

SCHOOL BUS INSPECTION PROGRAM

STATE INSPECTION PROGRAMS

School bus safety programs vary greatly from state to state. Each state is urged to establish a neutral third-party inspection program. Personnel conducting school bus safety inspections must be knowledgeable with the mechanical components of a school bus and also be aware of all the applicable construction standards, laws, rules, and all other requirements of their jurisdiction.

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INSPECTION PROCEDURE

School bus safety inspections should consist of a standardized inspection where vehicles are placed out-of-service based on uniform criteria. States should also develop specific inspection regulations, rules, procedures, and out-of-service criteria for all vehicles utilized in student transportation. States are encouraged to develop a system to compile the data for analysis.

OUT-OF-SERVICE CRITERIA

The purpose of criteria is to identify critical school bus components and provide tolerances that inspectors can utilize to determine if a school bus is safe for student transportation. While it is recognized that each state may enforce more stringent standards, this document is intended to establish a baseline for inspecting and placing school buses out-of-service.

RESOURCE INFORMATION

49 CFR PARTS 570.1-570.63, Vehicle in Use Inspection Standards

49 CFR PARTS 400-599, Federal Motor Vehicle Safety Standards

49 CFR PARTS 393, 396, Federal Motor Carrier Safety Regulations

49 CFR APPENDIX A to Subchapter B, Minimum Periodic Inspection Standards

Commercial Vehicle Safety Alliance (CVSA) North American Uniform Out-of-Service Criteria

Note: References to these citations below may include only the number for brevity; e.g. (393.203) instead of (49 CFR, Part 393.203).

SCHOOL BUS RECOMMENDED OUT-OF-SERVICE CRITERIA

BODY EXTERIOR

- A. Any panel, rub rail or trim that is loose, torn, dislocated, or protruding from the surface of the bus, creating a hazard (393.203);
- B. Any engine, battery, or other door that is not properly secured (393.203);
- C. Three or more adjacent floor sills/body crossmembers broken or detached (393.201);
- D. Any area of the floor that is sagging or soft due to broken body crossmembers (393.201);
- E. Any body crossmember, outrigger or other structural support which is cracked, missing, deformed, or has rust holes where damage affects the safe operation of the vehicle.

BODY INTERIOR

- A. Aisle
 - 1. Aisle does not have the required clearance (571.217);
 - 2. Obstructions in aisle prevent passengers from egress or emergency exits (393.62) (393.203).
- B. Door (Entrance)
 - 1. The student entrance door does not open or close properly;
 - 2. Door control handle does not lock in the closed position;
 - 3. Door is equipped with a padlock or similar locking device (excludes interlock systems).
- C. Floor

The floor is not maintained to prevent slipping or tripping by passenger(s).
- D. Handrail
 - 1. Handrail loose or missing; or

2. Handrail fails the nut/drawstring test as defined by NHTSA.

E. Panels

Any panel (e.g., ceiling, side, or wheel well) protruding, having sharp edges, or not secured and likely to cause injury.

F. Seat(s) and Barrier(s)

1. Any seat or barrier that is not securely attached to the vehicle (393.91);
2. Any seat or barrier material(s) that compromises the integrity of compartmentalization and occupant protection (571.222);
3. Seat spacing fails to comply with 571.222;
4. Any part of an equipped occupant safety restraint assembly is missing, not properly installed, not accessible or defective as to prevent proper securement of the occupant [393.93(a)(b)] (571.209);
5. Driver's seat fails to maintain adjusted position (393.93).

G. Stepwell

- A. Any part of the stepwell or support structure that is damaged;
- B. Any part of the stepwell tread that is loose, torn or damaged that would present a tripping hazard.

BRAKE SYSTEM(S)

A. Adjustment

Any one brake beyond the adjustment limit (See Table 1: Brake Adjustment Specifications.)

B. Air System

1. Absence of effective braking action upon application of service brakes [393.48 (a)]; ©
2. Audible air leak in the system at a location other than a proper connection; ©
3. If an air leak is discovered at a proper connection and either the primary or secondary reservoir pressure is not maintained when these conditions exist [396.3(a)(1)]:©

- a. Governor is cut-in;
 - b. Reservoir pressure is between 80-90 psi;
 - c. Engine is at idle; and
 - d. Service brakes are either fully applied or released;
4. Inoperative or defective primary or secondary air pressure gauge; ©
 5. Low air warning device is inoperative, missing or fails to function as designed; ©
 6. Air compressor (normally to be inspected when readily visible or when conditions indicate compressor problems.)
 - a. Loose compressor mounting bolts [393.3(a)(1)];
 - b. Cracked, broken or loose pulley. [393.3(a)(1)];
 - c. Cracked or broken mounting brackets, braces or adapters. [393.3(a)(1)].
 7. Air reservoir tank separated at either end from the attachment point(s) [393.3(a)(1)];
 8. Chamber size mismatched on axle [393.47(b)];
 9. Mismatched brake chamber long stroke versus regular stroke [393.47(b)];
 10. Mismatched slack adjuster length [393.47(c)];
 11. Any bus manufactured after October 20, 1994 not equipped with automatic slack adjusters, [571.121];
 12. Automatic slack adjuster fails to compensate for wear, {571.121};
 13. Loose, broken or missing component (e.g., chambers, spiders, support brackets, mounting hardware, springs clevis pin) (393.48); ©
 14. Any non-manufactured holes or cracks in the spring-brake-housing section of a parking brake. [393.3(a)(1)]. ©

C. Brake Shoe/Pad/Lining

1. Any lining thickness less than allowed by 393.47;
2. Lining pad is cracked, broken, not firmly attached or missing (393.47) (surface or heat cracks in the lining should not be considered out of service);
3. The friction surface of drum, rotor, or friction material are contaminated by oil, grease or brake fluid (393.47); ©
4. Fails to make contact with drum/rotor (e.g., frozen, binding, uneven) [393.48(a)].

D. Drums

1. External crack(s) or any crack that opens upon application [393.47(a)]; ©
2. Any portion of the drum missing broken, or misplaced [393.47(a)];
3. Drum has evidence of metal-to-metal contact on the friction surface [303.47(d)(1)]; ©
4. A drum surface that is worn beyond the limits established by the manufacturer [393.47(g)].

E. Hoses and Tubing

- A. Brake hose with any damage extending through the outer reinforcement ply [393.45(a)];©
- B. Audible leak at other than a proper fitting or connection [393.45(a)];©
- C. Any bulge or swelling when brake is applied [393.45(a)];©
- D. Any restriction due to cracked, broken or crimped line/hose [393.45(a)];
- E. Any line, tubing, hose or connection that is not constructed to meet standard (571.106).

F. Hydraulic Brake System

- A. Brake failure warning system is missing, inoperative, disconnected, defective, or activated while the engine is running with or without brake application [393.51(b)];
- B. Reservoir is below minimum level [393.45(a)] (571.106);

- C. Any seeping, leaking or swelling of hose(s) under pressure [393.45(a)];
 - D. Any leak in master cylinder unit [393.45(a)] (571.106);
 - E. Any observable fluid leak in the brake system;
 - F. Absence of effective braking action upon application of service brakes [393.48(a)]; ©
 - G. No pedal reserve with engine running [393.40(b)]; ©
 - H. Brake-power-assist unit is inoperative [393.3(a)(1)]; ©
 - I. Hydraulic-brake-backup system is inoperative [393.3(a)(1)]; ©
 - J. The master-cylinder assembly has loose or missing mounting bolts or is not secured causing it to shift out of its normal position [393.3(a)(1)]. ©
- G. Parking Brake
- A. Fails to hold vehicle in stationary position on normal roadway conditions (absence of ice or snow) in forward or reverse (393.41) [571.105 S5.2.1 and S5.2.3(b)];
 - B. Parking brake warning lamp fails to function as designed.
- H. Rotors
- 1. Any rotor with a flexural crack that passes completely through the rotor to the center vent from either side, completely through a solid rotor, or completely through a structural support connecting the rotor friction surfaces [393.47(a)];

Note: This does not include hairline heat cracks.
 - 2. A rotor surface that is worn beyond the limits established by the rotor manufacturer [393.47(g)];
 - 3. Rotor has severe rusting or pitting on the rotor friction surface on either side (light rusting on the friction surface is normal) [393.48(a)];
 - 4. Any portion of the rotor (disc) missing or in danger of falling away [393.47(a)]; ©
 - 5. Rotor has evidence of metal-to-metal contact on the friction surface [393.47(d)] .©

BUMPERS

- A. Front bumper is missing or not properly secured [393.203(e)];
- B. Rear bumper is missing or not properly secured (393.86).

CHASSIS/FRAME

- A. Any cracked, loose, sagging, or broken, frame rail. [393.201(a)];
- B. Any damage permitting the shifting of the body or imminent collapse of frame [393.201(a)]©;
- C. Any cracked, loose, broken frame member affecting support of functional components (e.g., steering gear, engine, transmission, body part, or suspension) [393.201(a)]©;
- D. Any condition that causes the body or frame to be in contact with a tire or any part of the wheel assemblies [393.3(a)(1)]©;
- E. Any alteration/repair not meeting OEM/manufacture specifications;
- F. Any frame crossmember or other structural support which is cracked, missing, or deformed that affects the structural integrity of the vehicle (393.201);

DIFFERENTIAL

Cracked or leaking housing [393.207(a)].

DRIVESHAFT/DRIVELINE

- A. Center Bearing (Carrier Bearing) ©
 - 1. Any broken or loose center bearing bracket, bracket bolts, or mounting hardware [396.3(a)(1)];
 - 2. Any center bearing bracket crack equaling 50 percent or more of the original bracket width [396.3(a)(1)];
 - 3. More than ½ inch vertical movement (with hand pressure only) of the shaft in the center bearing carrier [396.3(a)(1)].
- B. Driveshaft guard loose, missing, improperly placed, or bent (393.89)
- C. Driveshaft Tube ©
 - 1. Any original metal crack in the shaft tube greater than ¼ inch in length [396.3(a)(1)];

2. Obvious cracked welds at shaft-tube end [396.3(a)(1);
 3. Any shaft tube with an obvious twist [396.3(a)(1).
- D. Universal joint(s)
1. Worn, faulty, or obviously welded repair [393.209(2)(d)];
 2. Any independent vertical movement between opposing yoke ends greater than 1/8 inch, with hand pressure only [396.3(a)(1)]; ©
 3. Any missing, broken, or loose universal joint bearing cap [396.3(a)(1)];
 4. Any missing, broken or loose universal joint bearing cap bolt, bearing strap, or retainer bolt [396.3(a)(1)]; ©
 5. Any bearing cap retainer clip that is missing [396.3(a)(1)]. ©
- E. Yoke Ends (including Slip Yoke, Yoke Shaft, Tube, and End Fitting Yoke) ©
1. Any visible crack in a yoke end [396.3(a)(1);
 2. Any yoke-mounting hardware loose (with hand pressure only), broken, or missing [396.3(a)(1);
 3. Any horizontal or vertical movement of slip joint yoke shaft of greater than ½ inch, with hand pressure only [396.3(a)(1)];
 4. Any loose, broken or missing end fitting fastener [396.3(a)(1)].

ELECTRICAL/HIGH VOLTAGE

- A. Any high-voltage system with a dripping leak at any point;
- B. Damaged or exposed high-voltage cabling;
- C. Broken or damaged charging port on the vehicle.

ELECTRICAL/LOW-VOLTAGE BATTERY

- A. Battery
 1. Battery not secured (393.30);

2. Signs of leaking or excessive corrosion;
 3. Battery lacks cranking capacity to start engine.
- B. Cables
1. Electrical cable insulation chafed, frayed, damaged or burnt, causing bare cable to be exposed [393.28, 396.3(a)(1)]; ©
 2. Loose or corroded connections at battery posts or compromised insulation protection to electrical components [393.28, 393.77(b), 396.3(a)(1)];
 3. Missing or damaged protective grommets insulating main electrical cables through metal compartment panels (393.30). ©
- C. Components
- A. Broken or unsecured mounting of electrical components [396.3(a)(1)];©
 - B. Electrical cable unsupported, hanging or missing clamps that may cause chafing or frayed conditions [393.28, 396.3(a)(1)]. ©

EMERGENCY EQUIPMENT

- A. Fire extinguisher missing, not of proper type or size, not fully charged, has no pressure gauge, is not secured or is not readily accessible to the driver or passengers, or fails to meet state specifications (393.95);
- B. Any additional state-specific equipment (e.g., first aid kit, body fluid kit, webbing cutter, and emergency reflectors) that fails to meet state specifications and places the vehicle out of service;
- C. Missing, unusable or incomplete set of emergency triangles or not properly stored in accordance with FMVSS 571.125.

EMERGENCY EXITS

- A. Any emergency door, window or roof hatch that fails to open freely or completely as defined in 571.217;
- B. Door prop-rod device is missing or inoperative (571.217);
- C. Any emergency exit equipped with a padlock or similar locking device (excludes interlock systems);
- D. Any vehicle that lacks the required number of emergency exits (571.217);

- E. Any emergency exit not properly labeled and marked both inside and outside the vehicle as specified by 571.217;
- F. Any item or modification that reduces the size of the opening and limits egress to the emergency exit by all passengers;
- G. Emergency-exit-warning device is not audible in the driver seating position and the vicinity of the emergency door or window (571.217);
- H. If equipped with an emergency-exit interlock, the vehicle is capable of starting while the emergency-exit lock is engaged or emergency-interlock arm is inoperative when engaged and the key is in the run position (571.217).

ENGINE

- A. Any critical component that fails to function as designed (396.3);
- B. Any fluid leak that would affect the safe operation of the vehicle (396.3, 396.5 and 393.209);
- C. Any hose/line that is damaged or worn extending through the outer protective layer;
- D. Any hose/line not of approved type for the application;
- E. Any belt that is oil saturated, twisted, dry-rotted, cut, missing sections, or has separated plies;
- F. Any belt worn beyond manufacturer's specification;
- G. Engine oil is not at the appropriate operating level;
- H. Engine is misfiring, or there is excessive hesitation upon acceleration.

EXHAUST SYSTEM

- A. The exhaust system is leaking or discharging directly below or at a point forward of the driver or passenger compartment [393.83(g)]; ©

Note: Does not apply to proper venting for emission systems.
- B. The exhaust discharges below a fuel-fill location, emergency-exit door or lift door;
- C. Any part of the exhaust system so located that it is likely to result in burning, charring, or damaging the electrical wiring, the fuel supply or any combustible part of the vehicle

FUEL SYSTEM

A. CNG or LPG Fuels ©

1. Any fuel leakage from the CNG or LPG system detected audibly or by smell and verified by either a bubble test using non-ammonia, non-corrosive soap solution, or a flammable gas detection meter [396.3(a)(1)];

Note: Verification is needed to ensure that the sound is not either internal to the fuel system (such as gas flowing in a pressure regulator, or pressure equalizing between manifold tanks) or a leak in the air brake system.

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 either a bubble test using non-ammonia, non-corrosive soap solution, or a flammable gas detection meter [396.3(a)(1)].

Note: Some brief fuel leakage or decompression may occur during refueling, causing temporary frosting of CNG or LPG fuel system parts. If the vehicle has been refueled shortly before inspection, care must be taken to distinguish these temporary frosting occurrences from actual leaks.

B. Liquid Fuels

- A. Any part of the fuel tank or fuel system not securely attached to the vehicle (393.65);
- B. A fuel system with a dripping leak at any point of the tank (393.67);
- C. Dripping leak (396.3(a)(1), leak other than tank);
- D. Missing fuel cap or system does not seal as designed.

LAMPS/SIGNALS

- A. Any one of the following required lamps not working: brake, turn signal, tail, head (low beam), school bus overhead warning light (amber or red), hazard warning or stop arm lamp (571.108, 571.131);

Note: Vehicle LED lamps must have more than 25 percent of the diodes unlit to be considered not working.

- B. Horn fails to function as designed (393.81);
- C. Any critical brake, telltale lamp, buzzer or gauge that fails to function as designed;
- D. ABS and/or ESC malfunction indicator light not functioning as designed or illuminated on all vehicles required to have ABS and/or ESC;
- E. Stop arm(s) fail to operate with overhead red lights or does not meet the requirements of FMVSS 571.131;
- F. If equipped, a crossing-control arm fails to operate as designed.

MIRRORS (571.111)

- A. Any mirror required to provide the driver with the entire field of view, missing, damaged, clouded, or otherwise obscured so as to place children in a hazardous position;
- B. Any crossover mirror system or portion thereof that fails to hold a set adjustment;
- C. Any crossover mirrors directed to view any area other than for which they were intended;
- D. Any part of the required field of vision obscured or not visible from the driver seated position.

SPECIALLY-EQUIPPED VEHICLES

- A. Wheelchair lift
 - 1. Lift inoperable;
 - 2. Lift does not function as manufactured;
 - 3. Manual backup system inoperable;
 - 4. Manual backup accessories missing or damaged;
 - 5. Base plate/arms/towers/platform - Any cracked component or cracked weld;
 - 6. Any hydraulic fluid leak;
 - 7. Wiring does not meet manufacturer's specifications;
 - 8. Jacking Prevention – any portion of the vehicle raises off of the ground during lift operation.
- B. Platform lift manufactured after April 1, 2005 must meet all the following criteria (as

referenced in FMVSSs 403 and 404):

1. Shift/park brake interlock is inoperable;
2. Lift platform retention device inoperable/hardware missing;
3. Outer barrier, inner-roll stop, and threshold visual/audible warning system inoperable;
4. Stow interlock inoperable;
5. The inner/outer barrier non-deployment or interlock inoperable.

C. Wheelchair Ramp (ADA 49 CFR 38.23)

1. Any ramp that is cracked or damaged or unable to support a load of 600 lb. for ramps 30 inches or longer or 300 lb. for ramps shorter than 30 inches;
2. Any non-slip resistant surface;
3. Ramp surface has a protrusion greater than $\frac{1}{4}$ inch;
4. Ramp width of less than 30-inch clear space;
5. Ramp threshold greater than $\frac{1}{4}$ inch lip with no beveled transition or a bevel with a slope greater than 1:2;
6. Missing/broken/unsecured two-inch barrier on each side of the ramp;
7. Ramp exceeds maximum slope of 1:4 when deployed to ground level or:
 - a. 1:4 if vehicle floor is three inches or less above a six-inch curb; or
 - b. 1:6 if vehicle floor is three to six inches above a six-inch curb; or
 - c. 1:8 if vehicle floor is six to nine inches above a six-inch curb; or
 - d. 1:12 if vehicle floor is greater than nine inches above a six-inch curb;
8. Any ramp that is not firmly attached to the vehicle when used for boarding or alighting;
9. Any gap between the vehicle and the ramp that exceeds $\frac{5}{8}$ inch;
10. Vehicle does not provide for a method of stowage/securement of the ramps;
11. Ramp impinges on the wheelchair/mobility aid or poses a hazard to passenger

or passengers in the event of a sudden stop or maneuver;

12. Hand Rails (if equipped):
 - a. Not within 30-38 inches above ramp surface;
 - b. Not capable of withstanding a force of 100 lb. without deformation;
 - c. Cross section diameter not between 1¼ inch and 1½ inches;
 - d. Hand rail interferes with mobility aid maneuverability when entering or exiting the vehicle.
- D. Securement Device System
 1. Securement device system incomplete set, improperly installed, or damaged;
 2. Floor/ceiling track damaged or unsecured.
- E. Wheelchair Occupant Restraint System
 1. Restraint system incomplete or mismatched set;
 2. Lap/shoulder belt, damaged/missing hardware (see “seatbelts/occupant restraints” under the seats section of the “recommended school bus inspection procedure”);
 3. Restraint system is not in compliance (571.222).

STEERING SYSTEM

- A. Ball/Socket Joints ©
 - A. Any movement under steering load of a nut stud [396.3(a)(1)];
 - B. Any motion, other than rotational, between any linkage member and its attachment point of more than ⅛ inch measured with hand pressure only [393.209(d)];
 - C. Any obvious welded repair [393.209)(d)].
- B. Front-Axle Beam ©

Any crack(s) or obvious welded repair [396.3(a)(1)].

- C. Nuts©

Loose or missing fasteners on tie rod, pitman arm, drag link, steering arm, or tie rod arm [396.3(a)(1)].
- D. Pitman Arm ©
 - A. Looseness of the pitman arm on the steering gear output shaft [393.209(d)];
 - B. Any obvious welded repair [396.3(a)(1)] [393.209(d)].
- E. Power Steering
 - A. Auxiliary power assist cylinder loose [393.209(e)];
 - B. Power steering system leaking or insufficient fluid in reservoir [393.209(2)(e)].
- F. Steering
 - A. Any modification or condition that interferes with free movement of any steering component [393.209(d)];
 - B. Steering travel restricted through the limit of travel in both directions [570.60(c)].
- G. Steering Column/Wheel©
 - A. Absence or looseness of U-bolts or other positioning part(s) [393.209(c)];
 - B. Welded or repaired universal joint(s) [393.209(d)];
 - C. Steering wheel not properly secured [393.209(a)];
 - D. Steering wheel lash/free play exceeds performance test (see Table #2) [393.209(b)].
- H. Steering Gear Box ©
 - A. Mounting bolt(s) loose or missing [393.209(d)];
 - B. Crack(s) in gearbox or mounting brackets [(393.209(d) and 396.3(a)(1)];
 - C. Any obvious welded repair(s) [396.3(a)(1) and [393.209(d)];
 - D. Looseness of yoke-coupling to the steering gear input shaft [393.209(d)].

- I. Tie Rods/Drag Links ©
 - A. Loose clamp(s) or clamp bolt(s) on tie rod or drag link(s) [396.3(a)(1)];
 - B. Any looseness in any threaded joint [396.3(a)(1)].

SUSPENSION COMPONENTS

- A. Air Suspension ©
 - A. Deflated air suspension (one or more deflated air spring/bag) [393.207(f)];
 - B. Air spring/bag is missing, broken, or detached at either the top or bottom (393.207(f)).
- B. Axle Parts/Members
 - A. Any U-bolt or other spring to axle clamp bolt(s) which are cracked, broken, loose, or missing [393.207(a)];©
 - B. Any axle, axle housing, spring hanger(s), or other axle positioning parts which are cracked, broken, loose, or missing that results in shifting of an axle from its normal position [393.207(a)];©
 - C. Any worn (beyond manufacturer specifications) or improperly assembled U-bolt, shock, kingpin, ball joint, strut, air bag, or positioning component [570.61 (a)];
 - D. Any leaf spring broken, separated, sagging, bent, abnormally worn (beyond manufacturer specifications), shifted, or missing [393.207(c)];
 - E. Any broken coil spring [393.207(d)] ©;
 - F. Any suspension component that is loose, cracked, missing, or worn to the extent that the component can be moved by hand (e.g., bushings, sway bar, tracking components, etc.) (393.207).

TIRES/WHEELS/HUBS

- A. Hub
 - A. Excessive wheel bearing or kingpin play that exceeds ¼ inch (393.70) (570.61);
 - B. Any bearing (hub) cap, plug, or filler plug that is missing or broken, allowing

- an open view into hub assembly [396.3(a)(1)];©
 - C. Smoking from wheel hub assembly due to bearing failure [396.3(a)(1)];©
 - D. When any wheel seal is leaking. This must include evidence of contamination of the brake friction material [396.5(b)];

Note: Grease/oil on the brake lining edge, back of shoe, or drum edge and oil stain with no evidence of fresh oil leakage are not conditions for an out-of-service violation. ©
 - E. Lubricant is leaking from the bearing hub and is accompanied by evidence that further leakage will occur [396.5(b)];
 - F. No visible or measurable amount of lubricant showing in bearing hub [396.5(a)]. ©
- B. Tires
- A. Any tire cut, worn or damaged to the extent that the steel or fabric cord is exposed [393.75(a)];
 - B. Any observable bump, bulge, or knot related to sidewall or tread separation [393.75(a)]©;
 - C. Tire has a noticeable leak, or has 50 percent or less of the maximum inflation pressure marked on the tire sidewall [393.75(a)(3)]
 - D. So mounted or inflated that it comes in contact with any part of the vehicle [393.3(a)(1)]©;
 - E. Any front tire worn to less than $\frac{4}{32}$ inch [393.75(b)];
 - F. Any rear tire worn to less than $\frac{2}{32}$ inch [393.75(c)];
 - G. Any school bus operated with regrooved, recapped, or retreaded tires on the front axle [393.75(d)];
 - H. Any tire not meeting the minimum size and load rating as required per the manufacturer's GVWR;
 - I. Any mismatched tire on the vehicle (e.g., load range or size).
- C. Wheels/Rims/Spiders
- A. Any nuts, bolts, studs, lugs, or holes that are elongated, broken, missing,

damaged or loose [393.205(b)];

- B. Any cracked or broken wheel or rim [393.205(a)];
- C. Any lock or slide ring broken, cracked, improperly seated, sprung, or has mismatched rings [393.205(a)]. ©

WINDOWS

- A. Any glass or glazing that is broken through or missing (393.60).
- B. Any glass not of approved type [393.60(a)].
- C. Windshield has discoloration or other damage in that portion extending upward from the height of the topmost portion of the steering wheel, but not including a two-inch border at the top and a one-inch border at each side of the windshield or each panel thereof, except as follows:
 - 1. Color or tint applied by the manufacturer for the reduction of glare;
 - 2. Any crack not over $\frac{3}{4}$ -inch long, if not intersected by any other crack;
 - 3. Any damaged area, that can be covered by a disc $\frac{3}{4}$ -inch in diameter, if not closer than three inches to any other such damaged area.
- D. Any damage or obstruction to any window forward of the front passenger seat barriers (e.g., chips, clouding, or cracks that obscure the driver's vision [393.60(c)]).
- E. No operable defrosting and defogging system to clear the driver's windshield (571.103).

WINDSHIELD WIPERS

- A. Inoperative, missing, or damaged wiper (393.78).
- B. Wiper does not clean sweep area of driver's windshield (393.78).
- C. Inoperative or defective windshield washing system (393.78, FMVSS 571.104)