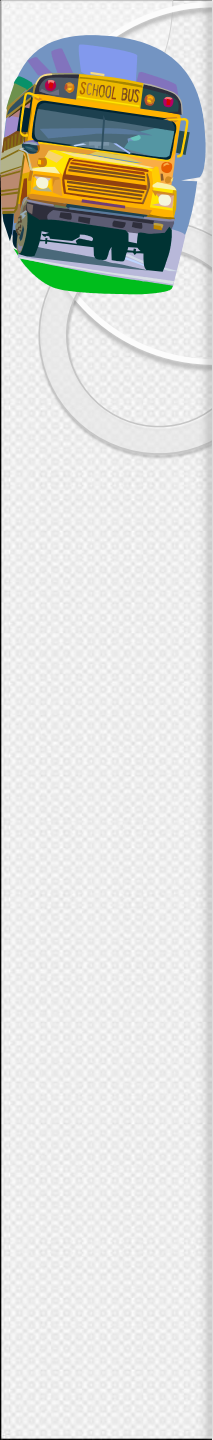


Pre-Trip Responsibilities

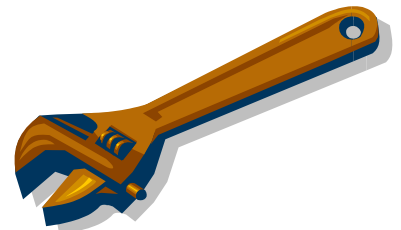




Bus Components and Systems

Performing a pre-trip inspection before a run and a post trip inspection after a run can help detect defects or deficiencies.

Basic knowledge of the school bus components is instrumental in performing an accurate daily pre-trip inspection.





Braking Systems

Hydraulic Brakes-Work through fluid pressure

Air Brakes-Use compressed air

Anti-lock Braking System

Uses computer to monitor and control braking



Drive-train

Engines

Diesel: Uses diesel fuel or mixed alternative fuel. Diesel engines use compression to ignite fuel and are more efficient than gasoline engines. These engines often use a turbocharger to increase power.

Gasoline: Uses gasoline or mixed alternative fuel. Gasoline engines use spark plugs to ignite the fuel mixture.



Drive-train

Transmission

Manual

Require the use of a clutch to apply and remove engine torque to the transmissions input shaft

Automatic

Automatically change to higher and lower gears with changes in the vehicle's speed and load on the engine



Steering Systems

Components

- Steering Wheel
- Pitman Arm
- Column
- Gear Box/Rack and Pinion Assembly
- Steering Knuckles and Ball Joints
- Wheel Spindle Assembly



Suspension System

Leaf springs

The springs support the weight of the vehicle, maintain ride height, and absorb road shock. They keep the vehicle's wheels in firm contact with the road and provide for a comfortable ride.

Shock Absorbers

Reduce effects of the up and down movement. Absorbers reduce the rate of bounce, roll or sway, brake dive and acceleration squat.



Electrical System

- The Battery is the initial source of electricity.
- The Alternator powers the electrical system when vehicle is running and restores charge in battery.
- The Starter converts electricity to mechanical energy to start the engine.
- The Fuse box contains fuses that protect the electrical system from electrical overload.



Traffic Warning System

Front of bus

Two red lamps

Two amber lamps



Stop Arm

One upper and lower red lamp on a red sign



Rear of bus

Two red lamps

Two amber lamps





Preventive Maintenance

The objectives of a preventive maintenance program are to:

- Keep the bus in a safe operating condition
- Prevent failures and breakdowns
- Maintain the bus in a serviceable operating condition
- Lower maintenance costs
- Preserve bus components
- Eliminate problems for the driver

The pre-trip inspection is a form of preventive maintenance.



Pre-trip Safety Inspection

The pre-trip safety inspection is the first step in preventive maintenance.

Inspecting the bus and recording the results before starting a route or field trip is mandatory.



Operation of the Bus

Be Perceptive, your vehicle “talks” to you in many ways.

1. Listen
2. Feel
3. Look
4. Smell



**Click the link below to complete the Pre-Trip Quiz
and then click submit.**

