

# Pre-trip Inspection Procedure

## AmTran RE

**Legal Requirements:** Title XIII of the California Code of Regulations §1215(a) states, "Prior to operation, the driver shall inspect each vehicle daily to ascertain that it is in safe condition, it is equipped as required by all provisions of law, and all equipment is in good working order." See Highway Patrol Handbook 82.7 for a state required list of items to be checked.

**Additional Requirements:** The Safety & Training Section of the San Diego Unified School District's Transportation Department has developed a pre-trip inspection order which incorporates the items required by the state with those required by the district. This document lists those requirements and the order they are to be checked.

**Using This Document:** This document is designed for use as a reference to the pre-trip inspection and its separate parts. The description is for the AMTRAN transit school bus. Each section will be described in detail.

**Pre-trip Order:** The procedure is to inspect in a top-to-bottom, left-to-right fashion. Use the following order when performing a pre-trip inspection.

Step	Inspect
1	Engine Compartment and lights.
2	Driver's Compartment
3	Interior
4	Exterior
5	Brakes

**Engine Compartment and Lights:**

**Login and choose: Pre-Trip**

**Scan: Asset Tag**

**Scan: Zone Tag #10 "Entering Bus"**

Step	Action
1	Check under the bus for unattached equipment and fluid leaks.
2	Enter bus; check required certificates: CHP 292, Insurance, DMV registration, District forms (collision report form, passenger list, witness cards), & first aid kit.
3	Set air door switch to manual, check stop sign & fire extinguisher.
4	Take engine door key out of compartment, set door control to 'closed' position.
5	Turn on; amber approach lights (crossover master on, crossover select set to amber), hazard lights (pull out button on left side of steering column), and headlights to high beam (pull up on turn signal lever).

**Scan: Zone Tag #11 "Engine Compartment"**

Step	Action
6	Exit bus walk around in a clockwise direction checking all lights (amber, hazard, taillights & high beams).
7	Open first bay only. Check reflectors, leave bay door open.
8	Check battery compartment. Secure to vehicle, no corrosion, no loose bolts, not leaking.
9	<u>1<sup>st</sup> Engine compartment.</u> Check accessible belts, clamps, hoses, oil & power steering fluids. Do not check transmission. <u>2<sup>nd</sup> Engine compartment.</u> Check accessible belts (no more than 1" of play), clamps, hoses, coolant & air filter gauge.
10	Check fuel cap (snug, not loose) and windshield washer fluid.

**Driver**

**Compartment:**

**Prior to starting the engine**

**Scan: Zone Tag "Driver Compartment"**

Step	Action
1	Enter bus. Set door switch to 'automatic'. Cancel amber & hazard lights. <b>Leave door closed.</b>
2	Check and adjust driver's seat and seat belt and steering wheel.
3	Check and adjust all mirrors.
4	Check left side windows. Check visors (left side window & under interior mirror).

**START ENGINE**

Step	Action
1	Check all gauges for proper operation. Check mileage sticker against odometer. Check gear shift selector (R-N-D; place gear in neutral "N" position)
2	Check 2-way radio. Turn on and off the high throttle.
3	On the left side panel (by the elbow pad). Check heater & defroster controls, P.A. & windshield washer/wipers.
4	On the front left panel below lights array. Check all lights switches, heater booster & fans, defroster fans and horns. (Start from highest to lowest setting)
5	Drain wet tank until low air light & buzzer activate. <b><i>Air Brake Needles must not drop. Checking one-way check valve in air brake system.</i></b>

**Bus Interior:**

**STOP ENGINE:**

See step 4 for Zone Tag

Step	Action
1	Stop engine. Open entrance door and wait 10 seconds for the Child Safety Alert System (CSAS) to activate the horn. Close the entrance door and turn key to "ON" position. The horn will deactivate automatically.
2	Walk to the rear of the bus checking; seat backs, all windows (open at least 3 randomly on each side daily), roof hatches/ emergency exits, & interior light lenses.
3	Open emergency exit doors checking light and buzzer, lettering & head pad, instructions. (window glass not cracked or broken, secure in rubber seal)
4	Open rear emergency exit window. Lettering, (window glass not cracked or broken, secure in seal), instructions. <b>Scan: Zone Tag #3</b>
5	Walk to the front of the bus checking: seat bottoms, seat backs, seat anchor bolts, & flooring.

**Bus Exterior:**

Scan: Zone Tags #4, 5, 6, 7, 8, and 9, as you walk around bus counterclockwise

Step	Action
1	Turn on red crossover lights: crossover master on, crossover select set to red & check indicator lights. Set headlights to low beam (pull up on turn signal lever).
2	Check left and right turn signal lights on the instrument panel & in the mirrors. Cancel turn signals.
3	Chock the brake pedal with the engine compartment key.
4	Exit the bus checking steps, step light, handrail, head pad and door seal on the way out. Take the tire bar & chock block out of the first bay & chock the front wheel. Walk around bus counterclockwise checking: <ul style="list-style-type: none"> <li>• <b>Front.</b> Mirrors &amp; mountings, lettering, crossover lights &amp; hoods, windshield, windshield wiper arms &amp; blades, headlights, license plate, bumper, look under bus for leaks.</li> <li>• <b>Sides.</b> Mud flaps, springs &amp; suspension parts, tires (4/32" minimum front, 2/32" for rear), tire sidewalls and rims, valve stems, lug nuts &amp; hub seal, lettering, body dents &amp; scratches, reflectors, driveshaft guard &amp; emergency exits (surrounded in reflective tape, hinges, glass not cracked or broken, secure in seal, instructions, must lock open at 90°, door seal, no obstructions or sharp edges).</li> <li>• <b>Rear.</b> Crossover lights, lettering, emergency exit, license plate and light, brake lights, tail pipe (flush with body, no more than 2" extended or recessed), look under the bus for leaks.</li> </ul>
5	<b>Place tire bar in bay. Enter bus, un-chock brake pedal and store engine-door key in compartment, close the entrance door and turn off red cross-over lights. Turn the key to the "OFF" position, walk to rear of bus and disarm the Child Safety Alert System (CSAS). Interior lights will stay on for one (1) minute confirming the system canceled correctly.</b>

**Dual Air System:**

Scan: Zone #1

**START ENGINE. Observe air brake system needles for movement.****\*\*\*The air governor needles must be stable, not rising, before starting Dual Air Brake System test\*\*\***

Test	Action
<b>Air Governor Cut-In</b>	Press on the service brake pedal, releasing approximately 5 p.s.i. per application. Monitor the air gauges at least 15 seconds. Repeat until the needles begin rising. <b>Minimum of 85 p.s.i.</b>
<b>Air Governor Cut-out</b>	Wait until the needles stop rising. <b>Maximum of 130 p.s.i.</b> If the pressure exceeds 130 p.s.i. <b>a safety valve will open and vent the excess air pressure by 150 p.s.i.</b>
<b>Static Air Pressure Loss</b> <i>Note: Must be at Air Governor Cut-out.</i>	<b>Turn off engine.</b> Monitor the gauge for 1 minute. Maximum loss 2 p.s.i.  <i>Checking for leaks in the service tanks and air lines to the air controls.</i>
<b>Applied Air Pressure Loss</b>	A) Release parking brake, allow the bus to settle on the chock block. B) Apply service brake fully and hold C) While service brake pedal is still applied, monitor the gauges for 1 minute. <b>Maximum additional air loss is 3 p.s.i.</b> D) Reset parking brake. <i>Checking for leaks in the brake lines and all six brake chambers (four service brake chambers and two spring brake chambers)</i>
<b>Low Air Warning Devices Front Tank</b>  <i>Note: Rear tank pressure must not drop while draining front tank. (Two-way check valve)</i>	A) <b>Turn key on.</b> Drain front service brake tank. <b>Light and buzzer must activate no lower than 60 p.s.i.</b> Drop pressure to 0 p.s.i. <b>Start engine,</b> place transmission in gear, check all mirrors, release parking brake, and allow bus to roll. Stop bus with the service brake pedal. <i>(Testing emergency stopping system)</i> B) <b>Set parking brake,</b> transmission to neutral, run engine at fast idle, place wheel chock in cargo bay and close bay door. Build air to at least 100 p.s.i., cancel fast idle and <b>turn engine off.</b>
<b>Low Air Warning Devices Rear Tank</b>  <i>Note: Front tank pressure must not drop while draining rear tank. (Two-way check valve)</i>	A) <b>Turn key on.</b> Drain rear service brake tank. <b>Light and buzzer must activate no lower than 60 p.s.i.</b> Drop pressure to 0 p.s.i. <b>Start engine,</b> place transmission in gear; check all mirrors, release parking brake, allow bus to roll. Stop with the service brake pedal. <b>Spring Brake Modulator (SR-1 Valve) enables use of front and rear brake systems.</b> <i>(System back-up to prevent front brake system application alone) (Testing emergency stopping system)</i> B) Place transmission in neutral and build air pressure to air governor cut-out before moving bus.
<b>Parking Brake Application Test</b>	Place transmission in drive, allow bus to roll forward, pull parking brake knob. Bus should stop with spring brake application only. <b>Checks spring brakes.</b>
<b>Two Service Brake Stops Prior to Leaving the Yard</b>	Drive bus forward and apply the service brake pedal. Bus should stop without any unusual noise, feel or pulling to left or right. <b>Two stops in the yard to test the brakes using the entire system.</b>

**Note: You may use the fast idle when needed to build up air pressure.  
Turn fast idle ON/OFF with the fast-idle switch only.**