

A. CHASSIS
1. Front Suspension

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
<p>Wheel Bearings See Appendix 17</p> <p>1) Inspect front wheel bearings and related components for condition and proper adjustment of bearings. With front wheels raised (wheels unloaded), grasp tire and attempt to rock wheel to check for movement. Spin tire to check for noise and condition of bearings.</p> <p>a) There is minor seepage of grease around dust cover b) There is wetness or dripping of grease around dust covers. c) Dust cover fasteners are missing or loose. d) Any noise, binding, or roughness is discovered in bearings. e) Wheel bearing, endplay exceeds manufacturer's specifications (Maximum of .10" in and out play measured at bearing hub). (See Manufactures manual for specific application)</p> <p>NOTE: It is important to correctly identify the source of excessive play. To determine if the play is in wheel bearings, have an assistant fully apply brakes while rechecking play. If movement disappears with brakes applied, then play was in wheel bearings.</p> <p>I-Beam</p> <p>1) Inspect I-beam axle assembly.</p> <p>a) I-beam has been cut, modified, or is damaged. b) There is any bluing or other evidence that I-beam has been heated (Heating of I-beam king pin eye for king pin replacement may not apply) (See manufactures manual).</p>	<p style="text-align: center;">1</p> <p>a b c d e</p>	<p>b c</p>	<p>c d e</p> <p>a b</p>

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

1. Front Suspension

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<p>King Pins</p> <p>1) Inspect king pin assemblies for condition and play as follows:</p> <p>a) With front wheels raised, grasp tire at top and bottom or using a pry bar for leverage attempt to move the wheel assembly in and out.</p> <p>NOTE: Wheel bearings must be adjusted properly (or wheel bearing play must be eliminated by locking brakes) before checking king pins.</p> <p>b) Place a pry bar under wheel and lift tire straight up and down to determine condition of thrust bearing and side to side to determine condition of bushings.</p> <p>c) Locking pin is loose.</p> <p>d) End cap O-rings or bolts are loose or missing.</p> <p>e) Locking pin is backing out, loose, or missing.</p> <p>f) King pin movement is more than 1/4 inch measured at outside edge of tire. Measurement to be taken at a point on the tire tread. See Appendix 2</p> <p>g) Vertical (up and down) play in king pin assembly exceeds manufactures specification and/or thrust bearing is damaged or missing.</p> <p>NOTE: If play is beyond specifications, wear may be king pin, axle eye, and/or king pin bushings. Vehicle should be grounded if side play at outside edge of tire is greater than 1/4 inch. Do not tighten king pin lock (if equipped) or grease king pin before inspecting king pin assembly play.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p> <p>f</p> <p>g</p>	<p>a</p> <p>b</p> <p>c</p>	<p>d</p> <p>e</p> <p>f</p> <p>g</p>
<p>Shackles</p> <p>1) Inspect condition of shackles, spring hangers, and pinch bolts.</p> <p>a) Any front spring shackle or hanger has significant side wear at spring eye.</p> <p>b) Any front spring shackle or hanger is worn, or pinch bolt is stripped or missing, so that spring pin cannot be clamped tightly.</p> <p>c) Any front spring shackle or hanger is cracked or broken.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p>	<p>a</p>	<p>b</p> <p>c</p>

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

1. Front Suspension

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Spring Mounts			
1) Inspect spring mount bracket(s) for condition and securement.	1		
a) Any front spring mount is broken or cracked.	a		a
b) Any front spring mount-to-frame fastener is loose or missing.	b		b
c) Frame is cracked at any spring mounting location.	c		c
Pins and Bushings			
1) Inspect pins and bushings as follows: Inspect front spring pins and bushings for wear and lubrication. Check for wear with front axle loaded. Insert pry bar between spring eye and fixed point at frame and pull down. Measure total free play in pins and bushings.	1		
a) Any spring pin assembly will not accept lubrication, or zerk (grease) fitting is damaged or missing.	a	a	
b) Total free play (up and down) of pins and bushings exceeds 1/4 inch.	b		b
c) Inner sleeve or rubber bushing type spring pin assembly(ies) is worn through, or rubber bushing is excessively worn (rubber is compacted or deteriorated, resulting in free play between rubber and spring eye or inner sleeve).	c		c
A-Frames and Bushings			
1) Inspect A-frame and bushings for condition and securement.	1		
a) Rubber bushing(s) is split, badly deteriorated or badly extruded from suspension joints	a	a	
b) Rubber bushing(s) is missing.	b		b
c) Any A-frame assembly is bent, missing, broken, or any fasteners or U-bolt(s) are loose or missing.	c		c
d) Any A-frame, bushing, or pivot arm has more than .050" free play at pivot point.	d		d
e) Mounting of bushing assembly(ies) is not secure.	e		e
Ball Joints			
1) Inspect ball joint(s) for condition, securement, and lubrication.	1		
a) Zerk (grease) fitting is missing or damaged, or ball joint will not take lubrication.	a	a	
b) Any ball joint movement exceeds manufactures specifications.	b		b
c) Any ball joint nut is loose or missing, or cotter pin is missing.	c		c
d) Ball joint to A-frame mounting is cracked or loose, or has been welded.	d		d

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

1. Front Suspension

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U-Bolts			
1) Inspect spring U-bolts for condition and securement. a) Any U-bolt(s) is misaligned. b) There is rust underneath U-bolt nuts indicating possibility of looseness. c) Any U-bolt, seating plate, shock mount bracket, or nut is loose missing, cracked, or stripped.	1 a b c	a b	c
Shocks			
1) Inspect shocks for condition and securement. a) There is wetness around shock body due to leaking shock fluid. b) Any shock mounting or fastener is loose, missing, cracked, or broken. c) Any shock is broken.	1 a b c	a b c	
Springs			
1) Inspect front springs for condition, securement, and alignment. a) There are any loose, missing, broken or worn spring clips. b) Any coil or leaf spring has collapsed, and ride height is less than manufacturer's specifications. c) Either front spring saddle (if equipped) is worn out or missing. d) Rubber bumper is missing. e) Any leaf spring is broken, cracked, or missing. f) There is misalignment of spring leaves. g) There is evidence that center pin is loose or broken. h) Either front coil or leaf spring is worn so that rubber frame bumper is damaged or worn due to frequent bottoming of front suspension. i) Any alignment wedge is loose or damaged. j) On any air bag type spring assembly, air bag is damaged or leaking. k) Spring eye is worn or spread such that bushings are loose in spring eye. l) Any coil spring(s) is broken, insecurely mounted, or non-O.E.M. blocks or spacers are installed.	1 a b c d e f g h i j k l	a b c d f h	e g l
Wheel Seals			
1) Check for condition and leakage. a) Either front wheel seal is damaged or leaking.	1 a		a

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS
2. Steering

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
<p>Column</p> <p>1) Check steering column</p> <p>a) Flexible coupling, if equipped (rag joint) has loose or missing fasteners, damaged flexible disc, or elongated holes.</p> <p>b) Any column U-bolt, pinch bolt, other column fasteners, or input shaft coupling is loose, damaged, or missing.</p> <p>c) Pot joint (shell coupling) rubber is damaged or torn or missing.</p> <p>d) Pot joint (shell coupling) if equipped is loose.</p> <p>e) Steering gear box is loose on frame, or fasteners, or lock tabs are loose or missing.</p> <p>f) Frame braces or crossmembers are cracked.</p> <p>g) Rivets or other fasteners at frame braces or crossmembers are loose or missing.</p> <p>h) Any axle or suspension component is loose beyond specifications prescribed elsewhere in this manual.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p> <p>f</p> <p>g</p> <p>h</p>		<p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p> <p>f</p> <p>g</p> <p>h</p>

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS 2. Steering

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Steering Gear Box			
2) Check Steering Gear Box and other external components will be checked using the following procedure:	2		
a) Vehicle should be on the ground (not suspended).	a		
b) With engine running have assistant move steering wheel back and forth repeatedly to load steering components.	b	b	
c) Visually observe the following external steering and related suspension and frame components for looseness while assistant works steering (also see specific procedures under each component):	c	c	
1) Column shaft and hardware.	1		1
2) Column U-joints or flexible coupling (as equipped).	2		2
3) Coupling at gearbox.	3		3
4) Gear box mounting bolts.	4		4
5) Pitman arm.	5		5
6) Drag link.	6		6
7) Steering knuckle or arms.	7		7
8) Tie rod ends.	8		8
9) Idler arm (as equipped)	9		9
10) Vehicle frame crossmembers and frame cross-members and frame braces (including associate rivets and fasteners for looseness and condition).	10		10
d) Have assistant carefully operate steering to full left and right turn and check for power assist pop-off and steering stops.	d	d	
e) As follow-up to the above steering check, also perform a visual and hands-on check of each of the listed components.	e		
NOTE			
TIGHTENING STEERING COLUMN JOINT BOLTS			
WARNING – FAILURE TO MAINTAIN THE STEERING SYSTEM IN PROPER CONDITION CAN CAUSE REDUCED STEERING ABILITY RESULTING IN PERSONAL INJURY AND PROPERTY DAMAGE.			
As good maintenance practice, it is recommended that Steering column joint bolts be checked for tightness every 80,000 km (50,000 miles or annually, whichever occurs first). DO NOT OVER TIGHTEN.			

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS 2. Steering

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Steering Gear Box Mounting			
1) Check mounting, condition, and tightness of steering gear box, and check frame, frame braces, and associated rivets or fasteners for looseness and condition.	1		
a) There is any binding in steering gear box.	a		a
b) Steering gear box is loose.	b		b
c) Frame, frame braces, and associated rivets or fasteners are loose, damaged, or missing.	c		c
Pitman Arm			
1) Check Pitman arm for condition.	1		
a) Any play is observed between pitman arm and sector shaft.	a		a
b) Pinch bolt at sector shaft is loose or missing.	b		b
c) Pitman arm is cracked or damaged.	c		c
d) Check the pitman arm for looseness or misalignment at sector shaft splines and looseness at all joints.	d		d
e) Check looseness of pinch bolt and fasteners and condition of pitman arm.	e		e
f) Pitman arm grease fitting (if originally equipped) is loose or missing.	f	f	
g) Pitman arm to sector shaft timing marks are misaligned.	g		g
h) Pitman arm ball-joint (if equipped) has more than 1/16 inch play (axial, i.e., in and out play between the ball stud and socket).	h		h
i) Pitman arm ball-joint (if equipped) has loose or missing nut, or cotter pin is missing.	i		i
Drag Link			
1) Inspect Drag Link for any of the following problems.	1		
a) Drag link ball stud is loose in pitman arm or upper steering arm	a		a
b) Any nut is loose or missing, or cotter pin is missing	b		b
c) Drag link shaft is damaged or bent.	c		c
d) Check the drag link ends, shaft, and fasteners for looseness and condition (on vehicles with I-beam suspension).	d		d
e) Any drag link end grease fitting (as equipped) is loose, or missing, or will not take grease.	e	e	
f) Drag link end boot is damaged or missing.	f	f	
g) Drag link needs lubrication.	g	g	
h) Drag link dust boot (as originally equipped) is cut, damaged, or missing.	h	h	
i) Drag link end (nonadjustable type) has more than 1/16 inch axial play.	i		i
j) Horizontal socket type (adjustable) drag link end has more than 1/16 inch axial or lateral play.	j		j

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

3. Front Brakes

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Brake Hoses			
1) Inspect front brake flexible hoses for condition, securement, and routing.	1		
a) Brake line bracket(s) or securement system is loose or missing.	a	a	
b) Any front brake flex hose is kinked, collapsed, bulging, has damaged plies or cord, or is damaged through outer covering.	b		b
c) Any front brake flex hose supporting brackets are damaged or have loose fasteners.	c		c
d) Any front brake flex hose is rubbing on or routed against other components.	d	d	
e) Any front brake flex hose or connection is leaking fluid or air pressure.	e		e
Lines			
1) Inspect air and hydraulic brake lines for routing, securement, and condition.	1		
a) Any brake line is bent, crimped, or damaged significantly restricting airflow or hydraulic fluid.	a		a
b) Any brake line is rubbing on other components or is abraded.	b	b	
c) Any brake line is not of O.E.M. material, size, or type.	c		c
d) Any brake line or connection is leaking air pressure or hydraulic fluid.	d		d
Chambers			
1) Inspect front brake chamber assembly(ies) for securement, condition, and proper size.	1		
a) Any front brake chamber mounting bracket is cracked, bent, or broken.	a		a
b) Any front brake chamber or mounting fastener is damaged or loose.	b		b
c) Size of chambers is not matched left and right (both sides must be same size).	c		c

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

3. Front Brakes

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Slacks			
<p>1) Inspect slack adjusters and S-cam assemblies for wear, condition, operation, and securement.</p>	1		
<p>a) Slack adjuster is mounted so that adjuster bolt is not assessable.</p>	a	a	
<p>b) Any portion of slack adjuster or S-cam is missing, broken, cracked, or badly worn.</p>	b		b
<p>c) S-cam shaft and/or S-cam bushing total wear (up and down) is greater than manufactures specification.</p>	c	c	
<p>d) S-cam in and out end play is more than manufactures specifications.</p>	d	d	
<p>e) S-cam snap ring is missing.</p>	e		e
<p>f) Slack adjuster has frozen or has stripped worm gear or ratchet assembly.</p>	f		f
Pushrods			
<p>1) Inspect pushrod assembly(ies) for condition, securement, and alignment.</p>	1		
<p>a) Pushrod is rubbing against body of chamber, or chamber is misaligned.</p>	a	a	
<p>b) Pushrod on left and right sides are not mounted in identical (same) slack adjuster location hole (same effective slack adjuster length).</p>	b		b
<p>c) Any portion of pushrod assembly (locknut, pushrod, clevis and pin, or cotter pin) is loose, missing, or damaged.</p>	c		c

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS
3. Front Brakes

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Linings See Appendix 17			
1) Inspect linings and foundation brake hardware for contamination, wear, damage, and securement.	1		
a) Lining cracks or voids of 1/16" in width observable on the edge of the lining.	a		a
b) Portions of lining segment missing such that a fastening device (rivet or bolt) is exposed when viewing the lining from the edge.	b		b
c) Cracks in the lining that exceed 1 1/2" in length.	c		c
d) Loose lining segments.	d		d
e) Complete lining segment missing.	e		e
f) Evidence of oil seepage into or out of the brake lining/drum interface area. This must include wet contamination of the lining edge accompanied by evidence that further contamination will occur—such as oil running from the drum or a bearing seal.	f		f
g) Buses with air brakes: Lining with a thickness of less than 1/4" or to wear indicator if lining is so marked, measured at the shoe center for drum brakes or less than 1/8" for disc brakes.	g		g
h) Buses with hydraulic & electric brake: Lining with a thickness 1/16" or less at the shoe center for disc or drum brakes	h		h
NOTE: Grease on the lining edge, back of shoe, or drum edge and oil stains with no evidence of fresh oil leakage are not conditions for out-of-service.			
Drums			
Drums need to be measured with a drum caliper or use a go no-go gauge. See Appendix 18 Document drum measurement			
1) Inspect front brake drum(s) for condition and oversize.	1		
a) There is any crack (other than heat checks) in any drum.	a		a
b) There is excessive wear in drum friction surface (inside diameter exceeds manufacture's maximum specifications).	b		b
c) There is any grease, oil, or brake fluid on inside of drum.	c		c
d) Drum is not centered on hub (if equipped) causing more than .010" out of round.	d	d	
e) Drum is not mounted securely.	e		e

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

3. Front Brakes

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Rotors			
1) Inspect front brake rotor(s) for mounting, thickness, and condition.	1		
a) Rotor mounting is not secure.	a		a
b) Rotor has excessive run-out (beyond manufacturer's specifications) causing a pulsating in brake pedal.	b	b	
c) Rotor has cracks (other than heat checks) or other mechanical defects.	c		c
d) Rotor thickness is less than manufacturer's specifications stamped on rotor.	d		d
e) Any rotor friction surface is significantly grooved or damaged.	e	e	
f) Friction surface is contaminated with oil, grease, or brake fluid.	f		f
Wheel Cylinders or Calipers			
1) Inspect wheel cylinder(s) or caliper(s) for leaks, mounting, and condition.	1		
a) Any wheel cylinder or caliper dust boot is damaged or missing.	a	a	
b) Any wheel cylinder or caliper is not securely mounted or has loose or missing fasteners.	b		b
c) There is uneven lining or pad wear, rotor or drum damage, or evidence of dragging, or other evidence that any wheel cylinder or caliper may be sticking.	c		c
d) Any wheel cylinder or caliper is leaking.	d		d
Brake Adjustment See Appendix 3			
1) Check brakes for proper adjustment. (This is suggested at each service interval.)	1		
a) Pushrod travel exceeds maximum.	a		a
b) There is any damage or condition, which prevents proper adjustment.	b		b
2) Automatic Slack Adjusters (ASA) must be checked for correct pushrod travel.	2		
a) Check adjustment of the ASA.	a	a	
b) Any automatic slack adjuster arm or mechanism is damaged or loose.	b		b
c) Pushrod travel of any automatic slack adjuster equipped brake exceeds maximum shown in Appendix 3 , (repair or replace ASA).	c		c

A. CHASSIS

4. Engine/Transmission Mounts, Starter Mounting

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Engine/Transmission Mounts			
<p>1) Inspect engine and transmission mounts for condition and securement.</p> <p>a) Any mounting fasteners are loose, missing, or broken.</p> <p>b) Any mount is cracked or has deteriorated rubber.</p> <p>c) Any structural members cracked or broken.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p>	<p>a</p> <p>b</p>	<p>c</p>
Starter Mounting			
<p>1) Inspect starter for securement and condition. Check for presence of heat shield (if equipped).</p> <p>a) Heat shield looseness or damage that could short the positive battery cable or terminal to ground.</p> <p>b) Any starter mounting bolt, stud, or nut is loose, damaged, broken, or missing.</p> <p>c) Starter is damaged or loose.</p> <p>d) Heat shield is missing, loose or damaged (if equipped).</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p>	<p>a</p> <p>b</p> <p>d</p>	<p>a</p> <p>b</p> <p>c</p>

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

5. Transmission

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Transmission Bolts			
1) Inspect transmission assembly and mounting fasteners for condition and securement.	1		
a) Any transmission assembly fastener(s) is loose, missing, or damaged (repair).	a	a	
b) Transmission is not mounted securely to flywheel housing.	b		b
c) There is any external indication that any torque converter bolt(s) is loose or missing.	c		c
Linkage			
1) Inspect transmission linkage for routing, condition, and securement.	1		
a) Modulator cable or vacuum hose is routed where it is subject to excessive heat.	a	a	
b) Any linkage hardware or fasteners are loose.	b	b	
c) Modulator cable is exposed or casing is damaged.	c	c	
d) Modulator vacuum hose is deteriorated or loose.	d	d	
e) Linkage is bent, damaged, or binding, or severely misadjusted.	e	e	
f) Any linkage hardware or fasteners are missing or linkage is damaged so as to cause a sticking or binding condition or not allowing transmission to go completely into park.	f		f
g) Modulator vacuum hose is leaking or not connected.	g	g	
Lines			
1) Inspect transmission lines for securement, routing, and condition.	1		
a) Any transmission line(s) is unsecured or routed subject to excessive heat or abrasion (note).	a	a	
b) Any transmission line is crimped reducing flow.	b	b	
c) There is any transmission line of improper type.	c	c	
d) Any transmission line is worn or deteriorated to the point that failure could occur.	d	d	

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS
5. Transmission

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Filter			
1) Inspect transmission external filter assembly (if equipped) for securement and condition.	1		
a) External filter mounting is insecure or has loose or missing fasteners.	a	a	
b) Filter canister is damaged.	b	b	
Cooler			
1) Inspect transmission cooler (as equipped) for securement and condition.	1		
a) Mounting of separate transmission cooler (if equipped) is insecure or has loose or missing fasteners.	a	a	
b) Body of transmission cooler, including all hose connections, is cracked or damaged.	b	b	
Clutch			
1) Operation	1		
a) Check pedal, linkage, clutch, and release bearing for wear, slippage, any abnormal noises in the engaged or released positions.	a	a	
b) Loose nuts and bolts.	b	b	
c) Noisy release bearing.	c	c	
d) Clutch out of adjustment	d	d	
1) Cannot adjust clutch to specs.	1	1	
2) Excessively noisy release bearing.	2	2	
3) Clutch slipping, grabbing, or has excessive chatter when engaging clutch.	3	3	
4) Binding or sticking clutch linkage or return spring.	4	4	
5) Hard to shift transmission.	5	5	
e) Visually check clutch pedal pad for wear.	e	e	
1) Worn pedal cover pad.	1	1	
2) Missing pedal cover pad.	2	2	

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

5. Transmission

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
<p>Clutch Cont.</p> <p>2) Check clutch master and slave cylinders for hydraulic leaks and operation (if equipped).</p> <p>a) Leaking master or slave cylinder or inoperable.</p> <p>b) Fluid level low.</p> <p>3) Adjustment</p> <p>a) Check “free play” travel of the clutch pedal. This is the first easy movement of the clutch pedal and should be no more than 1-1/2 and no less than 3/4 an inch of travel.</p> <p>b) Free play is out of adjustment.</p> <p>c) Clutch slips, grabs, or chatters after adjusting “free play” travel.</p> <p>d) Clutch pedal free play cannot be adjusted. (On Adjustable style linkage).</p>	<p>2</p> <p>a</p> <p>b</p> <p>3</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p>	<p></p> <p>b</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p>	<p></p> <p>a</p>

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

6. Fluid Leaks See Appendix 1

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
<p>Oil</p> <p>1) Inspect for engine oil leaks at all potential locations and determine severity.</p> <p>a) Engine oil leakage is causing deterioration of any rubber parts, such as steering linkage boots, hoses, etc.</p> <p>b) Engine oil is dripping at any location <u>except</u> on exhaust system.)</p> <p>c) Engine oil is dripping on any portion of exhaust system.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p>	<p>a</p> <p>b</p>	<p>c</p>
<p>Coolant</p> <p>1) Inspect all potential locations for coolant leaks.</p> <p>a) There is coolant leakage at radiator, hoses, heater core, engine oil cooler, thermostat housing, head gaskets, freeze plugs, reservoir, water pump, or other potential locations.</p> <p>b) Leakage is excessive.</p>	<p>1</p> <p>a</p> <p>b</p>	<p>a</p>	<p>b</p>
<p>Transmission</p> <p>1) Inspect for transmission fluid leaks at all potential locations and determine severity.</p> <p>a) Transmission fluid is causing deterioration of any rubber parts, such as steering linkage boots, hoses, etc.</p> <p>b) Transmission fluid is leaking at any location <u>except</u> on exhaust system.</p> <p>c) Transmission fluid is dripping on any portion of exhaust system.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p>	<p>b</p>	<p>c</p>
<p>Power Steering</p> <p>1) Inspect for power steering fluid leaks at all potential locations and determine severity.</p> <p>a) Power steering fluid is causing deterioration of any rubber parts, such as steering linkage boots, hoses, etc.</p> <p>b) Power steering fluid is seeping. Appendix 1</p> <p>c) Power steering fluid is dripping.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p>	<p>a</p> <p>b</p>	<p>c</p>

A. CHASSIS
7. Fuel Tank

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Leaks			
1) Inspect fuel tank assembly for leaks.	1		
a) The fuel tank has any cracks.	a		a
b) Any connection(s) are loose at the tank.	b		b
c) There is any fuel leakage from the tank, connections, or cap.	c		c
Mounting			
2) Inspect fuel tank mounting system and barrier (if equipped) for securement and condition.	2		
a) Any portion of fuel tank mounting system (including support brackets, retaining straps, and chassis frame) is missing, loose, cracked, or broken.	a		a
b) Any fuel tank mounting fasteners are loose or missing.	b		b
c) Barrier assembly (if originally equipped) is damaged, insecurely mounted, or missing.	c		c
d) Fuel tank exhaust shield is damaged, insecurely mounted or missing if required.	d	d	
Hoses			
1) Inspect all fuel lines, hoses, and under-bus fuel system components, for routing, securement, and condition.	1		
a) Any fuel line or hose is unsecured or is routed subject to excessive heat or abrasion.	a		a
b) Any fuel line or hose is deteriorated or damaged (including cracks or any damage that may cause potential leakage) or clamps are loose or missing.	b		b
c) Any under-bus fuel system filter, water separator, or other components are insecurely mounted, cracked, or damaged.	c		c
Wiring			
1) Inspect fuel tank sender unit wiring for securement, routing, and condition.	1		
a) Any wiring or connection has damaged or missing insulation	a		a
b) Any portion of sending unit wiring (including ground) or connections is unsecured or is routed subject to excessive heat or abrasion.	b	b	

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS
8. Propane Tanks (Requires Variance)

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
<p>Tank Mounting</p> <p>1) Inspect tank to see that it is securely mounted directly to vehicle main frame rail. (Tank can not be mounted to any body components.) See Appendix 6</p> <ul style="list-style-type: none"> a) Check for presence of heat shield, where tank is less than 12 " from exhaust pipe or muffler. b) Steel straps of at least 3/8 inch thickness with 2 ea 5/8 bolts per strap. c) All bolts used in tank mounting shall be SAE grade 8. d) Check tanks for ground clearance of 13". e) Check fuel lines and valves. (May not be mounted on the bottom of the tank.) f) Legible filling decal present. <p>Note: Technicians must have documented training on propane equipment.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p> <p>f</p>	<p></p> <p></p> <p></p> <p></p> <p></p> <p>f</p>	<p></p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p>

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

9. Brake Equipment

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Brake Lines			
1) Inspect all brake hoses, lines, and connections for routing, securement, and condition. a) Any brake hose or line is unsecured. b) Any brake line or hose is routed where it is subject to excessive heat or abrasion. c) Any brake line or hose is deteriorated or damaged to the point that failure could occur (cord frayed, wall thickness thin, rubber contaminated with oil, crimped, etc.). d) Any brake line or hose connection is loose. e) There is any audible air leak or visible hydraulic brake fluid leakage.	1 a b c d e	 a b 	 c d e
NOTE: External layer weather checking only shall not be cause for rejection.			
Brake Valves			
1) Inspect all brake system valves for securement and condition. a) There are any audible air leaks or visible hydraulic fluid leaks from any brake valve. b) Any brake valve is not mounted securely, is cracked, or damaged.	1 a b	 a 	 b
Reservoir Mounting			
1) Inspect reservoirs (air or vacuum tanks) for securement and condition. a) Any reservoir mounting strap or fastener is cracked, loose, or missing.	1 a	 	 a

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS
9. Brake Equipment

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Bleed Reservoirs			
1) With air system fully charged, check manual operation of safety relief valve.	1		
2) Partially open manual petcock valve on the first (wet) tank. Allow to drain until any moisture (water) or contamination is drained.	2		
a) There is moisture in reservoir (desiccant type air dryer equipped vehicles only).	a	a	
b) Safety relief valve leaks or does not release pressure.	b	b	
c) There is excessive sludge or oil contamination in the reservoir (more than eight (8) fluid ounces).	c	c	
d) Reservoir leaks due to corrosion or is cracked.	d		d
e) Automatic moisture ejectors are leaking.	e	e	
f) Drain valves are not at the lowest part of the tank.	f	f	

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS
10. Driveline

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
<p>Driveshafts</p> <p>1) Inspect driveshafts for condition.</p> <p>a) Any driveshaft balancing weight (if originally equipped) is missing.</p> <p>b) There is any foreign matter wrapped around driveshaft.</p> <p>c) Any driveshaft is bent or seriously dented.</p> <p>d) There are any cracks or other damage in driveshaft, which could cause structural failure.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p>	<p>a</p> <p>b</p> <p>c</p>	<p>d</p>
<p>U-Joints</p> <p>1) Prior to lubricating, inspect U-joints or constant velocity (CV) joints (if equipped) for condition, phasing (alignment of joints), lubrication, and presence of all hardware.</p> <p>a) U-joints or constant velocity joints are dry of lubrication, or zerk (grease) fitting (if equipped) is missing, clogged, or inaccessible.</p> <p>b) There is any missing hardware or fasteners in any U-joint or CV joint assembly.</p> <p>c) Any U-joint has excessive cross-shaft-to-bearing cup play, or CV joint has significant play</p> <p>d) Any U-joint or CV joint shows evidence of excessive rusting of bearings.</p> <p>e) Any bearing cup is loose in yoke.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p>	<p>a</p>	<p>b</p> <p>c</p> <p>d</p>
<p>Yokes</p> <p>1) Inspect driveshaft yokes for condition and lubrication.</p> <p>a) Driveshaft splines are unlubricated.</p> <p>b) Dust cap on yoke is missing.</p> <p>c) Zerk (grease) fitting is missing or clogged.</p> <p>d) Seal in dust cap is missing.</p> <p>e) Any yoke has excessive play in splines.</p> <p>f) Any yoke is cracked or broken.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p> <p>f</p>	<p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p>	<p>f</p>

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS
10. Driveline

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Hanger Bearings			
1) Inspect hanger bearings and rubber insulators for condition and securement. a) Hanger bearing rubber insulator is deteriorated, damaged, or oil soaked and there is excessive play. b) Hanger bearing support is misaligned. c) There is excessive play in hanger bearing or inner race is loose on shaft. d) There is any missing or damaged hardware or fasteners in hanger bearing or support assembly.	1 a b c d	 a b	 c d
Guards			
1) Inspect for presence, condition and proper amount of driveshaft guards. a) Any driveshaft guard is damaged b) Any driveshaft guard is missing, or has loose or damaged mounting fasteners.	1 a b	 a	 b
Driveshaft Park Brake			
1) Inspect driveshaft park brake assembly for condition, mounting, securement, and adjustment of linings, drum, linkage, and all other related hardware. a) Lining is worn down to 2/32 inch from top of rivet head. b) Lining is contaminated with grease or oil. c) Lining is broken, cracked, or loose. d) Drum is cracked or has excessive heat damage or scoring of friction surface. e) Any actuating or mounting hardware or fastener is damaged, loose, or missing. f) Park brake is not adjusted per manufacturer's specifications.	1 a b c d e f		 a b c d e f

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

11. Rear Suspension

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Axle Housing			
1) Inspect axle housing for condition and leakage.	1		
a) Any portion of axle housing is cracked or bent.	a	a	
b) Any portion of axle housing is leaking lubricant due to cracks, porous metal, or defective weld.	b	b	
c) There is any leakage at or around axle housing ends.	c	c	
d) Lubricant level is low.	d	d	
e) Differential gaskets or seals are leaking.	e	e	
Vent			
1) Inspect condition of axle housing vent.	1		
a) Vent hose (if originally equipped) is cracked, clogged, or missing.	a	a	
b) Axle vent is not functional or is missing.	b	b	
Differential			
1) Inspect differential assembly for condition, lubricant level, and leakage.	1		
a) Any external differential hardware or fasteners are loose or missing.	a	a	
b) Differential pinion yoke has endplay or side play exceeding manufacturer's specifications.	b	b	
c) Pinion/yoke end nut is missing.	c		c
Seals			
1) Inspect rear wheel seals for condition and leakage.	1		
a) There is wetness or dripping of grease around axle flange.	a	a	
b) Either rear wheel seal is damaged or leaking excessively.	b		b
c) Any axle flange stud or nut is loose or missing.	c	c	

A. CHASSIS

11. Rear Suspension

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Wheel Bearings See Appendix 17			
<p>1) Inspect rear wheel bearings for condition and proper adjustment of bearings. Raise rear wheels (wheels unloaded) and release park brake. Grasp tire and attempt to rock wheel assembly to check for movement.</p> <p>a) There is minor seepage of grease around dust cover b) There is wetness or dripping of grease around dust covers. c) Dust cover fasteners are missing or loose. d) Any noise, binding, or roughness is discovered in bearings. e) Wheel bearing, endplay exceeds manufacturer's specifications (Maximum of .10" in and out play measured at bearing hub). (See Manufactures manual for specific application)</p>	<p>1</p> <p>a b c d e</p>	<p>a b c d</p>	<p>e</p>
Hoses			
<p>1) Inspect rear brake flexible hoses for condition, securement, and routing.</p> <p>a) Any rear brake flex hose is kinked, collapsed, bulging, has damaged plies or cord, or is damaged below outer covering. b) Any rear brake flex hose supporting brackets are damaged or have loose fasteners. c) Any rear brake flex hose is rubbing on or routed against other components. d) Any rear brake flex hose or connection is leaking fluid or air pressure.</p>	<p>1</p> <p>a b c d</p>	<p>b</p>	<p>a c d</p>
Springs			
<p>1) Inspect rear springs for condition, securement, and alignment.</p> <p>a) There are any loose, missing, broken, or worn spring clips. b) Any leaf spring or air suspension ride height is less than manufacturer's specifications. c) Air ride pivot pins and bushings are loose. d) There is any misalignment of spring leaves or other evidence that centering pin is loose or broken. e) Any leaf spring is broken or missing. f) On any air bag type spring assembly, air bag is damaged or leaking, or air lines and valves are damaged or leaking. g) Either rear leaf spring is worn to the point that suspension bottoming has damaged rubber frame bumper. h) Rubber frame bumper is missing.</p>	<p>1</p> <p>a b c d e f g h</p>	<p>a b c g h</p>	<p>d e f</p>

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS
11. Rear Suspension

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
U-Bolts			
1) Inspect spring U-bolts for condition and securement.	1		
a) Any U-bolt is misaligned.	a	a	
b) There is rust underneath U-bolt nuts indicating possibility of looseness.	b	b	
c) Any U-bolt seating plate, shock mount bracket, or nut is loose, missing, cracked, or stripped.	c		c
Shocks			
1) Inspect rear shocks for condition and securement.	1		
a) There is any wetness around shock body due to leaking shock fluid.	a	a	
b) Any shock is broken.	b	b	
c) Any shock mounting or fastener is loose, missing, cracked, or broken.	c	c	
Shackles			
1) Inspect rear suspension shackles, spring hangers, and hanger pinch bolts for condition and securement.	1		
a) Any rear spring shackle or hanger is cracked or broken.	a		a
b) Any rear spring shackle or hanger is worn to the point, or pinch bolt is stripped or missing, so that spring pin cannot be clamped tightly.	b		b

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

11. Rear Suspension

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Pins and Bushings			
1) Inspect rear spring pins and bushings for wear and lubrication. a) Any greaseable spring pin assembly will not accept lubrication, or zerk (grease) fitting is damaged or missing. b) Inner sleeve on rubber type spring pin assemblies is worn through, or rubber bushing is excessively worn, (rubber is compacted or deteriorated resulting in free play between rubber and spring eye or inner sleeve). c) Rear spring pin bushing (metal type bushing) is worn through. d) Total free play (up and down) of pin and bushing exceeds 1/8 inch. e) On system using two pins and bushings, combined free play exceeds 1/4 inch.	1 a b c d e	a b d e	c
Hangers			
1) Inspect hangers for mounting and condition. a) Any spring hanger or bracket is cracked or broken, or any mounting fastener is loose or missing.	1 a		a

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

12. Rear Brakes

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
<p>Brake Hoses</p> <p>1) Inspect rear brake flexible hoses for condition, securement, and routing.</p> <p>a) Any rear brake line bracket(s) or securement system is loose or missing.</p> <p>b) Any rear brake flex hose is kinked, collapsed, bulging, has damaged plies or cord, or is damaged through outer covering.</p> <p>c) Any rear brake flex hose supporting brackets are damaged or have loose fasteners.</p> <p>d) Any rear brake flex hose is rubbing on or routed against other components.</p> <p>e) Any rear brake flex hose or connection is leaking fluid or air pressure.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p>	<p></p> <p>a</p> <p></p> <p>d</p> <p></p>	<p></p> <p></p> <p>b</p> <p>c</p> <p></p> <p>e</p>
<p>Lines</p> <p>1) Inspect air and hydraulic brake lines for routing, securement, and condition.</p> <p>a) Any brake line is bent, crimped, or damaged significantly restricting air pressure or hydraulic fluid.</p> <p>b) Any brake line is rubbing on other components or is abraded.</p> <p>c) Any brake line is not of O.E.M. material, size, or type.</p> <p>d) Any brake line or connection is leaking air pressure or hydraulic fluid.</p> <p>e) Brake line bracket(s) or securement system is loose or missing</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p>	<p></p> <p></p> <p>b</p> <p>c</p> <p></p> <p>e</p>	<p>a</p> <p></p> <p></p> <p>d</p> <p></p>
<p>Chambers</p> <p>1) Inspect rear brake chamber assembly(ies) for securement, condition, and proper size.</p> <p>a) Any chamber-mounting bracket is cracked, bent, or broken.</p> <p>b) Any rear brake chamber or mounting fastener is damaged or loose.</p> <p>c) Either chamber is not original size or size of chamber is unmatched (both sides same size).</p> <p>d) Chamber should have adjustment hole dust cover in place.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p>	<p></p> <p></p> <p></p> <p>d</p>	<p>a</p> <p>b</p> <p>c</p> <p></p>

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

12. Rear Brakes

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Slacks			
<ul style="list-style-type: none"> 1) Inspect slack adjusters and S-cam assemblies for wear, condition, operation, and securement. 	1		
<ul style="list-style-type: none"> a) Slack adjuster is mounted so that adjuster bolt is not assessable. 	a	a	
<ul style="list-style-type: none"> b) Any portion of slack adjuster or S-cam is missing, broken, cracked, or badly worn. 	b		b
<ul style="list-style-type: none"> c) S-cam shaft and/or S-cam bushing total wear (up and down) is greater than manufactures specification. 	c	c	
<ul style="list-style-type: none"> d) S-cam in and out endplay is more than manufactures specifications. 	d	d	
<ul style="list-style-type: none"> e) S-cam snap ring is missing. 	e		e
<ul style="list-style-type: none"> f) Slack adjuster has frozen or stripped worm gear or ratchet assembly. 	f		f
Pushrods			
<ul style="list-style-type: none"> 1) Inspect pushrod assembly(ies) for condition, securement, and alignment. 	1		
<ul style="list-style-type: none"> a) Pushrod is rubbing against body of chamber, or chamber is misaligned. 	a	a	
<ul style="list-style-type: none"> b) Pushrods on left and right sides are not mounted in identical (same) slack adjuster location holes (same effective slack adjuster length). 	b		b
<ul style="list-style-type: none"> c) Any portion of pushrod assembly (locknut, pushrod, clevis and pin, or cotter pin) is loose, missing, or damaged. 	c		c

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS
12. Rear Brakes

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
<p>Linings See Appendix 17</p> <p>1) Inspect linings and foundation brake hardware for contamination, wear, damage, and securement.</p> <p>a) Lining cracks or voids of 1/16" in width observable on the edge of the lining.</p> <p>b) Portions of lining segment missing such that a fastening device (rivet or bolt) is exposed when viewing the lining from the edge.</p> <p>c) Cracks in the lining that exceed 1 1/2" in length.</p> <p>d) Loose lining segments.</p> <p>e) Complete lining segment missing.</p> <p>f) Evidence of oil seepage into or out of the brake lining/drum interface area. This must include wet contamination of the lining edge accompanied by evidence that further contamination will occur—such as oil running from the drum or a bearing seal.</p> <p>g) Buses with air brakes: Lining with a thickness of less than 1/4" or to wear indicator if lining is so marked, measured at the shoe center for drum brakes or less than 1/8" for disc brakes.</p> <p>h) Buses with hydraulic & electric brake: Lining with a thickness 1/16" or less at the shoe center for disc or drum brakes</p> <p>NOTE: Grease on the lining edge, back of shoe, or drum edge and oil stains with no evidence of fresh oil leakage are not conditions for out-of- service.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p> <p>f</p> <p>g</p> <p>h</p>		<p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p> <p>f</p> <p>g</p> <p>h</p>
<p>Drums</p> <p>Drums need to be measured with a drum caliper or use a go no-go gauge. See Appendix 18</p> <p>Document drum measurement</p> <p>1) Inspect rear brake drum(s) for condition and oversize.</p> <p>a) There is any crack (other than heat checks) in any drum.</p> <p>b) There is excessive wear in drum friction surface (inside diameter exceeds manufacture's maximum specifications).</p> <p>c) There is any grease, oil, or brake fluid on inside of drum.</p> <p>d) Drum is not centered on hub (if equipped) causing more than .010" out of round.</p> <p>e) Drum is not mounted securely.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p>	<p>d</p>	<p>a</p> <p>b</p> <p>c</p> <p>e</p>

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS
12. Rear Brakes

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Rotors			
1) Inspect rear brake rotor(s) for mounting, thickness, and condition.	1		
a) Rotor mounting is not secure.	a		a
b) Rotor has excessive runout (beyond manufacturer' specifications) causing a pulsating in brake pedal.	b	b	
c) Rotor has cracks (other than heat checks) or other mechanical defects.	c		c
d) Rotor thickness is less than manufacturer's specifications stamped on rotor.	d		d
e) Any rotor friction surface is significantly grooved or damaged.	e	e	
f) Friction surface is contaminated with oil, grease, or brake fluid.	f		f
Wheel Cylinders or Calipers			
1) Inspect wheel cylinder(s) or caliper(s) for leaks, mounting, and condition.	1		
a) Any wheel cylinder or caliper dust boot is damaged or missing.	a	a	
b) Any wheel cylinder or caliper is not securely mounted or has loose or missing fasteners.	b		b
c) There is uneven lining or pad wear, rotor or drum damage, or evidence of dragging, or other evidence that any wheel cylinder or caliper may be sticking.	c		c
d) Any wheel cylinder or caliper is leaking.	d		d
1) Check brakes for proper adjustment. (This is suggested at each service interval.) See Appendix 3	1		
a) Pushrod travel exceeds maximum.	a		a
b) There is any damage or condition, which prevents proper adjustment.	b		b
2) Automatic Slack Adjusters (ASA) must be checked for correct pushrod travel.	2		
a) Check adjustment of the ASA	a	a	
b) Any automatic slack adjuster arm or mechanism is damaged or loose.	b		b
c) Pushrod travel of any automatic slack adjuster equipped brake exceeds maximum shown in Appendix 3, (repair or replace ASA).	c		c

A. CHASSIS

13. Body Securements and Structure

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
<p>Body Hold downs</p> <p>1) Inspect for securement and condition of all body hold-downs, chassis cowl mounts, and frame pads. Body hold-downs include any J-bolt, U-bolt, or clamp type hold-down used to secure body to chassis frame.</p> <p>a) Any body hold-down is loose or misaligned, or there are any cracks or stripped fasteners at floor sill securement points.</p> <p>b) Padding between frame rails and floor sills is missing or grossly misaligned.</p> <p>c) Any originally installed body hold-down or cowl mount is missing.</p> <p>d) Three (3) or more body hold-downs are loose, misaligned, or have missing hardware.</p> <p>e) There are three (3) or more body hold-downs with cracks or stripped nuts at floor sill securement point.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p>	<p>a</p> <p>b</p> <p>c</p>	<p>d</p> <p>e</p>
<p>Floor (Underneath)</p> <p>1) Inspect condition of floor structure, sills, and braces.</p> <p>a) There are any minor cracks in floor sills or braces or in welds.</p> <p>b) There is any broken weld or mounting of a floor sill or brace resulting in complete separation more than one (1) foot in length.</p> <p>c) There is any broken weld in the mounting of the bracing (K-member) at the front of the body floor (between stepwell and driver's area).</p> <p>d) There are any holes or cracks in floor sheet metal creating an opening to the passenger compartment.</p> <p>e) Entire cross section of any floor sill or brace is broken.</p> <p>f) Undercoating missing or not meeting minimum standards.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p> <p>d</p> <p>e</p> <p>f</p>	<p>a</p>	<p>b</p> <p>c</p> <p>d</p> <p>e</p>
<p>Outriggers</p> <p>1) Inspect body outriggers and hardware for condition and securement.</p> <p>a) Any originally installed (as required by manufacturer) outrigger is missing.</p> <p>b) Any body outrigger is cracked or has loose or missing hardware.</p>	<p>1</p> <p>a</p> <p>b</p>	<p>b</p>	<p>a</p>

A. CHASSIS

13. Body Securements and Structure

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
<p>Braces</p> <p>1) Inspect for condition and securement of all chassis and body braces. a) There is any cracked brace underneath the body.</p>	<p>1</p> <p>a</p>	<p>a</p>	
<p>Skirts</p> <p>1) Inspect body skirts (and luggage compartments, if equipped) for securement and condition. a) Any body skirt, skirt brace, or luggage compartment has cracked or broken sheet metal or mounting points. b) Luggage compartment door latch, hinge, or lock is sticking, damaged, or malfunctions.</p>	<p>1</p> <p>a</p> <p>b</p>	<p>a</p> <p>b</p>	
<p>Frame Rails</p> <p>1) Inspect condition of chassis frame rails, crossmembers, and all hardware attachment points. a) There is any crack in either frame rail or any crossmember. b) There is any loose or missing rivet or other fastener securing a crossmember to the frame. c) Any bumper brace is broken, cracked, or missing.</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p>	<p>a</p> <p>b</p> <p>c</p>	<p>a</p> <p>b</p>

A. CHASSIS

14. Exhaust Systems

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Exhaust Leaks			
1) With engine running and at operating temperature, inspect exhaust system for leaks, condition, and securement.	1		
a) Any exhaust junction gasket or hardware is broken or missing.	a	a	
b) Any exhaust component that has deteriorated to the point of allowing the escape of gases while the vehicles' engine is at idle and without restriction to the exhaust system.	b		b
c) Any exhaust leak at a seam or joint that can be felt with the bare hand six inches from the point of the leak, in any direction, with the engine at idle, and without restriction to the exhaust system.	c	c	
d) There is any physical damage to exhaust system that causes a reduction in flow	d	d	
2) Mounting	2		
a) Inspect mounting of the exhaust system.	a		
b) There is any exhaust system hanger, which is not securely mounted.	b	b	
c) Any exhaust pipe or clamp is loose.	c	c	
d) There is any originally installed exhaust hanger, which is missing, broken, or detached from exhaust system or frame mounting point.	d	d	
e) Any clamp is missing.	e	e	
f) Missing fuel tank heat shields as required by MSFOSB.	f	f	
3) Mufflers	3		
a) Inspect condition of the muffler.	a		
b) The muffler is cracked and /or leaking.	b		b
c) There is other significant physical damage to the muffler.	c	c	
4) Tailpipe	4		
a) Inspect condition of tailpipe and that it extends beyond rear bumper or to the skirt on the left side.	a	a	
b) The tailpipe is cracked and/or leaking.	b	b	
c) There is other significant physical damage to the tailpipe	c	c	
d) There is any originally installed exhaust hanger, which is missing, broken, or detached from exhaust system or frame mounting point.	d		d
e) Any clamp is missing.	e	e	
f) The tailpipe does not extend at least to the rear edge of the rear bumper, or more than 2 inches beyond bumper.	f		f
g) Left side exhaust tailpipe is to exit between 6 and 24 inches forward of the front edge of the rear tire. No tail pipe shall terminate beneath any emergency exit or fuel fill receptacle.	g		g

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

15. Wheels and Tires

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
<p>Tread Depth</p> <p>1) Inspect and measure all tires for tread depth and record on inspection form.</p> <p>a) Measured tread depth of either front tire is less than 4/32 inch (2/32 inch for rear tires) at three (3) points spaced equally around the circumference of the tire in the same major tread groove. Measurement shall not be taken at a wear bar. Measurement shall be taken at the most worn groove of the tire.</p> <p>b) There is evidence that any recapped tire has been regrooved.</p> <p>c) Any front tire is recapped or regrooved. See Appendix 4</p>	<p>1</p> <p>a</p> <p>b</p> <p>c</p>		<p>a</p> <p>b</p> <p>c</p>
<p>Pressure</p> <p>1) With tire cold, check pressure of all tires and record on inspection form.</p> <p>(NOTE: Refer to Tire and Rim Association Manual for correct air pressure for your specific tire and load rating.)</p> <p>a) Pressure in any tire is greater than maximum cold inflation pressure stated on sidewall of the tire.</p> <p>b) There is greater than 20% difference in pressure between any tires on a particular axle.</p>	<p>1</p> <p>a</p> <p>b</p>	<p>a</p> <p>b</p>	

A. CHASSIS

15. Wheels and Tires

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Damage			
1) Inspect for damage to wheels and tires.	1		
a) There is foreign material in the tire tread, which could cause damage or loss of air pressure.	a		a
b) There is any evidence of separation, bulges (other than normal manufacturer bulge), or other damage within the carcass of the tire.	b		b
c) There are any cuts, abrasion, or other damage to tire sidewall resulting in exposed or damaged cord.	c		c
d) There are any cracks, which run around the bead or sidewall of the tire.	d		d
e) On retreaded tire there is separation of the tire tread from the tire carcass, which could result in tire or tread failure.	e		e
f) Any valve cap is missing.	f	f	
g) Any valve stem is damaged or mislocated so that tire cannot be filled with air.	g	g	
NOTE: Weather checking only shall not be cause for rejection.			
NOTE: Refer to Tire and Rim Association Manual for correct procedures in demounting and mounting of tires and rims.			
h) There are minor dents or bends in a rim.	h	h	
i) There is any damage to the lock ring assembly or lock ring groove of a multi-piece rim, including rust or corrosion, which could cause the lock ring not to seal fully.	i		i
j) There are any cracks or breaks at the lugholes or any other part of a rim or cast spokes.	j		j
k) There are any dents or bends in a rim, which could result in failure of the rim or separation of the tire from the rim.	k		k
l) Any welds that are not factory.	l		l

School Bus Maintenance & Inspection Manual for Oregon School Buses

A. CHASSIS

15. Wheels and Tires

Items to be inspected & condition	Annual Insp.	30-day	O.O.S.
Matching			
<ul style="list-style-type: none"> 1) Inspect for matching of tire construction, design, size, and load rating on each axle. 	1		
<ul style="list-style-type: none"> a) There is mismatching of inner and outer dual tire diameter greater than 3/8 inch. 	a	a	
<ul style="list-style-type: none"> b) There is any tire marked for other than highway use. 	b		b
<ul style="list-style-type: none"> c) Any tire does not meet or exceed the tire size and load rating specified on the vehicle data plate. 	c	c	
<ul style="list-style-type: none"> d) All tires on front axle are not of same type (e.g., lug or rib) and size. 	d		d
<ul style="list-style-type: none"> e) Radial and bias ply tires are intermixed on the same axle. 	e		e
Alignment			
<ul style="list-style-type: none"> 1) Inspect tires for evidence of proper alignment. 	1		
<ul style="list-style-type: none"> a) Any tire is feather-edged, cupped, or has uneven tread wear. 	a	a	
<ul style="list-style-type: none"> b) Lateral runout of any tire/rim assembly exceeds 1/4 inch. 	b	b	
<ul style="list-style-type: none"> c) Tires/wheels are grossly misaligned, affecting steering control. 	c		c
Wheel Hardware			
<ul style="list-style-type: none"> 1) Inspect for presence, type, condition, and securement of all wheel hardware. 	1		
<ul style="list-style-type: none"> a) Check for proper spacing of rear dual wheels and tires (proper spacer width). 	a		a
<ul style="list-style-type: none"> b) There is improper matching of rims and lock rings. 	b		b
<ul style="list-style-type: none"> c) There is evidence of slippage of wheel assembly on cast spoke hub. 	c		c
<ul style="list-style-type: none"> d) Stud holes are elongated. 	d		d
<ul style="list-style-type: none"> e) Any loose wheel nut, stud, or clamp. 	e		e
<ul style="list-style-type: none"> f) Any wheel, nut, stud, or clamp is broken or missing. 	f		f
<ul style="list-style-type: none"> g) Any improper spacer is installed on a wheel. 	g		g