

GA School Bus Out-of-Service Criteria

(Revised July 2021)

The purpose of this part is to identify critical vehicle inspection items and provide criteria for placing vehicles out-of-service subsequent to a safety inspection.

DPS personnel shall declare "**Out of Service**" any school bus, which due to its mechanical condition or loading, would be likely to cause an accident or breakdown. No school system, contract carrier, or individual shall require, nor shall any person operate any school bus declared and marked "out of service" until all repairs required by the "out of service notice" have been satisfactorily completed.

Out-of-Service decals shall not be removed until repairs are completed.

O.C.G.A 40-8-220 Inspection of School Buses

(a) Every school bus which is defined by paragraph (55) of Code Section 40-1-1 which is owned or operated by a state, county, or municipal government or under contract by any independent school system shall be inspected annually, or more frequently at the discretion of the commissioner of public safety, under the supervision of an employee of the Department of Public Safety.

(b) The employee of the department shall supervise the inspection of such vehicle to determine if such vehicle possesses in safe operating condition the equipment which is applicable to school buses required by Parts 1 through 4 of Article 1 of this chapter and the equipment required by Part 6 of Article 1 of this chapter.

(c) If such vehicle is found to meet the equipment and safety requirements specified in subsection (b) of this Code section, then the employee of the department making the inspection shall issue a school bus certificate of safety inspection to the vehicle.

(d) If such vehicle does not meet the equipment and safety requirements specified in subsection (b) of this Code section, then that vehicle shall not be operated on the streets and highways of this state, and no school bus certificate of safety inspection shall be issued to such vehicle.

(e) All public-school buses shall be made available for the inspection required under this Code section, and no person shall conceal any bus required to be inspected under this Code section.

(f) The commissioner of public safety is authorized to implement any and all provisions of this Code section by the promulgation of necessary rules and regulations. When duly promulgated and adopted, all rules and regulations issued pursuant to this Code section shall have the force of law.

Publications

The following publications were referenced in the development of the Georgia Dept. of Public Safety School Bus Out of Service Criteria.

Commercial Vehicle Safety Alliance North American Standard Out of Service Criteria, 2020 Edition
National School Transportation Specifications and Procedures, 2015 Edition

The School Bus Out of Service Criteria has been approved and adopted by the Georgia Dept. of Education Pupil Transportation.

Note: Items in red are current revisions to the out of service criteria.

The following conditions shall be considered
"Out-of-Service":

FRONT COMPONENTS

HEADLAMPS

A bus which does not have at least one headlamp operative on low beam.

FLASHER LIGHTS

The bus shall be equipped with two hooded or recessed red flasher lights operable at all times.

CROSSING GATE

Crossing Gate must be operable at all times.

Note: The crossing gate must extend a minimum of 90 degrees and mounted on the right side of the front bumper. When opened, this arm shall extend in a line parallel to the body side and aligned with the right front wheel.

NOTE:

School buses must be equipped with a crossing gate mounted on the right side of the front bumper and must work in conjunction with the stop arm. Buses manufactured on or after 11/1/2017, Type A buses the crossing gate must be a minimum of 67 inches in length. Type B, C, and D buses must be a minimum of 70 inches in length. Both measured from bumper to outer edge of the crossing arm.

Type A, B, C, and D buses manufactured before 11/1/2017 the crossing gate must be a minimum of 66 inches.

WINDSHIELD WIPERS

Any bus that has an inoperative wiper or missing or damaged parts that render it ineffective on the driver's side. (Applicable only in inclement weather requiring use of windshield wipers.)

LEFT SIDE COMPONENTS

TIRES

Any Tire on Any Steering Axle

That is regrooved, retreaded, or recapped on front steering axle.

With less than $2/32$ -inch tread when measured in any two adjacent major tread grooves at any location on the tire. When any part of the breaker strip or casing ply is showing in the tread.

When sidewall is cut, worn, or damaged to the extent the ply cord is exposed.

Visually observable bump, bulge, or knot apparently related to tread or sidewall separation.

Tire is flat or has noticeable (e.g., can be heard or felt) leak, or has 50% or less of the maximum inflation pressure marked on the tire sidewall.

So mounted or inflated that it comes in contact with any part of the vehicle.

The weight on a tire on either side of an axle exceeds the tire load limit marked on the sidewall of the tire.

TIRES (cont.)

This includes an overloaded tire resulting from low air pressure.

Tires other than steering axle

Tire is flat or has noticeable (e.g., can be heard or felt) leak, or has 50% or less of the maximum inflation pressure marked on the tire sidewall.

Bias Ply Tire: When more than one ply is exposed in the tread area or sidewall or when the exposed area of the top ply exceeds 2 square inches.

Radial Ply Tire: When two or more plies are exposed in the tread area or damaged cords are evident in the sidewall or when the exposed area exceeds 2 square inches in the sidewall.

Any tire with visually observable bump or knot apparently related to tread or sidewall separation.

So mounted or inflated that it comes in contact with any part of the vehicle. (This includes any tire contacting its mate in a dual set.)

TIRES (cont.)

The weight on a single tire or dual set of tires on either side of an axle exceeds the applicable load limit marked on the sidewall of the tire(s). This includes an overloaded tire resulting from low air pressure.

So worn that less than 1/32 inch (.8mm) tread remains when measured in any two adjacent major tread grooves at 3 separate locations on the tire.

Seventy-five percent or more of the tread width loose or missing in excess of 12 inches in circumference.

LODGED ITEMS BETWEEN TIRES OF A DUAL TIRE SET

Any solid item lodged between a set of dual tires that is in direct contact with the sidewalls of the tires (excluding mud and snow).

WHEELS and RIMS

Lock or Side Ring

Bent, broken, cracked, improperly seated, sprung, or mismatched ring(s).

Rim Cracks

Any circumferential crack except an intentional manufactured crack at a valve stem hole.

Disc Wheel Cracks

- (1) Any single crack 3" or more in length.
- (2) A crack extending between any two holes including hand holes, stud holes and center hole.
- (3) Two or more cracks any place on the wheel

Disc Wheels

Fifty percent or more elongated stud holes (fasteners tight).

SPOKE WHEELS

Two or more cracks more than 1 inch long across a spoke or hub section.

Two or more web areas with cracks

FASTENERS

Loose, missing, broken, cracked, or stripped (both spoke and disc wheels) ineffective as follows: for 10 fastener positions – 3 anywhere or 2 adjacent; for 8 fastener positions or less (including spoke wheels and hub bolts) – 2 anywhere.

WELDS

- (1) Any cracks in welds attaching disc wheel to rim.
- (2) Any crack in welds attaching tubeless demountable rim to adapter.
- (3) Any welded repair on aluminum wheel(s) on a steering axle.
- (4) Any welded repair other than disc to rim attachment on steel disc wheel(s) mounted on the steering axle.

HUBS

- (1) When any axle bearing (hub) cap is missing or broken allowing an open view into hub assembly.
- (2) Smoking from wheel hub assembly due to bearing failure.

ELECTRICAL/BATTERY

Battery not secured, leaking, or has corrosion.

Cables/wiring that is chafed, frayed, damaged, or burnt insulation, causing bare wire to be exposed.

Broken or unsecured mounting of electrical components. Electrical cables unsupported, hanging or missing clamps that may cause a chafing or frayed condition.

Missing or damaged protective grommets insulating all electrical cables through metal compartments panels.

NOTE: All electrical cables passing through a metal surface shall pass through an insulated grommet as to provide adequate protection against chaffing and shorting.

STOP ARM

Stop arm must be operable at all times and have at least one operable red flashing lamp visible from front and rear.

Note: The stop arm must be perpendicular to the side of the bus when extended at a minimum of 90 degrees.

REAR COMPONENTS

FLASHER LIGHTS

The bus shall be equipped with two hooded or recessed red flasher lights operable at all times.

TAIL LAMPS/STOP LAMPS

Bus not having at least one steady burning tail lamp on the rear of the rear most vehicle visible from 500 feet (152 m).

Does not have at least one operative stop lamp on the rear.

REAR TURN SIGNAL

Does not have operative turn signals visible on each side of the rear.

STROBE LIGHTS

Every bus shall have an outside roof mounted white flashing strobe light with clear lenses emitting light 360 degrees around its vertical axis. Such strobe light shall be no greater than one-third the distance from the rear of the bus to the front of the bus and shall flash when the bus is stopped to receive or discharge passengers. *This rule shall apply only to new school buses manufactured on or after January 1, 1993*

RIGHT SIDE COMPONENTS

TIRES

Any Tire on Any Steering Axle

That is regrooved, retreaded, or recapped on front steering axle.

With less than 2/32-inch tread when measured in any two adjacent major tread grooves at any location on the tire. When any part of the breaker strip or casing ply is showing in the tread.

When sidewall is cut, worn, or damaged to the extent the ply cord is exposed.

Visually observable bump, bulge, or knot apparently related to tread or sidewall separation.

Tire is flat or has noticeable (e.g., can be heard or felt) leak, or has 50% or less of the maximum inflation pressure marked on the tire sidewall.

So mounted or inflated that it comes in contact with any part of the vehicle.

The weight on a tire on either side of an axle exceeds the tire load limit marked on the sidewall of the tire.

TIRES (cont.)

This includes an overloaded tire resulting from low air pressure.

Tires other than steering axle

Tire is flat or has noticeable (e.g., can be heard or felt) leak, or has 50% or less of the maximum inflation pressure marked on the tire sidewall.

Bias Ply Tire: When more than one ply is exposed in the tread area or sidewall or when the exposed area of the top ply exceeds 2 square inches.

Radial Ply Tire: When two or more plies are exposed in the tread area or damaged cords are evident in the sidewall or when the exposed area exceeds 2 square inches in the sidewall.

Any tire with visually observable bump or knot apparently related to tread or sidewall separation.

So mounted or inflated that it comes in contact with any part of the vehicle. (This includes any tire contacting its mate in a dual set.)

TIRES (cont.)

The weight on a single tire or dual set of tires on either side of an axle exceeds the applicable load limit marked on the sidewall of the tire(s). This includes an overloaded tire resulting from low air pressure.

So worn that less than 1/32 inch (.8mm) tread remains when measured in any two adjacent major tread grooves at 3 separate locations on the tire.

Seventy-five percent or more of the tread width loose or missing in excess of 12 inches in circumference.

LODGED ITEMS BETWEEN TIRES OF A DUAL TIRE SET

Any solid item lodged between a set of dual tires that is in direct contact with the sidewalls of the tires (excluding mud and snow).

WHEELS and RIMS

Lock or Side Ring

Bent, broken, cracked, improperly seated, sprung, or mismatched ring(s).

Rim Cracks

Any circumferential crack except an intentional manufactured crack at a valve stem hole.

Disc Wheel Cracks

- (4) Any single crack 3" or more in length.
- (5) A crack extending between any two holes including hand holes, stud holes and center hole.
- (4) Two or more cracks any place on the wheel

Disc Wheels

Fifty percent or more elongated stud holes (fasteners tight).

SPOKE WHEELS

Two or more cracks more than 1 inch long across a spoke or hub section.

Two or more web areas with cracks

FASTENERS

Loose, missing, broken, cracked, or stripped (both spoke and disc wheels) ineffective as follows: for 10 fastener positions – 3 anywhere or 2 adjacent; for 8 fastener positions or less (including spoke wheels and hub bolts) – 2 anywhere.

WELDS

- (1) Any cracks in welds attaching disc wheel to rim.
- (2) Any crack in welds attaching tubeless demountable rim to adapter.
- (3) Any welded repair on aluminum wheel(s) on a steering axle.
- (4) Any welded repair other than disc to rim attachment on steel disc wheel(s) mounted on the steering axle.

HUBS

- (1) When any axle bearing (hub) cap is missing or broken allowing an open view into hub assembly.
- (2) Smoking from wheel hub assembly due to bearing failure.

FUEL SYSTEM

A missing fuel cap.

INTERIOR COMPONENTS

CHILD CHECK REMINDER SYSTEM

Child check reminder system inoperative or doesn't operate as designed.

Note: Required on buses mfg. August 2004 and after.

CHILD REMINDER INSPECTION PROCEDURE

To properly inspect the child reminder system, you must have the driver start the engine activate the 8-way lights, along with the stop arm and crossing gate. Then have the driver switch the bus to either off or accessory position, allow the system to arm, open the door to see if the horn activates and then deactivate the system by pressing the button at the rear of the bus, and waiting for the dome lamp or such indicators to activate to indicate the system is disarmed.

Note: to eliminate unnecessary idling, the driver must be able to unload students with the engine off and the key in the accessory or on/run position.

SEATS AND BARRIERS

Any seat frame or barrier that is not securely attached to the vehicle. To include the driver's seat. (ie., loose, broken or missing anchors/bolts).

Any seat or barrier material(s) that compromises the integrity of the compartmentalization and occupant protection. (FMVSS 571.222)

AIR PRESSURE GAUGES

Inoperative, missing, or defective primary or secondary air pressure gauges. (i.e., broken needle, faded numerical values)

LOW PRESSURE WARNING

Low pressure warning device missing, inoperative, or does not operate at 55 psi and below, or 1/2 of the governor cutout pressure, whichever is less.

GUIDANCE: FMCSR 393.51(c)(2)

NOTE: If either an audible or a visual warning device is working as required, vehicle will not be placed out-of-service.

AIR LOST RATE

If an air leak is discovered and the reservoir pressure is not maintained when:

- (1) Governor is cut-in;
- (2) Reservoir pressure is between 80 & 90 psi;
- (3) Engine is at idle, and
- (4) Service brakes are fully applied

Air reservoir security; separated from its original attachment points.

STEERING COLUMN and COMPONENTS

- (1) Any absence or looseness of U-bolt(s) or positioning part(s).
- (2) Worn, faulty, or obviously repair-welded universal joint(s).
- (3) Steering wheel not properly secured.
- (4) Telescopic steering column does not lock in position.
- (5) Tilt steering column does not lock in at least one position.

STEERING WHEEL FREE PLAY

When any of these values, inch movement or degrees, are met or exceeded, vehicle shall be placed out-of-service. (For power steering systems, engine must be running.)

Steering Wheel Diameter	Manual System Movement	Power System Movement*
	30 degrees or	45 degrees or
16" (41cm)	4-1/2" (11.5cm)(or more)	6-3/4" (17cm)(or more)
18" (46cm)	4-3/4" (12cm)(or more)	7-1/8" (18cm)(or more)
19" (48cm)	5 " (13cm)(or more)	7-1/2" (19cm)(or more)
20" (51cm)	5-1/4" (13cm)(or more)	7-7/8" (20cm)(or more)
21" (53cm)	5-1/2" (14cm)(or more)	8-1/4" (21cm)(or more)
22" (56cm)	5-3/4" (15cm)(or more)	8-5/8" (22cm)(or more)

- For power systems, if steering wheel movement exceeds 45 degrees before steering axle tires move, proceed as follows: Rock steering wheel •left to right between points of power steering valve resistance. If that motion exceeds 30 degrees (or the inch movement values shown for manual
- steering) vehicle shall be placed out-of-service.

EMERGENCY EXITS

A required/marked emergency exit that has one of the following conditions:

Missing

Inoperative (does not open, close and/or secure as designed).

Not properly marked.

Obstructed (includes obstructions of the markings, release mechanism and/or the opening of the emergency exit).

EMERGENCY EXITS (cont.)

Inoperable audible warning device to alert the driver of an open rear door, side door, or **rear push out window** (emergency exits only).

Guidance FMVSS 217-76

SERVICE DOOR

Inoperative or does not open as designed.

WHEELCHAIR LIFT EQUIPPED VEHICLES

- (1) Wheelchair lift does not function as designed or is inoperable.
- (2) Any hydraulic line leaking during lift operation, **to include cylinder seal leaks.**
- (3) Wheelchair restraint system is missing, incomplete or improperly installed, loose, damaged, or
- (4) Any required wheelchair occupant restraint system not in compliance.

FIRE SUPPRESSION SYSTEM

(Required on wheelchair lift equipped vehicles)

Fire suppression system is inoperative, or system is not charged.

Bus Specifications 2001, 2003, 2004, 2006

A pressure gauge shall be provided on the canister to allow service personnel to monitor status of the charge of the canister. A warning light shall be provided to alert the driver when the system is activated.

Bus Specifications 2007

The system shall be triggered by electronic activation through a control panel that provides an audible and visual alarm. The control panel shall be located within view and easy reach of the driver. A pressure gauge shall

be mounted within the driver's compartment area to monitor the status of the charged chemical canister.

Bus Specifications 2008, 2010, 2017

The system shall be triggered by electronic activation through a control panel that provides an audible and visual alarm. The control panel shall be located within view and easy reach of the driver. A pressure gauge, light or monitor shall be mounted within the driver's compartment area to monitor the status of the charged chemical canister. If a light or monitor is utilized, a pressure gauge must still be provided at the charged chemical canister.

Bus Specifications 2019

The system shall be triggered by a loss of pressure (LOP) detection system or an electronic activation through a control panel that provides an audible and visual alarm. The control panel shall be located within view and easy reach of the driver. A pressure gauge, light or monitor shall be mounted within the driver's compartment area to monitor the status of the charged suppression piston accumulator or chemical canister. If a light or monitor is utilized, a pressure gauge must still be provided at the charged chemical canister.

UNDERSIDE/CHASSIS COMPONENTS

BRAKES

Missing or broken mechanical components including: shoes; linings; pads; springs; anchor pins; spiders; cam rollers; pushrods, and air chamber mounting bolts.

Absence of effective braking action upon application of the service brakes (such as brake linings failing to move or contact braking surface upon application.)

Loose brake components including air chambers, spiders and camshaft support brackets.

Audible air leak at brake chamber

Brake adjustment limits: Bring reservoir pressure between 90 and 100 psi, turn engine off and then fully apply the brakes.

- a) One brake at 1/4 inch or more beyond the adjustment limit.
- b) Two brakes less than 1/4 inch beyond the adjustment limit also equal one defective brake.

BRAKE ADJUSTMENT CHART

CLAMP TYPE BRAKE CHAMBER

TYPE		OUTSIDE DIAMETER	BRAKE ADJUSTMENT LIMIT
6	A	4 1/2 "	1 1/4 "
9	B	5 1/4 "	1 3/8 "
12	B	5 11/16 "	1 3/8 "
16	D	6 3/8 "	1 3/4 "
20	D	6 25/32 "	1 3/4 "
24	D	7 7/32 "	1 3/4 "
30	D	8 3/32 "	2 "
36		9 "	2 1/4 "

Note: Added new Type SAE brake chamber marking.

BRAKE ADJUSTMENT CHART

CLAMP TYPE **LONG STROKE** BRAKE CHAMBER

TYPE		OUTSIDE DIAMETER	BRAKE ADJUSTMENT LIMIT
12	D	5 ¹¹/₁₆ "	1 ³/₄ "
16	E	6 ³/₈ "	2 "
20	E	6 ²⁵/₃₂ "	2 "
<small>(2 1/2" Dated Stroke)</small>			
20	F	6 ²⁵/₃₂ "	2 ¹/₂ "
<small>(3" Dated Stroke)</small>			
24	E	7 ⁷/₃₂ "	2 "
<small>(2 1/2" Dated Stroke)</small>			
24	F	7 ⁷/₃₂ "	2 ¹/₂ "
<small>(3" Dated Stroke)</small>			
30	F	8 ³/₃₂ "	2 ¹/₂ "

Note: Added new Type SAE brake chamber marking.

Brake linings or pads (except steering axles):

Cracked, loose, or missing lining.

- a. Lining cracks or voids of 1/16" in width observable on the edge of the lining.
- b. Portions of a lining segment missing such that a fastening device (rivet or bolt) is exposed when viewing the lining from the edge.
- c. Cracks that exceed 1-1/2" (38 mm) in length.
- d. Loose lining segments. (Approximately 1/16" or more movement.)
- e. Complete lining segment missing.

Evidence of oil seepage into or out of the brake lining/drum interface area. This must include wet contamination of the lining edge and that further contamination will occur-such as oil running from the drum, or a bearing seal. The friction surface shall not be saturated with oil, grease, or brake fluid.

Air Brakes: Lining with a thickness less than 1/4 inch or to wear indicator if lining is so marked, measured at the shoe center for drum brakes or less than 1/8 inch for disc brakes.

Hydraulic & electric brakes:

Lining with a thickness 1/4 inch or less at the shoe center for disc or drum brakes.

STEERING AXLE BRAKES

- (1) Any inoperative brake on either wheel of any steering axle.
- (2) Mismatch across any steering axle of:
 - (a) Air chamber sizes.
 - (b) Slack adjuster length.

Brake linings or pads on the steering axle of any bus:

- (a) Cracked, loose, or missing lining.
 - i. Lining cracks or voids of 1/16" (1.6 mm) in width observable on the edge of the lining.
 - ii. Portions of a lining segment missing such that a fastening device (rivet or bolt) is exposed when viewing the lining from the edge.
 - iii. Cracks that exceed 1-1/2" in length.
 - iv. Loose lining segments. (Approximately 1/16" or more movement.)
 - v. Complete lining segment missing.

Evidence of oil seepage into or out of the brake lining/drum interface area. This must include wet contamination of the lining edge and that further contamination will occur-such as oil running from the drum, or a bearing seal. The friction surface shall not be saturated with oil, grease, or brake fluid.

STEERING AXLE BRAKES (CONT.)

Lining with a thickness less than 3/16 inch (5 mm) for a shoe with a continuous strip of lining or 1/4 inch (6 mm) for a shoe with two pads for drum brakes or to wear indicator if lining is so marked, or less than 1/8 inch (3 mm) for air disc brakes, and 1/16 inch (1.6 mm) or less for hydraulic, disc, drum and electric brakes.

Inoperative parking brake:

No brakes on the vehicle are applied upon actuation of the parking brake control, including driveline hand-controlled parking brakes, and held solely by mechanical means.

Any non-manufactured holes or cracks in the spring brake housing section of a parking brake.

Brake drums with any external crack or cracks that open upon brake application.

Brake rotors (disc) with a crack in length of more than 75% of the friction surface and passes completely through the rotor to the center vent from either side or completely through a solid rotor or completely through a structural support connecting the rotor friction surfaces.

Any portion of the drum or rotor (discs) missing or in danger of falling away.

Hose with any damage extending through the outer reinforcement ply. Hose with audible leak at other than a proper connection.

Two hoses improperly joined such as a splice made by sliding the hose ends over a piece of tubing and clamping the hose to the tube.

Air hose cracked, broken, or crimped in such a manner as to restrict airflow.

Tubing with an audible leak at other than a proper connection.

Tubing cracked, damaged by heat, broken, or crimped.

AIR COMPRESSOR

- (1) Loose compressor mounting bolts.
- (2) Cracked, broken, or loose pulley.
- (3) Cracked or broken mounting brackets, braces, or adapters.


VACUUM

- (1) Insufficient vacuum reserve to permit one full brake application after engine is shut off.
- (2) Vacuum hose(s) or line(s) restricted, abraded (chafed) through outer cover-to-cord ply, crimped,

cracked, broken, or has collapse of vacuum hose(s) when vacuum is applied.

HYDRAULIC BRAKES

(Including: Power Assist over Hydraulic and Engine Driven Hydraulic Booster)

- (1) No pedal reserve with engine running.
 - (2) Master cylinder less than 1/4 full **or below minimum marking.**
 - (3) Brake power assist unit is inoperative.
 - (4) Seeping or swelling brake hose(s) under application of pressure.
 - (5) Hydraulic hose(s) abraded (chafed) through outer cover-to-fabric layer.
 - (6) Hydraulic or vacuum lines, hoses or connections restricted, crimped, cracked, or broken.
 - (7) Any visually observed leaking hydraulic fluid in the brake system upon full application.
 - (8) Hydraulic System: Brake failure light/low fluid warning light on and/or inoperative. 
 - (9) **Improperly joined, such as a splice made by sliding a hose/tube end over the brake line and clamping the hose to the brake line.**
 - (10) **Hydraulic power brake unit is inoperative.**
 - (11) **The hydraulic brake backup system is inoperative.**
- Note: See hydraulic brake inspection bulletin 2012-04 on the School Bus Safety website for inspection guidance.**

EXHAUST SYSTEM

Any bus exhaust system leaking or discharging under the chassis more than 6 inches (152 mm) forward of the rear most part of the bus when powered by a gasoline engine, or more than 15 inches (381 mm) forward of the rear most part of the bus when powered by other than a gasoline engine.

No part of the exhaust system of any motor vehicle shall be so located as to be likely to result in burning, charring, or damaging the electrical wiring, the fuel supply, or any combustible part of the motor vehicle, (i.e., transmission fluid, power steering fluid, or motor oil).

FRAMES

Any cracked, loose, sagging, or broken frame side-rail permitting shifting of the body onto moving parts or other condition indicating an imminent collapse of the frame.

Any cracked, loose, or broken frame member adversely affecting support of functional components such as steering gear, engine, transmission, body parts and suspension.

One and one-half inches or longer crack in frame side-rail web, which is directed toward bottom flange.

One inch or longer crack in side-rail bottom flange. Any crack extending from the frame side-rail web around the radius and into the bottom flange.

Any condition, including loading that causes the body or frame to be in contact with a tire or any part of the wheel assemblies, at the time of inspection.

Any obvious welded repairs to the frame or sub frame.

BODY SECUREMENT

Body anchor points on frame with 50 percent or more that are broken, loose, or missing.

FUEL SYSTEM

- (1) A fuel system with a dripping leak at any point
- (2) A fuel tank not securely attached to the vehicle.
- (3) A missing fuel cap.

CNG OR LPG FUELS

- (1) Any fuel leakage from the CNG or LPG system detected audibly or by smell and verified by a bubble test using non-ammonia, non-corrosive soap solution.
- (2) Any fuel leakage from the CNG or LPG system detected visibly (evidence such as ice buildup at fuel

system connections and fittings) and verified by a bubble test using non-ammonia, non-corrosive soap solution.

STEERING GEAR BOX

- (1) Any mounting bolt(s) loose or missing.
- (2) Any crack(s) in gearbox or mounting bracket.
- (3) Any obvious welded repair(s).

PITMAN ARM

- (1) Any looseness of the pitman arm on the steering gear output shaft.
- (2) Any welded repair(s).

BALL AND SOCKET JOINTS

- (1) Any movement under steering load of a stud nut.
- (2) Any motion, other than rotational, between any linkage member and its attachment point of more than 1/8 inch (3 mm) measured with hand pressure only.
- (3) Any obvious welded repair(s).

TIE RODS AND DRAG LINKS

- (1) Loose clamp(s) or clamp bolt(s) on tie rods or drag links.
- (2) Any looseness in any threaded joint.
- (3) Loose or missing nuts on tie rods, pitman arm, drag link, steering arm, or tie rod arm.
- (4) Drag link so worn to cause a non-manufactured hole.

SUSPENSION

Any spring hanger(s), or other axle positioning part(s) cracked, broken, loose, or missing resulting in shifting of an axle from its normal position. Any U-bolt(s) or other spring to axle clamp bolt(s) cracked, broken, loose, or missing.

One-fourth or more of the leaves in any spring assembly broken.

Any leaf or portion of any leaf in any spring assembly is missing or separated.

Any broken main leaf.

Coil spring broken.

Rubber spring missing.

The suspension connecting leaf, in springs having such a leaf, has the same function as the suspension connecting rod components should be treated as such a component for purposes of out of service.

One or more leaves displaced in a manner that could result in contact with a tire, rim, brake drum, or frame.

Broken torsion bar spring in torsion bar suspension.

Deflated air suspension, (i.e., system failure, leak, etc.).

DRIVELINE/DRIVESHAFT

A. YOKE ENDS (including slip yoke, yoke shaft, tube yoke, and end fitting yoke)

- (1) Any visible crack in a yoke end.
- (2) Any yoke mounting hardware loose (with hand pressure only), broken or missing.
- (3) Any horizontal or vertical movement of slip joint yoke shaft of greater than 1/2 inch, with hand pressure only.
- (4) Any loose, broken, or missing end-fitting fastener.

B. UNIVERSAL JOINT

- (1) Any independent vertical movement between opposing yoke ends greater than 1/8 inch, with hand pressure only.
- (2) Any missing universal joint bearing cap.
- (3) Any missing, broken, or loose universal joint bearing cap bolt or retainer bolt.
- (4) Any bearing cap retainer clip is missing.

C. CENTER BEARING (CARRIER BEARING)

- (1) Any broken or loose center bearing bracket, bracket bolts, or mounting hardware.
- (2) Any center bearing bracket crack equaling 50 percent or more of the original bracket width.

(3) More than ½ inch vertical movement (with hand pressure only) of the shaft in the center-bearing carrier.

D. DRIVESHAFT TUBE

(1) Any original metal crack in the shaft tube greater than ¼ inch in length.

(2) Obvious cracked weld at shaft tube end.

(3) Any shaft tube with obvious twist.

E. DRIVESHAFT PROTECTION

Missing or loose driveshaft protection, (including a frame crossmember that serves as a driveshaft protection).