- If a change of seating is needed, request that the student move to a seat near you.
- Never put a student off the bus except at school or at his or her designated school bus stop. If you feel that the offense is serious enough that you cannot safely drive the bus, call for a school administrator or the police to come and remove the student. Always follow your state and local school or school district procedures for requesting assistance.

In order to get students to and from school safely and on time, you need to be able to concentrate on the driving task.

Loading and unloading requires all your concentration. Don't take your eyes off what is happening outside the bus.

If there is a behavior problem on the bus, wait until the students unloading are safely off the bus and have moved away. If necessary, pull the bus over to handle the problem.

# 2.17 Antilock Braking Systems

# **Vehicles Required to have Antilock Braking Systems**

The United States Department of Transportation requires that antilock braking systems be on:

- Air brake equipped vehicles (trucks, buses, trailers and converter dollies) built on or after March 1, 1998.
- Hydraulically braked trucks and buses with a gross vehicle weight rating of 10,000 lbs. or more built on or after March 1, 1999.

Many buses built before these dates have been voluntarily equipped with ABS.

Your school bus will have a yellow ABS malfunction lamp on the instrument panel if it is equipped with ABS.

## **How ABS Helps You**

When you brake hard on slippery surfaces in a vehicle without ABS, your wheels may lock up. When your steering wheels lock up, you lose steering

control. When your other wheels lock up, you may skid, jackknife or even spin the vehicle.

ABS helps you avoid wheel lock up and maintain control. You may or may not be able to stop faster with ABS, but you should be able to steer around an obstacle while braking and avoid skids caused by over braking.

## **Braking With ABS**

When you drive a vehicle with ABS, you should brake as you always have. In other words:

- Use only the braking force necessary to stop safely and stay in control.
- Brake the same way regardless of whether you have ABS on the bus. During emergency braking, do not pump the brakes on a bus with ABS.
- As you slow down, monitor your bus and back off the brakes (if it is safe to do so) to stay in control.

## **Braking If ABS Is Not Working**

Without ABS you still have normal brake functions. Drive and brake as you always have.

Vehicles with ABS have yellow malfunction lamps to tell you if something is not working. The yellow ABS malfunction lamp is on the bus's instrument panel.

As a system check on newer vehicles, the malfunction lamp comes on at start up for a bulb check and then goes out quickly. On older systems, the lamp could stay on until you are driving over five mph.

If the lamp stays on after the bulb check or goes on once you are under way, you may have lost ABS control at one or more wheels.

Remember, if your ABS malfunctions, you still have regular brakes. Drive normally but have the system serviced soon.

# **ABS Safety Reminders**

- ABS won't allow you to drive faster, follow more closely or drive less carefully.
- ABS won't prevent power or turning skids. ABS should prevent brake-induced skids or jackknifes

but not those caused by spinning the drive wheels or going too fast in a turn.

- ABS won't necessarily shorten stopping distance.
   ABS will help maintain vehicle control, but not always shorten stopping distance.
- ABS won't increase or decrease ultimate stopping power. ABS is an 'add on' to your normal brakes, not a replacement for them.
- ABS won't change the way you normally brake.
  Under normal brake conditions, your vehicle will
  stop as it always has stopped. ABS only comes
  into play when a wheel would normally have
  locked up because of over braking.
- ABS won't compensate for bad brakes or poor brake maintenance.
- Remember: The best vehicle safety feature is still a safe driver.
- Remember: Drive so you never need to use your ABS.

# 2.18 Special Safety Considerations

# **Strobe Lights**

Some school buses are equipped with roof mounted white strobe lights. If your bus is so equipped, the overhead strobe light should be used when there is limited visibility. This means that you cannot easily see around you – in front, behind or beside the school bus. Your visibility could be only slightly limited or it could be so bad that you can see nothing at all. In all instances, understand and obey Colorado and local regulations concerning the use of these lights.

For Colorado school bus drivers, the use of the strobe lamp will only be permitted in the following instances: when the bus presents a hazard to other motorists, such as when loading or unloading students in inclement weather or to enhance visibility of the bus when barriers inhibit such visibility. The school bus driver may also use the strobe, in addition to the hazard lamps, to warn other motorists that the bus is not in motion or is being operated at a speed of twenty-five miles per hour or less.

#### **Driving in High Winds**

Strong winds affect the handling of the school bus! The side of a school bus acts like a sail on a sailboat. Strong winds can push the school bus sideways. They can even move the school bus off the road or in extreme conditions tip it over.

If you are caught in strong winds:

- Keep a strong grip on the steering wheel. Try to anticipate gusts.
- You should slow down to lessen the effect of the wind or pull off the roadway and wait.
- Contact your dispatcher to get more information on how to proceed.

## **Backing**

Backing a school bus is strongly discouraged. You should back your bus only when you have no other safe way to move the vehicle. You should never back a school bus when students are outside of the bus. Backing is dangerous and increases your risk of collision.

If you have no choice and you must back your bus, follow these procedures:

- Post a responsible person for the lookout. The purpose of the lookout is to warn you about obstacles, approaching persons and other vehicles. The lookout should not give directions on how to back the bus. Before backing on a roadway or on school grounds, sound the horn or audible warning device and actuate the hazard lights.
- Signal for quiet on the bus.
- Constantly check all mirrors and rear windows.
- Back slowly and smoothly.
- If no lookout is available:
  - 1. Set the parking brake.
  - 2. Turn off the motor and take the keys with you.
  - 3. Walk to the rear of the bus to determine whether the way is clear.
- If you must back up at a student pick up point, be sure to pick up students before backing and watch for late comers at all times.
- Be sure that all students are in the bus before backing.
- If you must back up at a student drop off point, be sure to unload students after backing.

#### **Tail Swing**

A school bus can have up to a three-foot tail swing. You need to check your mirrors before and during any turning movements to monitor the tail swing.

# 2.19 Light Rail

The Regional Transportation District (RTD) has added Light Rail Transit to its bus fleet in the Denver Metropolitan area. The Light Rail Vehicles are six axle, articulated, bi-directional rail vehicles that are electrically powered using overhead catenary wires. The light rail tracks in and around the Denver downtown area are points of extreme danger. School transportation vehicle operators must exercise the utmost care when approaching, traveling alongside and crossing light rail tracks.

The RTD light rail tracks are not a distance away from the road like most railroad tracks. They are, in most cases, a part of the same street motorists drive on. The light rail tracks run parallel to traffic, traveling in the same direction as traffic or against traffic flow. There are several locations where the RTD light rail tracks cross major streets.

Light Rail Vehicles (LRVs) may approach from either direction since they are bi-directional. Pay attention to all sets of tracks. Even though a train may have left the crossing on one track, another train may be approaching on another track. The Light Rail Vehicles are very quiet and appear to be traveling slower than they actually are. Each car weighs 40 tons and is equipped with a bell, an emergency siren and three bright lights that can be seen two to three blocks away. Two of the lights are in the 'normal' headlight positions and the third is in the middle, at the top of the LRV. LRVs have turn signals to indicate which direction they are turning.

In most cases, there are no physical barriers such as curbs or medians separating the vehicle traffic from the LRV rails. The rails are set in concrete and are a lighter color than the asphalt on the street. Certain weather and light conditions will reduce the visibility of this subtle difference.

In some areas the tracks are close to parking areas. Motorists can become confused as to where to park.

Warning Signs – A yellow, diamond shaped warning sign with a black symbol of a streetcar

indicates the location of the LRV tracks. At intersections or by the tracks, these signs have a black bi-directional arrow below the streetcar symbol. Before intersections, these signs have the term 'AHEAD' below the streetcar symbol.

# **Procedures For Light Rail Crossings**

Treat light rail crossings as a railroad crossing except for the use of the hazard lights. Use the hazard lights only when necessary as they are not recommended or required.

- Instruct students to be quiet when stopping at a LRV crossing. Turn down the radio.
- Flash the brake lights if required to stop.
- Stopping on the tracks is unsafe and against the law.
- Always observe the 'Stop Here on Red' sign and the white safety stripe (stop line) location.
- Traffic light controlled intersections govern both the motorist and the LRV. Treat these locations like any other traffic light controlled intersection. Look and listen in the appropriate directions for LRVs, motorists and pedestrians before crossing the tracks.
- At stop sign controlled intersections, the Department of Education recommends that a school bus operator, when stopped, open the driver's side window and service door. Look and listen in both directions for LRVs, motorists and pedestrians. Close the service door before crossing the tracks.
- Never cross the light rail tracks until the entire vehicle's length can safely clear the tracks.
- Never back across the light rail tracks.

The Department of Education recommends that school transportation operators do not park their vehicles near a light rail track or crossing. When parking, always consider the safest loading/unloading position for school students.

# 2.20 Pre Trip Vehicle Inspection

The driver must perform a daily pre trip inspection to determine if their vehicle is in safe, good working order. Procedures for the pre trip inspection may vary according to the type of vehicle being inspected and according to individual district procedure. The pre trip inspection must be documented on a district form. The documentation should include the date, vehicle ID, items inspected, defects reported and the signature of the person performing the inspection.

The following is an example of component checks and tests to determine if your vehicle is safe to operate.

# Vehicle Approach

1. Check for signs of fluid leakage underneath, objects hanging or vehicle leaning.

## **Engine Compartment**

- 1. **Oil Level** The level is within the safe operating range on the dipstick.
- 2. **Transmission Fluid Level** The level is within the safe operating range on the dipstick.
- 3. **Coolant Level** The level is within the safe operating range in the sight glass or if there is no sight glass, the radiator cap is removed and a visual inspection for coolant is done. Do not remove the radiator cap while the engine is hot.
- 4. **Power Steering Fluid** The level is within the safe operating range on the dipstick, the sight glass or the reservoir.
- 5. **Windshield Washer Fluid Level** There is a sufficient amount of fluid for use during the entire trip.
- 6. Water Pump Secure and not leaking. The drive system (belt or gear) for the pump should also be checked. The belt should not be frayed, no visible cracks or signs of wear. Belt should be snug, should not deflect more than 1/2 to 3/4 inch when checked by hand.
- 7. **Alternator** Secure, no frayed wires or loose connections. Check the drive system (belt). If belt driven, belt should not be frayed, no visible cracks or signs of wear. Belt should be snug, should not deflect more than 1/2 to 3/4 inch when checked by hand.
- 8. **Air Compressor** Secure, no missing or broken bolts. May be belt or gear driven (on air brake equipped vehicles). If belt driven, belt should not be frayed, no visible cracks or signs of wear. Belt should be snug, should not deflect more than 1/2 to 3/4 inch when checked by hand.
- 9. **Master Cylinder** No leaks. The fluid level is within the safe operating range. (On hydraulic brake equipped vehicles.)
- 10. **Hoses** No cracks, cuts, leaks, loose connections, rubbing or excessive wear.

11. **Engine Belts** – No more than 1/2 to 3/4 inch play, no fraying, visible cuts, cracks or excessive wear.

## Steering

- 1. **Steering Box** Securely mounted, no leaks, missing nuts, bolts or cotter keys.
- 2. **Steering Linkage** No loose or missing nuts, bolts and cotter keys. The pitman arm and drag link are securely mounted. No excessive wear, cracks or broken parts.

## Front Suspension

- Springs No cracked, shifted, broken or missing leaf springs. No broken, distorted or loose coil springs or shackles. Clamps are present and secure.
- 2. **Spring Mount** No cracked or broken spring hanger, no missing or damaged bushings, no broken, loose or missing axle mounting parts.
- 3. **Shock Absorber** Securely mounted, no leaks.

#### Front Wheels

- 1. **Rims** No damaged or bent rims. No welding repairs. Check for rust trails that may indicate that a rim is loose on a wheel.
- 2. **Hub Oil Seals** No leaks, no loose or missing nuts. If a sight glass is present, the oil level is adequate.
- 3. Tires
  - Tread Depth Check for a minimum tread depth of 4/32 inch (1/8 inch). Recaps are not allowed.
  - Tire Condition No damage or cuts to the sidewall or tread. Tire is evenly worn. Valve caps and stem are not missing, broken or damaged.
  - Tire Inflation Check for proper inflation using a tire gauge or by striking tire with a mallet or other similar device.
- 4. **Lug Nuts** All lug nuts are present and tight. Bolt holes are not cracked or distorted and there is no visible rust that would indicate a loose lug nut.

#### **Front Brake**

- 1. **Slack Adjustor** (air brakes) No broken, loose or missing parts. The angle between the push rod and adjuster arm should be approximately 90 degrees. When pulled by hand, the brake rod should not move more than approximately one inch.
- 2. **Brake Chamber** Securely mounted, not cracked, dented or audibly leaking air.
- 3. **Brake Hoses/Lines** For brake hoses, the couplings are secure, not fraying or worn. For hydraulic lines there should be no cracks, crimps or leaks. The lines should also be secure.
- 4. **Drums/Rotors/Linings** Most front brake drums and brake linings are protected by a 'rock guard' and cannot be checked during the pre trip. If visible, check the drum for cracks, dents or holes. Brake linings where visible, should not be worn dangerously thin and should not be grease or oil soaked.

## **Inside Bus and Engine Start Checks**

- 1. Passenger Entry/Lift The door operates smoothly and closes correctly. The handrails are secure and there is nothing in the passenger entry that has the potential of catching clothing, backpacks, etc. as students are entering or exiting. The entry steps are clear with the treads not loose or worn excessively. If equipped with a lift, look for leaking, damaged or missing parts. Lift must be fully retracted and latched securely. Should know how to properly cycle the lift.
- 2. **Driver's Seat** Seat belt adjusted and functioning properly. The seat is adjusted for the driver to properly reach the pedals.
- 3. **Clutch/Gearshift** Before starting engine, depress clutch, select neutral. Vehicles with automatic transmissions should be in neutral or park.
- 4. **Low Air Pressure Buzzer** Listen for buzzer to sound when engine is first started, indicating low air pressure (below 60 psi).
- 5. **Gauges** Check that the oil pressure, water temperature, ammeter/voltmeter and fuel indicator lights and gauges are functioning.

Oil Pressure Gauge – Should be within the predetermined range established for the bus. Note: If the bus is equipped with a warning light in addition to the gauge, it may light up

when the bus is started but should go off immediately after the engine starts. If the light remains on or the gauge does not build to proper pressure, shut down the engine and report it immediately to fleet maintenance.

**Temperature Gauge** – Indicates the temperature of the coolant in the engine. 'Cold' is the proper reading when the engine is first started. The gauge should move slowly to mid dial as the engine warms up. If the gauge reads 'Hot' or the temperature warning light comes on, shut off the engine and report the problem immediately to fleet maintenance.

**Ammeter Gauge** – Indicates the electrical charge to the system. If discharging, stop the engine and report it to fleet maintenance.

**Voltmeter Gauge** – Indicates the condition of the battery.

**Fuel Gauge** – Should be operable and indicating enough fuel for the trip.

#### 6. Brake Checks:

Parking Brake Check – For hydraulic brake systems the brake pedal is pumped three (3) times and then held down for five (5) seconds. The brake pedal should not move in those five seconds. For air brake systems, build the air pressure to governor cutoff, which is usually 100 to 125 psi. With the parking brake set, place the bus in drive or low gear and bring the engine up to 900 rpm. If the vehicle moves, report it immediately to fleet maintenance for adjustment before putting the vehicle in service.

**Service Brake Check** – For hydraulic or air brakes systems, release the parking brake and gently pull forward a few feet and apply the service brake. The vehicle should stop with no pulling to the right or left.

**Air Brake Check** (GBV test) – This test procedure is designed to ensure that the safety devices of the air brake system operate correctly as air pressure drops from a normal supply level to a low supply level. Build the air supply pressure to governor cut out, which should be between 100-125 psi. Chock your wheels if necessary. This is a 3 step check.

Air Pressure Gauge – Shut the engine off and turn the key to the 'on' position. Release the parking brake and fully apply the service brake. Hold the service brake for one full minute. The air pressure should not drop more than three (3) pounds in one minute.

Warning Devices – Begin fanning off the air pressure by rapidly applying and releasing the service brake. The low air warning devices (buzzer, light) should activate before the air pressure drops below sixty (60) psi.

The Parking Brake Valve – As you continue to fan off the air pressure, the parking brake valve should close (pop out) at approximately forty (40) psi. On some vehicles, the air pressure for the valve closure could be less than forty (40) psi.

- 7. **Steering Play** There should be no more than two inches of free play in a 20-inch wheel when turning the steering wheel back and forth. The engine should be running on vehicles equipped with power steering.
- 8. **Mirrors and Windshield** The mirrors should be clean, adjusted properly, not cracked or loose and have no obstructions. The windshield should be clean, not cracked, pitted or shattered and have no obstructions.
- 9. **Wipers/Washer Fluid** Operate the wipers using washer fluid. The wiper arms and blades should be secure, in good condition and operate correctly.
- 10. **Lighting Indicators**—The indicators on the dash work when the corresponding directional, emergency 4-way flashers, high and low headlight beams and 8-way systems are turned on.
- 11. **Horn(s)**-Air horn and/or electric horn works properly.
- 12. **Heaters and Defrosters** The heaters and defrosters work on all speeds. Check all panel switches.
- 13. **Safety Emergency Equipment** Check for spare electrical fuses, three reflective triangles, a properly rated and charged fire

extinguisher and complete first aid kits (24 items in each).

- 14. **Seating** Check for broken or loose seat frames, unsecured cushions, damaged foam or padding. The flip seat next to a side emergency door must fully retract by itself.
- 15. Emergency Exit(s) The bus doors, roof hatches or push out windows used for emergency evacuation are not damaged and operate smoothly and close securely. Check that any emergency exit warning devices including the starter interlock system are working. \* Warning devices are not required on roof hatches.

## **Outside Walk Around Inspection**

1. Exterior Lights and Reflectors – On the front of the vehicle, all of the lights: headlights low and high beam, turn signals, clearance, four way flashers and student lights (amber and red) are working. Lenses should be clean and intact.

On the side of the vehicle, the reflectors should be in place and of the proper color (red in the rear, amber elsewhere). The clearance lights should be working with the lenses intact, red on the rear, amber elsewhere.

On the rear of the vehicle, the running lights (tail), the turn signals, brake lights, 4-way hazard lights, clearance lights and reflectors should all be working. Lenses should be clean and intact.

The 8-way warning light system should be checked on the front and rear of the vehicle. The stop arm on the side should extend fully when operated and the stop arm's alternately flashing red lights should work. The stop arm should be securely mounted to the vehicle. You should check for loose fittings, broken or frayed wires and damage to the diaphragm.

2. **Battery/Box** – The battery box/tray and cover should be secure and in good shape, not damaged or corroded. The correct number of batteries are in place. The cables are secure with no signs of corrosion.

#### Driver/Fuel Area

- 1. **Door** Entry door operates properly.
- 2. **Mirror** The mirror is securely attached to the outside of the vehicle, is not broken or damaged. All mirrors should be securely mounted to the vehicle.
- 3. **Fuel Tank** The tank is securely mounted, the cap is present and tight and there are no leaks from the tank or lines.

#### **Rear Wheels**

- Rims No damaged or bent rims. No welding repairs. Check for rust trails that may indicate that a rim is loose on a wheel.
- 2. **Hub Oil Seal -** No leaks, no loose or missing nuts. If a sight glass is present, the oil level is adequate.
- 3. Tires
  - Tread Depth Check for a minimum tread depth of 2/32 inch (1/16 inch).
  - Tire Condition No damage or cuts to the sidewall or tread. Tire is evenly worn. Valve caps and stem are not missing, broken or damaged.
  - Tire Inflation Check for proper inflation using a tire gauge or by striking tire with a mallet or other similar device.
- 4. **Lug Nuts -** All lug nuts are present and tight. Bolt holes are not cracked or distorted and there is no visible rust that would indicate a loose lug nut.
- 5. **Dual Wheels** Check for even spacing, tires not touching each other, no debris in between the wheels.

#### **Rear Suspension**

- Leaf Springs No broken, cracked, shifted or missing leaves. Clamps are present and secure.
- 2. **Spring Mounts** No cracked or broken spring hangers, no missing or damaged bushings, no broken, loose or missing axle mounting parts.
- 3. **Shock Absorbers** Secure and no leaks.
- 4. **Torque Arm/Air** The torque arm is mounted securely and not damaged. Check air ride suspension for securement, damage and audible air leaks.

#### **Rear Brakes**

- 1. **Slack Adjustor** (air brakes) No broken, loose or missing parts. The angle between the push rod and adjuster arm should be approximately 90 degrees. When pulled by hand, the brake rod should not move more than approximately one inch.
- 2. **Brake Chamber** Securely mounted, not cracked, dented or audibly leaking air.
- 3. **Brake Hoses/Lines** For air brake hoses, the couplings are secure, not fraying or worn. For hydraulic lines, there should be no cracks, crimps or leaks. The lines should also be secure.
- 4. **Drums/Linings** Most rear brake drums and brake linings are protected by a 'rock guard' and cannot be checked during the pre trip. If visible, check the drum for cracks, dents or holes. Brake linings where visible, should not be worn dangerously thin and should not be grease or oil soaked.

**Rear Door/Side Door -** Check that the doors and hinges are not damaged and that they open, close and latch properly from the outside. You should be able to open the door from the outside as well as from the inside.

# **Under the Vehicle**

- Drive Shaft Not bent or cracked. The shaft couplings appear to be secure and free of foreign objects.
- 2. **Exhaust System** The system is connected tightly and mounted securely. Check the system for damage and signs of leaking (rust or carbon soot).
- 3. **Frame** No cracks or bends in longitudinal frame members. No cracks, bends, broken or missing cross members. Look for signs of breaks or holes in the floor.

**Optional Equipment** – Inspect all equipment such as wheelchair lifts or ramps, wheelchair and passenger securements and other special needs equipment for proper working condition.

**Mirror Adjustments** – Before departing for a bus route or trip, make sure your mirrors are adjusted properly. Check with your school district for mirror adjustment procedures.

Each school transportation vehicle shall have a daily pre trip inspection performed and documented by the school transportation vehicle operator or the district/service provider authorized transportation employee prior to placing the vehicle in service. The minimum requirements for a school bus pre trip inspection shall include: service brake test, park brake test, lights (inside and outside), mirrors, emergency equipment, emergency door(s), wheels, tires, wipers, horn and exhaust system. The district/service provider shall determine any additional items.

# 2.21 Post Trip Inspection

When your route or school activity trip is finished, you should conduct a post trip inspection of the bus. You should walk through the bus and around the bus looking for the following:

- Sleeping students. The school district/service provider shall have a procedure in place to verify that no students are inadvertently left on the bus at the end of the run or trip.
- Articles left on the bus.
- Open windows and doors.
- Mechanical /operational problems with the bus, giving special attention to items that are unique to school buses such as mirror systems, flashing warning lamps and stop arm signals.
- Damage or vandalism.

A post trip inspection can detect problems that have occurred while on the route. The following is an example of a post trip inspection. Individual school districts will establish their own procedure. As with the pre trip, the post trip inspection must be documented.

# **Engine Shutdown**

- Check all lights.
- Shut down all electrical equipment.
- Perform brake checks.

## **Bus Interior**

- Clean/sweep bus.
- Close windows.
- Check for students or items left on the bus.
- Look for damage to the vehicle.

#### **Paperwork**

- Report vehicle defects.
- Record mileage.

#### 2.22 Preventative Vehicle Maintenance

Preventative maintenance is the regularly scheduled care of a vehicle that will guarantee the dependability and maximum life of the various components. It is a carefully organized system of inspections made at regular mileage (not to exceed 4,000 miles) or time intervals, combined with immediate attention to all reported defects. These inspections are made up of a series of check and balance procedures combined with the process of cleaning, tightening, lubricating and adjusting components and systems.

The driver has a responsibility in preventative maintenance. You are on the road with the school transportation vehicle for a number of hours each day and are in a position to observe its performance under all conditions. Learn to recognize defects and immediately report the symptoms to the vehicle maintenance department. Do not attempt to diagnose the problem. Report anything unusual that you hear, see, smell or feel. Remember, defects cannot be repaired if they are not reported.

#### **Listen For Trouble:**

- Sharp knock when picking up speed.
- Light knock when the engine is running at idle speed.
- Dull regular knock.
- Clicking or tapping noises.
- Continuous or intermittent squeal or squeak.
- Loud exhaust noise.
- Engine backfiring, missing, popping, spitting or overheating.
- Steaming or hissing sounds.

#### **Feel For Trouble:**

- Excessive vibration in the engine compartment, the steering wheel or the drive train.
- Low speed or high speed shimmy.
- Hard steering or steering wander.

## **Look For Trouble:**

- Sudden change in engine temperature.
- Sudden drop in oil pressure.
- Low oil pressure.
- No oil pressure.
- Excessive oil consumption
- Smoke coming from under the dash or hood.
- Scuffed tires or uneven wear.
- Irregular air pressure.

#### **Smell Trouble:**

- Fuel.
- Burning rubber, oil or rags.
- Exhaust fumes.
- · Hot brakes.

Regardless of the engineering skill or workmanship incorporated in a school bus, it cannot continue to deliver maximum safety, economy and dependability unless it is properly maintained. If you don't report a problem, it can't be fixed. The driver plays a major role in safeguarding the students they carry and prolonging the life of the vehicle by conducting thorough daily inspections. These inspections can aid technicians in locating and fixing vehicle problems.

# **Section 2 Test Your Knowledge**

- 1. Define the danger zone. How far does the danger zone extend around the bus?
- 2. What should you be able to see if the outside flat mirrors are adjusted properly? The outside convex mirrors? The crossover mirrors?
- 3. You are loading students along the route. When should you activate the amber lights of your 8-way warning light system?
- 4. You are unloading students along your route. Where should students walk to after exiting the bus?
- 5. After unloading at school, why should you walk through the bus?
- 6. Where should students stand in front of the bus before they cross the roadway?
- 7. Give some examples of situations that may require an evacuation of the bus.
- 8. How far from the nearest rail should you stop at a rail grade crossing?
- 9. What is a passive rail grade crossing? Why should you be extra cautious at this type of crossing?
- 10. How should you use your brakes if your vehicle is equipped with antilock (ABS) brakes?

These questions may be on your test. If you can't answer them all, reread Section 2.