Assembly/Entrance/Handrails
   B. Driver’s Seat
   C. Steering system
   D. Clutch Operation
   E. Instruments and Switches
   F. Horn/s
   G. Windshield Wipers/Washers
   H. Defroster and Auxiliary Fans
   I. Heater(s)
   J. Mirrors
   K. Sun Visor
   L. Emergency Equipment
   M. First Aid Kit
   N. Cleanliness
   O. Floor and floor covering
   P. Ceiling
   Q. Seats
   R. Emergency Exits
III. ENGINE COMPARTMENT
   A. Hood Assemblies
   B. Firewall
   C. Engine/Drive Train Components
   D. Fuel System

IV. UNDERCARRIAGE AND BRAKES
   A. Frame
   B. Front Axle Assembly
   C. Shock Absorbers (front and rear)
   D. Rear Axle Assembly
   E. Springs, Torsion Bars and Torque Rods
   F. Air Suspension
   G. Brakes
   H. Exhaust System
   I. Fuel Tank and Shield
   J. Tyres, Rims and Wheels
   K. Body and Mounting Pads
   L. Drive-line, Universal Joints

V. PROPANE FUEL SYSTEM
   A. General – The system shall be maintained to the manufacturer’s specifications.
   B. Tanks
   C. Fuel Lines
   D. Fuelling Compartment
   E. Relief Valve
   F. Automatic Shut Off
   G. Decals Stating “Powered by Propane”
   H. Other

VI. COMPRESSED NATURAL GAS (CNG)
   A. General - The system shall be maintained to the manufacturer’s specifications.
   B. Fuel Cylinders - Visually check for:
   C. Fuel Lines - Visually check for:
   D. Decals
   E. Manual Shut-Off Valve
   F. Automatic Shut-Off
VII. Body Sheet Metal

A. Brakes
B. Bumpers
C. Doors – Service, Lift, and/or Type A Left Driver’s door
D. Drawstring - No catch points on handrails or within stairwell including service door.
E. Emergency Exits
F. Emergency Equipment – All must be present and operational (Fusses, triangles and fire extinguisher).
G. Exhaust System
H. Fluid Leaks (engine, radiator, drive train, hydraulic systems (lifts), heater systems)
I. Fuel System
J. Glass and Mounting
K. Horn
L. Interior
M. Lettering/Markings
N. Lights
O. Mirrors
P. Minor Violations
Q. Power lifts
R. Seats
S. Steering Mechanism
T. Suspension
U. Tyres
V. Undercarriage
W. Wheels, Rims and Hubs
X. Windshield Wipers
Y. Wiring