

# Pre-Trip Inspection Procedure

## Conventional Buses

**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."

**Additional Requirements:** The Safety & Training Section has developed a pre-trip inspection order which incorporates the items required by the state with those required by the district.

**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 CONVENTIONAL school bus. Each section will be described in detail.

**Pre-trip Inspection 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
2	Driver's Compartment
3	Interior
4	Exterior (two trips required)
5	Brake system (hydraulic & air brakes)
6	Special Ed. Equipment (if applicable)

### ENGINE COMPARTMENT:

Login and choose: Pre-Trip; Scan: Asset Tag; Open engine hood Scan: "Engine Compartment"

Step	Check
1	Under bus for unattached equipment & fluid leaks;
2	All accessible hoses, belts, & fluids. Do not check transmission.
3	For anything unusual.

### DRIVER'S COMPARTMENT:

Close entrance door & set emergency door switch to "Closed"; Scan: Zone Tag #10 "Entering Bus"

Step	Check
1	All emergency equipment (fire extinguisher, reflectors, first aid kit),
2	All certificates, (CHP, DMV & Insurance card).
4	Driver seat & seat belt. Mirror adjustment & sun visor.

**Prior to starting the engine; Scan: Zone Tag "Driver Compartment"**

**START ENGINE.**

Step	Check
5	All gauges for proper operation. Check transmission gear selector and listen for back up beeper.
6	PA, all switches, heater & defroster fans, windshield washer & wiper.
7	Horn & turn on two-way radio. (If air drain valve is inside bus, drain for 3 to 5 seconds.)
8	Turn engine key to "OFF" position. Open entrance door and wait for CSAS to activate horn. Close entrance door.

**INTERIOR:**

Turn key to "ON" position

Step	action
1	Chock service brake pedal with tire bar.
2	Turn on amber approach lights & hazard lights, check front amber approach lights in front left mirror.
3	Walk to the rear of bus checking; seat backs, windows, roof vents & interior light lenses. Open emergency exit doors checking warning light and buzzer. Look out back door, checking brake lights, hazard lights & amber approach lights. <b>Scan: Zone Tag "Inside Bus"</b>
4	Walk to front of bus checking; seat bottoms, anchor bolts & flooring. Turn key to "OFF" position.
<b>NOTE: Check back-up lights with assistance <u>only</u>.</b>	

**EXTERIOR: First Trip.**

Step	Action
1	Turn on; Headlights (high beam), left turn signal & red crossover lights. Open entrance door.
2	Exit bus, take tire bar with you, check steps & door seal, walk counterclockwise around bus checking: <b>Scan: Zonar Tags: right front, front, left front, left rear, rear, and right rear, as you walk around bus counterclockwise.</b> <hr/> <ul style="list-style-type: none"> <li>a. <u>Front.</u> Mirrors and mountings, lettering, clearance lights, red crossover lights, windshield &amp; wipers. headlights, left turn signal, license plate, bumper &amp; under bus for fluid leaks.</li> <li>b. <u>Sides.</u> Tires, tread depth minimum 4/32" front, 2/32" rear, sidewall, rim, valve stems, lug nuts &amp; hub seal. Body condition, lettering, clearance lights, reflectors, springs, suspension parts, Mud flaps, emergency exits, drive shaft guards and stop arm. (If air drain valve is outside bus, drain air tank 3 to 5 seconds.)</li> <li>c. <u>Rear.</u> Clearance lights, red crossover lights, lettering, emergency exit, left turn signal, license plate &amp; light, taillights, reflectors &amp; tail pipe.</li> </ul> <hr/>

**EXTERIOR: Second Trip.**

Step	Action
1	Set headlights to low-beam and turn on right turn signal.
2	Exit bus and check: Headlights & right turn signal (front & rear) and damage on the bus.
3	Enter bus, 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.

**BRAKE CHECKS:**

**HYDRAULIC BRAKES**

**Zonar: Scan: Zone "Brakes"**

Step	Check	Action
1	Warning Lights, and beepers	<b>Turn ignition key on.</b> Oil press/temp, park brake & brake malfunction lights & beepers must come on. Electric backup motor must activate. <b>Turn Ignition key off.</b>
2	Brake Pedal Travel and Electric Backup Motor Check	Push service brakes pedal & hold for 15 seconds. Electric backup motor must activate. Brake pedal must not travel more than 60% of the distance to the floor. Hold the brake pedal & <b>START THE ENGINE.</b> All lights, beepers & electric backup motor must deactivate.
3	Parking Brake	Place transmission selector lever in drive and raise engine speed to <b>no more than</b> 1000. r.p.m. <b>Bus must not move.</b>
4	Two Stops	Make two full stops prior to leaving the yard.
<b>NOTE: If any warning lights activate during operation stop bus in a safe location &amp; notify dispatch.</b>		

THE THOMAS 50 PASSENGER, INTERNATIONAL 50 PASSENGER

**Air Brake Test Dual Air System:**

**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.
<p><b>Air Governor Cut-In</b></p>	<p>Press on the service brake pedal, releasing approximately 5 p.s.i. per application. Monitor the air gauges 15 sec. Repeat until the needles begin rising. <b>Minimum of 85 p.s.i.</b></p>
<p><b>Air Governor Cut out</b></p>	<p>Wait until the needles stop rising. <b>Maximum of 130 p.s.i.</b> If the pressure exceeds 150 p.s.i. the safety valve will open and vent the excess pressure.</p>
<p><b>Static Pressure Loss</b> <i>Note: Must be at Air Governor Cut out.</i></p>	<p><b>Turn off the engine.</b> Turn key to "ON" position. Monitor the gauge for 1 minute, maximum loss 2 p.s.i. <b>Checking for leaks in the service tanks and lines to the air controls.</b></p>
<p><b>Applied Pressure Loss</b></p>	<p>A) Apply the service brake fully and hold                      B) Release the parking brake                      C) While service brake pedal is still applied, monitor the gauges for 1 minute. Maximum additional loss is 3 p.s.i.                      D) Reset parking brake.  <b>Checking for leaks in the service brake lines and all six brake chambers (two spring and four service)</b></p>
<p><b>Low Air Warning Device, Front (Secondary) Tank</b>  <i>Note: Rear tank pressure must not drop while draining front tank.</i></p>	<p>A) Turn key on. Drain front service brake tank. Light and buzzer must activate no lower than 60 p.s.i. Drop pressure to 0 p.s.i. Start engine, place transmission in gear, release parking brake, allow bus to roll. Stop with the service brake pedal.                       B) Set parking brake, 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.</p>
<p><b>Low Air Warning Device, Rear (Primary) Tank</b>  <i>Note: Front tank pressure must not drop while draining rear tank</i></p>	<p>A) Turn key on. Drain rear service brake tank. Light and buzzer must activate no lower than 60 p.s.i. Drop pressure to 0 p.s.i. Start engine, place transmission in gear; check all mirrors, release parking brake, allow bus to roll. Stop with the service brake pedal. Spring Brake Modulator (SR-1 Valve) enables use of front and rear brake systems. (System back-up to prevent front brake system application alone) (Testing emergency stopping system)                      B) Place transmission in neutral and build air pressure to air governor cut-out before moving bus.</p>
<p><b>Parking Brake/Spring Brake Application Test</b></p>	<p>Place transmission in drive, allow bus to roll forward, pull parking brake knob. Bus should stop with spring brake application only.  <b>Checking spring brakes.</b></p>
<p><b>Two Service Brake Stops Prior to Leaving the Yard</b></p>	<p>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></p>