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### **PURPOSE AND SCOPE – TRANS 309.01**

(1) The purpose of this chapter is to prescribe minimum vehicle and medical equipment specifications for ambulances and to establish administrative procedures for implementing the ambulance inspection program under s. 341.085, Stats.

Note: To be licensed as an ambulance service provider in Wisconsin, all ambulances used by the ambulance service provider must be first inspected by Wisconsin DOT per ch. Trans 309.

(2) This chapter applies to all ambulances in service in this state.

(3a) This chapter shall be construed by the department to reasonably effectuate the legislative purpose of promoting safe, efficient emergency transportation for the sick, injured and disabled.

(3b) Vehicles subject to the standards and specifications prescribed in the chapter are also subject to any other administrative rule or statute governing motor vehicle design, construction or equipment. Unless the express terms or context requires otherwise, this chapter shall be construed as supplementing rather than conflicting with other such statutes or administrative rules.

(3c) This chapter prescribes minimum standards applicable to all ambulances subject to inspection under s. 341.085, Stats. Ambulance service providers may exceed these minimum standards. Also, some ambulances may be subject to higher or more restrictive standards imposed as conditions for receiving federal assistance in connection with the acquisition of ambulance vehicles and equipment. Ambulance service providers are responsible for complying with all conditions and requirements, including those related to color and marking, contained in federal assistance grants or agreements.

## **DEFINITIONS – TRANS 309.02**

- (1k) "Advanced emergency medical technician" has the meaning given in s. 256.01 (1k), Stats.
- (1m) "Ambulance" means any authorized emergency motor vehicle as defined in s. 340.01 (3), Stats., whether privately or publicly owned, which is designed, constructed or equipped to transport patients.
- (2) "Ambulance service provider" has the meaning given in s. 256.01 (3), Stats.
- (3) "Department" means the department of transportation.
- (4) "Emergency medical technician" has the meaning given in s. 256.01 (6), Stats.
- (5) "Emergency medical technician - intermediate" has the meaning given in s. 256.01 (7), Stats.
- (6k) "Gross axle weight rating" or "GAWR" means the maximum distributed weight that may be supported by an axle of a road vehicle.
- (6r) "Gross vehicle weight rating" or "GVWR" means the combination of the vehicle's curb weight and total usable payload.
- (7) "In-service ambulance" means an ambulance that is ready to take calls, including emergencies, transfers or standing by at a special function.
- (8) "Inspector" means any officer or employee of the department who is authorized and assigned to conduct ambulance inspections under this chapter.
- (9) "Medical director" means a medical director as defined in s. 256.01 (11), Stats.
- (9k) "OEM" means original equipment manufacturer.
- (9r) "Paramedic" has the meaning given in s. 256.01 (14), Stats.
- (10) "Person" means any individual, corporation, partnership, association, the state and political subdivisions thereof and any municipal corporation.
- (11) "Reserve ambulance" means an ambulance kept in reserve in case an in-service ambulance needs to be taken out of service for repairs.
- (12) "Type I ambulance" means an ambulance of 10,001-pound to 14,000-pound GVWR, that is constructed on a cab chassis furnished with a modular unit ambulance body.
- (13) "Type I-AD ambulance" means an ambulance of 14,001-pound GVWR or more that is constructed on a cab chassis with a modular ambulance body.
- (14) "Type II ambulance" means an ambulance constructed on a van chassis.
- (15) "Type III ambulance" means an ambulance of GVWR from 10,001 to 14,000 pounds that is constructed on a cutaway van chassis with an integrated modular ambulance body.
- (16) "Type III-AD ambulance" means an ambulance of 14,001-pound GVWR or more that is constructed on a cutaway van chassis with an integrated modular ambulance body.

## **INSPECTIONS AND ENFORCEMENT – TRANS 309.03**

- (1) No person may use any motor vehicle for the purpose of providing ambulance services unless the vehicle has been inspected and approved by the department for use as an ambulance in this state. Except as otherwise provided, each ambulance shall be inspected at least biennially to the satisfaction of the inspector to ensure that the ambulance meets the minimum standards applicable to that vehicle under subchs. I, II and III. Whenever the ambulance service provider upgrades to a higher level of provider service, the service provider shall notify the inspector. When a reserve ambulance is put into in-service ambulance status, it shall meet all requirements of this chapter.

(1g) Ambulance service providers based out of state but operating in Wisconsin shall have their home state's most current inspection on file with the department and shall comply with all Wisconsin motor vehicle legal requirements including ch. Trans 305, ch. 347, Stats., and this chapter, except for inspection by the department under sub. (1).

(1m) Sub. (1) does not prevent the inspector from doing spot inspections to check for compliance with this chapter.

(1r) Whenever the department receives a complaint about a service provider alleging non-compliance with this chapter, the inspector shall investigate and, where appropriate, inspect the provider's ambulances.

(2) The ambulance service provider shall present the vehicle for inspection when notified by the department and shall cooperate with the inspector. Whenever possible, the department shall perform the inspections at the ambulance service provider's place of business or other site convenient to the ambulance service provider's base of operation. The inspector shall conduct the inspection in a manner that will not interfere with the provision of ambulance service.

(3a) Except as provided in sub. (4), if upon inspection a vehicle is found to be unsafe or improperly constructed or equipped for use as an ambulance, or if the ambulance service provider's license has been revoked, the inspector shall attach an "OUT OF SERVICE" sticker to the glass in the rear door of the vehicle. A vehicle may not be put in service as an ambulance while the sticker is so displayed. Except as provided in par. (b), the "OUT OF SERVICE" sticker displayed shall be reinspected by and shall have the sticker removed after passing reinspection by an employee of the division of state patrol or authorized agent of the service provider at the direction of the division of state patrol employee prior to reuse as an ambulance. The "OUT OF SERVICE" sticker shall not be removed until the deficiencies noted on the inspection report have been corrected, or the ambulance provider's license has been reinstated.

(3b) 1. If a vehicle that has been declared "out of service" and is no longer able to serve as an ambulance, the owner or lessee of the vehicle shall remove the "OUT OF SERVICE" sticker and all special ambulance markings and features from the vehicle, including all of the following:

a. The warning, flood lights and siren unless the vehicle is being converted for use as another kind of authorized emergency vehicle. The current owner or lessee must physically remove all lighting equipment required by s. Trans 309.15 (2), the siren and public address equipment required by s. Trans 309.17 and all lettering and markings required by s. Trans 309.19. The current owner or lessee must also remove all equipment required in subch. III. Ambulance lighting shall be brought into compliance with vehicle general lighting requirements in ch. 347, Stats. and ch. Trans 305.

b. Any lettering identifying the vehicle as an ambulance.

c. All equipment required in subch. III.

2. The owner or lessee of the vehicle is not required to obtain approval from the department but shall notify the department when he or she proceeds under this paragraph.

(4) If upon inspection a vehicle is found defective or deficient but, in the judgment of the inspector, may nevertheless be operated as an ambulance without seriously affecting the safe transportation of sick, injured, or disabled persons or the general public, the inspector shall note the deficiency on the ambulance inspection report and shall specify the time, not to exceed 30 days, in which the ambulance service provider is required to correct the defect or deficiency. The inspector may require proof of correction of the defect or deficiency in writing. If the defect or deficiency is not corrected within the time allowed, the vehicle may not be used as an ambulance.

Inspections and enforcement - Trans 309.03 cont.

(5) A vehicle being used as an ambulance shall immediately be rendered out of service and the service provider may be assessed a monetary penalty if, upon inspection, the ambulance is found to have any of the following, and sub. (4) does not apply:

(a) A malfunctioning brake system.

(b) A faulty exhaust system.

(c) A faulty battery system.

(d) A malfunctioning fuel system.

(e) An inadequate on-board oxygen system.

(f) An unsafe structure.

(g) Unsafe tires.

(h) Ten or more minor violations which, in the opinion of the inspector, shows a lack of effort on the part of the service provider to stay in compliance with this chapter.

- (i) Repeat violations from the previous inspection report with no maintenance history or documentation that the problem had been corrected.
- (j) A malfunctioning or inadequate environmental climatic control system.
- (k) A malfunctioning or inadequate cot or cot securement system.
- (m) Inoperative complete front, side or rear emergency lighting.
- (n) An inoperative siren.
- (o) Carbon monoxide concentrations within the vehicle greater than 10 ppm (parts per million) above the outside ambient carbon monoxide concentration.
- (p) A malfunctioning or inadequate steering system.
- (q) Belts that are damaged, contaminated by oil or improperly adjusted.
- (r) A defective or inadequate suspension system.
- (s) The ambulance exceeds the GVWR as set by the OEM.
- (t) The ambulance exceeds the GAWR as set by the OEM.

(6) The vehicle shall be rendered out of service and the provider may be assessed monetary penalties when the provider knowingly resists or obstructs the inspector while the inspector is doing any act in an official capacity and with lawful authority. For purposes of this subsection, "obstructs" includes, without limitation, knowingly giving or demonstrating false information to the inspector.

(7) The penalty for violating sub. (5) (a) to (h) or (j) to (t) is a forfeiture of up to \$50.00 per violation. The penalty for violating sub. (5) (i) is a forfeiture of up to \$100.00. The penalty for violating sub. (6) is a forfeiture of up to \$200.00.

(8a) The ambulance service provider shall notify the inspector as soon as possible if an ambulance is involved in a motor vehicle crash which involves serious injury or death.

(8b) If an ambulance is being placed back into service after being involved in a crash, the ambulance service shall notify the inspector and shall provide proof of the repairs in writing before being placed back into service.

(9a) The department shall consider the age, condition, and equipment of ambulances before granting approval for their continued use. The department shall not permit the use of any ambulance for emergency medical purposes which is deemed to be unsafe or unfit for such service.

(9b) In construing and enforcing the provisions of this chapter, the act, omission or failure of any officer, agent, servant or other person acting for or employed by the registered owner or the lessee of the ambulance is deemed to be the act, omission or failure of such registered owner or lessee. This paragraph does not apply to violations of ch. 346, Stats.

## **OUT OF SERVICE – TRANS 309.03**

See North American Standard OOS Criteria unless TRANS 309 requirements are more restrictive.

The ambulance shall comply with Federal Motor Vehicle Safety Standards (FMVSS) and other Federal and state regulations applicable or specified for the year of manufacture.

## **BRAKES – TRANS 309.03 (5a)**

(1) Every ambulance shall meet federal brake standards under 49 CFR 393.40 and 393.52, 396.17, and applicable standards under 49 CFR 571.105 and 571.121, in effect at the time of manufacture. Each brake system including the parking brake shall be maintained in good working order. The brake system shall be free of any leaks. The lines and hoses may not be chafed, flattened or restricted in any way.

BRAKES – TRANS 309.03 (5a) cont.

(2) A type 1AD Ambulance that uses air assisted brakes shall be equipped with a low-pressure warning system which functions at 60 PSI and lower. The governor cut out pressure may not exceed 135 PSI. The governor cut in pressure may not be lower than 80 PSI.

(3) A type 1AD Ambulance that uses vacuum assisted brakes shall be equipped with a low-pressure warning system which functions when the vacuum is 8 inches of mercury and less.

(4) A type 1AD Ambulance when equipped with air or vacuum assisted brakes shall be equipped with a reserve tank having a capacity of not less than 1,000 cubic inches to provide additional air or vacuum for the primary brake system. There shall be a check valve or pressure protective valve to protect the system from loss of air or vacuum. There shall be no accessory except the low-pressure warning device operated from the air or vacuum reserve tank or its connecting lines. The low-pressure warning system shall be installed to indicate the air pressure or vacuum in the tank. The gauge required to monitor this system shall be visible to the driver at all times.

(5) Every ambulance shall be equipped with a power assist brake system.

(6) The interior of the brake drums, brake linings, brake discs, and pads shall be free of cracks and contamination from oil or grease.

(7) The brake systems shall be properly adjusted to provide maximum braking effort in accordance with 49 CFR 396.17 (Appendix G).

## **AIR BRAKES - (AII)**

1. Check for improper, missing, non-functioning, loose, contaminated (with grease or oil), or cracked parts on the brake system, such as brake drums, shoes, rotors, pads, lining, brake chambers, chamber mounting, push rods and slack adjusters.

2. Check for "S" cam flip-over.

3. Listen for audible air leaks around brake components and lines.

4. With the brake released, mark the brake chamber push rod at a point where the push rod exits the brake chamber. Mark the push rods on both sides at this time. All push rods will be measured later.

5. Check that the slack adjusters are the same length (from center of "S" cam to center of clevis pin), and that the air chambers on the steering axle are the same size.

6. Check that the ABS brake system complies with FMVSS 121 on vehicles manufactured on or after March 1, 1998.

## **"S" Cam Air Brake Components**

### **ALL OF THE FOLLOWING OOS IF:**

**\*\*The number of defective brakes is equal to or greater than 20% of brakes on the vehicle or combination. A defective brake includes any brake that meets one of the following criteria:**

1. **\*\*Absence of effective braking action upon application for the service brakes (such as brake linings failing to move or contact braking surface upon application.) (393.48(a))**

2. **\*\*Missing or broken mechanical components including: shoes, linings, pads, spring, anchor pins, spiders, cam rollers, pushrods, and air chamber mounting bolts. (393.48(a))**

3. **\*\*Loose brake components including air chambers, spiders, and camshaft support brackets. (393.48(a))**

4. **\*\*Audible air leak at brake chamber (Example: ruptured diaphragm, loose chamber clamp, etc.) (396.3(a)(1))**

5. **\*\*Brake adjustment limits. Bring reservoir pressure between 90 to 100 psi; turn engine off and then fully apply the brakes.**

- **\*\*One brake at ¼" or more beyond the adjustment limit.**

(Example: Type 30 clamp type brake chamber pushrod measured at 2 ¼" would be one defective brake.)  
(396.3(a)(1))

- \*\*Two brakes less than ¼" beyond the adjustment limit also equal one defective brake. Example: Type 30 clamp type brake chamber pushrods measure: Two at 2 1/8"
- \*\*The above example would equal one defective brake.  
(396.3(a)(1))

6. \*\*Brake linings or pads. (Except on power unit steering axles.)

- \*\*Cracked, loose, or missing linings.
- \*\*Lining cracks or voids of 1/16" in width observable on the edge of the lining
- \*\*Portions of a lining segment missing such that a fastening device (rivet or bolt) is exposed

when

viewing the lining from the edge.

- \*\*Cracks that exceed 1 ½" in length.
- \*\*Loose lining segments (rev. 11-25-98).
- \*\*Complete lining segment missing. (393.47)

## **REFERENCE CHART**

Brake Adjustment: Shall not exceed those specifications contained hereunder relating to "Brake Adjustment Limit." (Dimensions are in inches.)

### CLAMP TYPE BRAKE CHAMBER DATA

TYPE	OUTSIDE DIAMETER	BRAKE ADJUSTMENT LIMIT
6	4 ½	1 ¼
9	5 ¼	1 3/8
12	5 11/16	1 3/8
16	6 3/8	1 3/4
20	6 25/32	1 ¾
24	7 7/32	1 3/4
30	8 3/32	2
36	9	2 ¼

### 'LONG STROKE' CLAMP TYPE BRAKE CHAMBER DATA

TYPE	OUTSIDE DIAMETER	BRAKE ADJUSTMENT LIMIT
16	6 3/8	2.0
20	6 25/32	2.0
20	6 25/32	2.5
24	7 7/32	2.0
24*	7 7/32	2.5
30	8 3/32	2.5

\* For maximum stroke type 24 chambers.

### TIE ROD STYLE PISTON BRAKE CHAMBER DATA

SIZE	OUTSIDE DIAMETER	BRAKE ADJUSTMENT LIMIT
30	6 ½	2.5

### BOLT TYPE BRAKE CHAMBER DATA

TYPE	OUTSIDE DIAMETER	BRAKE ADJUSTMENT LIMIT
A	6 15/16	1 3/8
B	9 3/16	1 3/4
C	8 1/16	1 3/4
D	5 ¼	1 ¼
E	6 3/16	1 3/8
F	11	2 ¼

G 9 7/8 2

ROTOCHAMBER DATA

TYPE	OUTSIDE DIAMETER	BRAKE ADJUSTMENT LIMIT
9	4 9/32	1 1/2
12	4 13/16	1 1/2
16	5 13/32	2
20	5 15/16	2
24	6 13/32	2
30	7 1/16	2 1/4
36	7 5/8	2 3/4
50	8 7/8	3

DD-3 BRAKE CHAMBER DATA

TYPE	OUTSIDE DIAMETER	BRAKE ADJUSTMENT LIMIT
30	8 1/8	2 1/4

NOTE: The DD3 brake chamber does not feature a push rod over-stroke indicator, because a splash boot completely covers the push rod. The DD3 can be easily distinguished from spring brake chambers by the number air lines attached to the chamber. A DD3 chamber has three (3) air lines attached, while a spring brake has 2. The DD3 is usually found on motor coaches.

**\*\*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.**

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. (393.47)

**\*\*Lining with a thickness less than 1/4 inch or to wear indicator if lining is so marked, measured at the shoe center for out-of-service. (393.47)**

7. **\*\*Missing brake on any axle required to have brakes. (393.42)**

**\*\*STEERING AXLE BRAKES:**

In addition to being included in the 20% criterion, the following criteria places a vehicle out-of-service.

1. OOS **\*\*Absence of effective braking action on any steering axle of any vehicle required to have steering axle brakes. (393.48(a))**

2. OOS **\*\*Mismatch across any power unit steering axle of:**

- **\*\*Air chamber sizes. (393.47(b))**
- **\*\*Slack adjuster length. (393.47(c))**

3. OOS **\*\*Brake linings or pads on the steering axle of any power unit:**

- **\*\*Cracked, loose, or missing lining.**
- **\*\*Lining cracks or voids of 1/16" in width observable on the edge of the lining.**
- **\*\*Portions of a lining segment missing such that a fastening device (rivet or bolt) is exposed when viewing the lining from the edge.**
  - **\*\*Cracks that exceed 1 1/2" in length.**
  - **\*\*Loose lining segments (rev. 11-25-98).**
  - **\*\*Complete lining segment missing. (393.47)**

**\*\*Evidence of oil seepage into or out of the brake lining/drum interface area. This must include wet contamination of that lining edge accompanied by evidence further contamination will occur — such as oil running from the drum or bearing seal.**

## **AIR BRAKES- (All) cont.**

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. (393.47)

**\*\*Lining with a thickness less than 3/16" for a shoe with a continuous strip of lining or 1/4" for a shoe with two pads for drum brakes or to wear indicator if lining is so marked, or less than 1/8" for air disc brakes, and 1/16" or less for hydraulic disc, drum and electric brakes. (393.47)**

## **End of 20% criteria**

### PARKING BRAKES:

**\*\*Any non-manufactured holes or cracks in the spring brake housing section of a parking brake. (396.3(a)(1)**

### BRAKE SMOKE/FIRE:

**\*\*OOS if brake malfunction causing smoke or fire to emit from the wheel end. (393.48(a))**

**Example: Brake lining continuously in contact with drum or rotor.**

NOTE **\*\*Does not include overheating due to severe brake use\*\***

NOTE **\*\*Refer to "Wheels"; as cause may either be the brakes or a problem in the hub and bearing area.**

### BRAKE DRUMS OR ROTORS (DISCS):

**\*\*Drums with any external crack or cracks that open upon brake application. (393.47(a))**

NOTE: Do not confuse short hairline heat check cracks with flexural cracks. (393.47(a))

**\*\*Any portion of the drum or rotor (discs) missing or in danger of falling away. (393.47(a))**

### BRAKE HOSE:

**\*\*Hose with any damage extending into the reinforcement ply. (Rubber impregnated fabric cover is not a reinforced ply.) (Thermoplastic nylon may have braid reinforcement or color difference between cover and inner tube. Exposure of second color is out-of-service.) (393.45 (a))**

**\*\*Bulge, swelling when air pressure is applied. (393.45(a))**

**\*\*Hose with audible air leak at other than a proper connection. (393.45)**

**\*\*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. (393.45(a))**

**\*\*Air hose damaged by heat, broken or crimped in such a manner as to restrict air flow. (393.45(a))**

### *Interpretation:*

When should air hoses not be documented as a violation for chafing?

Answer- A violation should not be recorded until a reduction of the hose diameter is observed. It is not a violation if the hoses/lines rest on, or lightly rub on vehicle components. A hose that is found to have a reduction in diameter but is no longer chafing does not constitute a violation unless damage extending to or through the outer reinforcement ply is observable; when damage extends to or through the outer reinforcement ply a violation will be recorded (thermoplastic nylon tubing that is discolored or faded but not damaged, is not a violation).

Note: If inspectors observe air hose lines that appear to be resting on or lightly rubbing on vehicle components, but no observable reduction is present, inspectors should educate the drivers that this is a condition that, while not in violation, is a condition that could lead to a violation/OOS condition in the future and make comments in the notes only, if so inclined.

### LOW PRESSURE WARNING DEVICE:

**\*\*Low pressure warning device missing, inoperative, or does not operate at 55 psi and below, or 1/2 of the governor cut-out pressure, whichever is less. NOTE: If either an audible or visual warning device is working, vehicle should not be placed out-of-service. (393.51)**



### AIR LOSS RATE:

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

- \*\*Governor is cut-in
- \*\*Reservoir pressure is between 80 & 90 psi
- \*\*Engine is at idle, and
- \*\*Service brakes are fully applied. (396.3(a)(1))

### AIR RESERVOIR:

\*\* OOS Air reservoir security, separated from its original attachment points. (393.50)

### AIR COMPRESSOR:

(Normally to be inspected when readily visible or when conditions indicate compressor problems.)

\*\*OOS if loose compressor mounting bolts. (396.3(a)(1))

\*\*OOS if cracked, broken, or loose pulley. (396.3(a)(1))

\*\*OOS if cracked or broken mounting brackets, braces, or adapters. (396.3(a)(1))

## **HYDRAULIC BRAKE SYSTEMS- GENERAL:**

All ambulances shall be in safe and proper operating condition at all times. These include parts and accessories in this section and any other additional parts and accessories which may affect safe operation. This section may not include all items specified in Trans. 309, therefore the applicable Federal Standard may have to be referenced when necessary.

### 1. Visually inspect conditions of hydraulic system.

A. Inspect hydraulic hoses and tubes for leaks, cracks, chafing, flattened or restricted sections and improper support.

\*\*OOS if brake hose or tubing is leaking fluid, flattened, restricted, or insecurely fastened. (393.45(a))

\*\*OOS if brake hoses chafed/cracked through outer cover to fabric layer. (393.45(b)(2))

\*\*OOS if any observable bulge or swelling on a brake hose. (393.45(a))

### 2. Visually inspect condition of master cylinder (Normally inspected when readily visible or when problem is apparent).

A. Inspect for brake fluid level in reservoir.

\*\* OOS if master cylinder assembly (including backup system, power assist, or power brake unit) has loose or missing mounting bolts or is not secured causing it to shift out of its normal position.

\*\*OOS if fluid level is below 25% full. (396.3(a)(1))

### 3. Visually inspect condition of wheel cylinders and brake calipers.

A. Inspect wheel cylinders and brake calipers for fluid leaks. Do not confuse axle lubricant with brake fluid.

\*\*OOS if any brake fluid leak is observed (393.45(a))

-test for operation of light by turning ignition to start position (bulb check). Some vehicles will flash "Brake" warning upon startup. (i.e. 1987 vacuum operated GM one-ton chassis.)

B. With ignition on and engine running, apply 125- 150 pounds of pedal force and observe light.

\*\*OOS if wire is disconnected. (393.51(b))

\*\*OOS if light is inoperative. (393.51(b))

\*\*OOS if light comes on when brake pedal is depressed. (393.51(b))

4. Visually inspect condition of pressure differential switch and brake warning light. This is located by following the brake lines from a dual master cylinder to the switch. Many newer vehicles have the proportioning valve integrated into the master cylinder (Ford F & E Series and new IHC buses are examples). There will then be a plug into the side of the master cylinder which is a low fluid indicator in many cases (Required after 1973).

A. Inspect wire connection at pressure differential switch.

B. Test for operation of light by turning ignition to start position (bulb check). Some vehicles will flash "Brake" warning upon start up (ie. 1987 vacuum operated GM one-ton chassis).

C. With ignition on and engine running, apply 125 150 pounds of pedal force and observe light.

\*\*OOS if wire is disconnected. (393.51(b))

\*\*OOS if light is inoperative. (393.51(b))

\*\*OOS if light comes on when brake pedal is depressed. (396.3(a)(1))

5. Inspect condition of brake pedal reserve and hydraulic system.

A. With engine running apply brakes with moderate foot force for one minute.

\*\*OOS if less than 20% of the total available pedal travel remains. (393.40(b))

\*\*OOS if service brake pedal moves slowly in applied direction while foot pressure is maintained signifying a fluid leak. (393.45(a))

6. Inspect condition of brake drums or rotors (discs).

A. Inspect drums and rotors for cracks or improper wear.

\*\*OOS if cracks in drum open upon brake application (do not confuse short hairline heat check cracks with flexural cracks). (393.47(a))

\*\*OOS if rotor surfaces are worn through. (393.47(g))

\*\*OOS if any portion of the drum or rotor (disc) is missing or in danger of falling away. (393.47(a))

7. Visually inspect condition of brake linings.

A. Inspect linings for improper wear or contamination.

\*\*OOS if lining cracks or voids of 1/16" in width observable on the edge of the lining. (393.47(a))

\*\*OOS if portions of a lining segment missing such that a fastening device (rivet or bolt) is exposed when viewing the lining from the edge. (393.47(a))

\*\*OOS if there are cracks that exceed 1 1/2" in length. (393.47(a))

\*\*OOS if there is a loose lining segment (rev. 11-25-98). (393.47(a))

\*\*OOS if complete lining segment is missing. (393.47(a))

\*\*OOS if evidence of oil seepage into or out of the brake lining/drum or lining edge accompanied by evidence that further contamination will occur such as oil leaking from an axle seal. (393.47(a))

\*\*OOS if lining has a thickness of 1/16" or less for disc or drum brakes. (393.47(d)(2))

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. (393.47)

8. Visually and physically check condition of parking brake system and parking brake warning light.

A. Set the parking brake firmly to determine the reserve travel of the hand lever or foot pedal.

\*\*OOS if ambulance cannot hold vehicle stationary for 5 minutes, in both forward and reverse direction on a 20 percent grade free from snow, ice, and loose materials (CFR 571.105 & CFR 571.121).

**\*\*OOS if ambulance cannot hold vehicle stationary (to the limit of traction on the braked wheels) for 5 minutes in both forward and reverse direction on a 30 percent grade free from snow, ice and loose materials (CFR 571.105 & CFR 571.121).**

B. Inspect the band type parking brake on the drive shaft for the presence of oil or grease.  
**\*\*OOS if brake lining is contaminated and evidence of oil seepage onto lining is present. (393.47(a))**

**\*\*OOS if brake lining fails to make contact with drum. (393.48(a))**

9. Visually and physically check condition of emergency brake system.

A. Inspect vehicle to assure the emergency brake system shall perform emergency stopping function and is constructed that single failure anywhere in the brake system which performs service brake function, excepting mechanical parts of wheel brake assemblies and brake pedal and brake pedal attachment to brake valves or master cylinder, will not leave vehicle without operative brakes capable of stopping vehicle when loaded up to and including manufacturers rated gross vehicle weight at any legal speed.

B. Inspect the control by which the driver applies the emergency brake system to assure it can be readily operated while being properly restrained by a seat belt.

C. Inspect to assure the controls for applying the service brake, parking brake, and emergency brake are not combined into one system. The emergency brake may be combined with either the parking or service brake.

**\*\*OOS if ambulance is not equipped to provide emergency braking capabilities found in the brake performance table in CFR 49 Part 393.52.**

**\*\*OOS if driver cannot apply emergency brake system while properly restrained.**

**\*\*OOS if all three brake systems are combined.**

HY-POWER HYDRO-BOOSTT/DELCO MORAINÉ) HYDRAULIC BRAKE SYSTEM (Chev, GMC, IHC before March 1987)

*These requirements apply in addition to the general section:*

1. Visually inspect master cylinder and hydraulic power booster.

A. Observe any fluid leaks and check flow switch.

B. Dampness caused by fluid seeping, which is not visually detected when brakes are applied or steering action is occurring, is not a defect

**\*\*OOS if fluid is leaking**

C. If a leak is detected clean surfaces and with motor running, rock steering, and apply brakes. Check for persisting leak.

**\*\*OOS if flow switch is disconnected or inoperative.**

**\*\*OOS if power steering fluid reservoir is empty.**

2. Inspect brake light warning device, electric brake motor warning light and electric brake motor operation. Refer to equipment standards that pertained to make and model year of vehicle when it was manufactured. Use information below as guidelines.

A. With engine off and ignition off apply the brakes and observe brake warning light and listen for electric brake motor.

B. 1996 - 2002 GMC chassis will activate only electric brake motor.

C. All IHC chassis will activate electric brake motor only.

D. 1987- 1990 Chevy chassis will activate electric brake motor only.

**\*\* OOS if electric motor brake light/buzzer is not observed when equipped to function or electric assist brake motor is inoperative.**

- E. With the engine off and ignition on, with or without brake application, observe brake warning light, brake electric motor light and listen for electric brake motor.
- 1996 - 2002 GMC will activate warning bell without brake application. When brake is applied the electric brake motor will activate along with warning bell. When vehicle starts "AUX BRAKE" and "PRIMARY BRAKE" will flash and then go off to indicate bulbs are working.
  - Before 5/7/1985 IHC electric brake will only operate when you apply pressure to the brake pedal. The "BRAKEPRESSURE" light will be operating with the key in the on position and engine off.
  - After 5/7/1985- March 1987, IHC will activate brake pressure light and electric brake motor will be running.
  - 1987- 1990 Chevy will activate two lights indicating "BRAKE" and "BRAKE BOOST" along with the electric brake motor running and warning chime.
- \*\*OOS if brake warning light/buzzer, brake electric motor warning light is not observed when equipped to function or electric brake motor is inoperative.**
- F. With the engine on apply brakes and rock steering (note: do not turn wheel to steering stops).
- \*\*OOS if any brake warning light activates or loss of power steering occurs.**

#### DUAL POWER HYDRAULIC BRAKE SYSTEM

*These requirements apply in addition to the general section.*

1. Visually and aurally inspect: hydraulic power booster, vacuum booster, vacuum reserve system.
  - A. Observe any fluid leaks and check condition of flow switch  
*-dampness caused by fluid seeping, which is not visually detected when brakes are applied, or steering action is occurring is not a defect.*  
**\*\*OOS if fluid is leaking**
  - B. If leak is detected, clean surfaces and with motor running, rock steering and apply brakes, check for persisting leak.  
**\*\*OOS if flow switch is disconnected or inoperative.**  
  
**\*\*OOS if power steering fluid reservoir is empty.**  
  
**\*\*OOS if any vacuum leak is detected.**
2. Visually and aurally inspect condition of brake warning light, low vacuum warning light/buzzer and vacuum gauge.
  - A. With engine running build full vacuum and turn motor off. Observe vacuum gauge.  
**\*\*OOS if any observable vacuum leaks after initial shut down or up to two minutes there after (rev. 11-25-98).**
  - B. With vacuum built up, apply and hold brake for one minute.  
**\*\*OOS if any observable vacuum leaks after initial brake application (rev 11-25-98).**
  - C. After checking above item, release brakes and apply two more times.  
**\*\*OOS if vacuum reserve is not adequate for three full brake applications.**
  - D. Check that the low vacuum warning light/buzzer is functioning when the vacuum gauge reads below eight inches Hg. (pump brakes if necessary and make sure ignition is in start position to view light or hear buzzer.
    1. Mid 1980's IHC, the flow switch, pressure differential switch and low vacuum warning light all activate one warning light. To check the low vacuum warning light, deplete vacuum system and start bus. Light should stay on until vacuum reaches 8 inches of mercury. If light goes out immediately upon startup with vacuum depleted the low vacuum switch (mounted on inside of firewall, under dash) is inoperative.
    2. 1986 Chevy with key on and full vacuum will activate no lights. With low vacuum will activate sharp tone and low vacuum light. Upon start up you will observe low additional lights indicating "BRAKE" (differential switch) and "BRAKE BOOST" (flow switch).

**\*\*OOS if vehicle is equipped with both low warning indicator and one is not functioning.**

**\*\*OOS if no low vacuum warning indicator is functioning.**

**\*\*OOS if brake warning light is inoperative.**

E. After checking above item, the vacuum system should be depleted. Depress brake pedal and hold. Start vehicle while depressing pedal. A surge should be felt in the brake pedal indicating an operating vacuum system.

**\*\*OOS if you do not feel the brake pedal surge.**

F. After feeling surge in brake pedal when the vehicle starts the brake pedal should travel farther to the floor indicating proper hydraulic assist. At this time a "throttling" noise will be heard.

**\*\*OOS if pedal does not travel farther to the floor and "throttling" noise not heard.**

#### VACUUM BRAKE SYSTEM

*These requirements apply in addition to the general section.*

1. Visually and aurally inspect vacuum booster, and vacuum reserve system.

**\*\*OOS if any observable vacuum leaks.**

2. Visually and aurally inspect condition of low vacuum warning light/ buzzer and vacuum gauge. Brake warning light for pressure differential switch will also be present (see general section for inspection procedure).

A. With engine running build full vacuum and turn motor off. Observe vacuum gauge.

**\*\* OOS if any observable vacuum leaks after initial shut down and up to two minutes there after (rev 11-25-98).**

B. With vacuum built up, apply and hold brake for one minute.

**\*\*OOS if any observable vacuum leaks after initial brake application (rev. 11-25-98).**

C. After checking above item, release and apply brake two more times.

**\*\*OOS if vacuum reserve is not adequate for three full brake applications.**

D. After checking above item, check that the low vacuum warning light is functioning when the vacuum gauge reads below 8 inches of Hg (pump brakes if necessary and make sure ignition is in start position to view light or hear buzzer).

**\*\*OOS if no low vacuum warning indicator is functioning.**

E. After checking above item, the vacuum system should be depleted. Depress brake pedal and hold. Start vehicle while depressing pedal. A surge should be felt in the brake pedal indication an operating vacuum system.

**\*\*OOS if you do not feel the brake pedal surge.**

#### HYDRO-MAX (BENDIX) HYDRAULIC BRAKE SYSTEM (IHC- after March 1987 and Ford vehicles)

*These apply in addition to the general section.*

1. Visually inspect master cylinder, hydraulic power booster, and on Ford vehicles check the Saginaw brake pump and associated components related to the parking brake system.

A. Observe any fluid leaks and check flow switch. Dampness caused by fluid seeping, which is not visually detected when brakes are applied, or steering action is occurring, is not a defect.

**\*\*OOS if fluid is leaking- if a leak is detected**

B. Clean surfaces and with motor running rock steering and apply brakes. To check Ford's parking brake system the vehicle should be running with the brakes released. This will build pressure in the rear canisters.

**\*\*OOS if flow switch is disconnected or inoperative.**

**\*\*OOS if Saginaw brake pump fluid reservoir is empty (Ford).**

2. Inspect brake warning device, electric motor warning light and electric brake motor.

A. With the engine off and ignition off apply the brakes and observe electric brake motor warning light/buzzer and listen for electric brake motor operation.

-Ford vehicles will activate electric brake motor warning light, buzzer, and electric brake motor.

-Nov. 1998 - 2006 Freightliner (Thomas C-2 body is on Freightliner chassis) vehicles will activate electric brake motor only and audible alarm.

**\*\*OOS if the electric brake motor warning light and buzzer or bell is inoperative or electric brake motor is inoperative when equipped to function.**

B. With the engine off and ignition on with or without brake application observe brake warning light, brake electric motor light/buzzer and listen for electric brake motor operation.

C. Nov. 1998 Freightliner vehicles will activate brake pressure light (!), buzzer, and electric brake motor. This is the new hydro-max system from Bendix. The light is a low fluid, differential switch, and flow switch indicator.

D. With the engine off and ignition on with or without brake application observe brake warning light, brake electric motor light/buzzer and listen for electric brake motor operation.

**\*\*OOS if the brake warning light and the brake electric motor light/buzzer inoperative or brake motor inoperative.**

E. With the engine off and ignition on with the parking brake set, check the parking brake warning light.

F. With the engine on apply brakes and rock steering (note: do not turn wheel to steering stops).

**\*\*OOS if any brake warning light activates or loss of power steering occurs.**

#### HYDRO-BOOST HYDRAULIC BRAKE SYSTEM (Found mainly on GM and Ford one-ton chassis)

*These requirements apply in addition to the general section.*

1. Visually inspect master cylinder, Hydraulic power booster and flow switch.

A. Observe any fluid leaks and check flow switch.

-1987 -1989 Chevy no flow switch.

-December of 1989 flow switch present in hydraulic hose coming from pump

-*dampness caused by fluid seeping, which is not visually detected when brakes are applied, or steering action is occurring, is not a defect.*

**\*\*OOS if fluid is leaking**

B. If a leak is detected, clean surfaces and with motor running rock steering and apply brakes. Check for persisting leak.

**\*\*OOS if flow switch is disconnected or inoperative.**

**\*\*OOS if power steering fluid reservoir is empty.**

2. With engine off inspect condition of dual system by applying brakes several times until a hard brake pedal is felt. Apply and hold brake pedal. Start vehicle and the brake pedal should kick back indicating a properly working system.

**\*\*OOS if pedal does not kick back (check condition of Nitrogen canister).**

3. With engine off and ignition on, observe brake warning light.

**\*\*OOS if brake warning light is inoperative.**

4. With engine on, apply brakes and rock steering (note: do not turn wheel to steering stops).

**\*\*OOS if any brake warning light activates or loss of power steering occurs.**

#### WABCO/INTERNATIONAL HYDRAULIC BRAKE SYSTEM (ICCO-International starting 2005):

*These apply in addition to the general section.*

1. Visually inspect master cylinder, fluid level, fluid level switch, and travel switch.

A. Observe any fluid leaks

**\*\*OOS if fluid is leaking**

**\*\*OOS if fluid level switch or travel switch is disconnected.**

2. Inspect pump motors. With engine off(key on or off) press brake pedal several times. Listen for pump motors to operate.

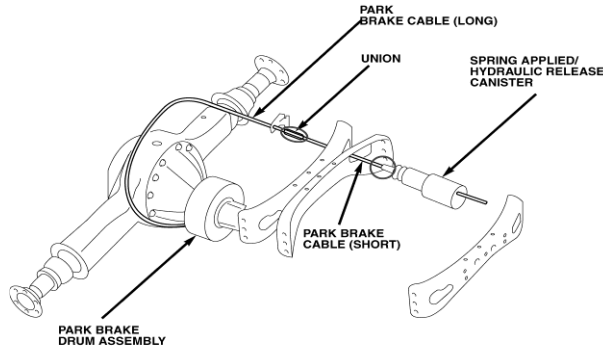
**\*\*OOS if motor does not run. (Located on left side frame rail behind axle 1)**

3. Inspect brake warning light. Turn key from off to on position. Instrument panel should light up and go off after approximately 5 seconds. Lights will not come on upon start up.

**\*\*OOS if brake pressure light or brake fluid light is inoperative.**

4. Inspect the powered parking brake.

**\*\*OOS if system has a fluid leak.**



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## **EXHAUST SYSTEM – TRANS 309.03 (5b)**

(1) The exhaust shall discharge at the vertical side(s) of the ambulance at a maximum distance of 1" beyond the side of the module and be angled /positioned to project the exhaust away from the door(s) to minimize fumes and contaminants entering the interior. On modular vehicles, the tailpipe outlet shall not terminate within 12" of the vertical axis of the fuel tank filler opening(s) when located on the same side. Modifications or extensions made to the OEM exhaust system shall meet or exceed OEM's requirements in terms of backpressure, components, design, and workmanship.

1. Visually inspect mufflers, resonators, catalytic converters, tail pipes, exhaust pipes and supporting hardware.

-inspect for presence and condition- i.e.. rusted/corroding/pinched/loose.

**\*\* OOS if sufficient exhaust leak (ie. 3" in diameter hole or greater with a gasoline, LNG, CNG, or LPG powered vehicle)**

**\*\*OOS if a leak is present and a hole is evident in the passenger compartment. (All fuel types) (393.83(g))**

**\*\*OOS if any part of the exhaust system is located as to be likely to result in the burning, charring, or damaging the electrical wiring, fuel supply, or any combustible part of the motor vehicle. (393.83(a))**

**\*\*OOS if improper exhaust exiting location. (see (1) above)**

## **BATTERY – TRANS 309.03(5c)**

1. Other than ambulances powered by diesel fuel, check that the storage battery has a cranking performance rate equal to or greater than the cubic inch displacement of the engine. (*Compare cold cranking amps on battery or line setting ticket to engine cubic inch displacement*).

## **BATTERY CARRIER AND CONNECTIONS – TRANS 309.03(5c)**



1. All batteries shall be securely attached in a manner to prevent dislocation in the event of an accident. The battery may be mounted in the engine compartment or, when mounted outside of the engine compartment, it shall be contained in a closed, drained, weather-tight and vented compartment that shall retain the battery in the event of upset or roll over of the bus. If the battery is mounted in the body skirt, the battery compartment door or cover shall be secured by a latch. The battery shall not be located in the passenger compartment.

2. The cables to the battery shall not be spliced.

A. Check that the battery is either mounted in the engine compartment or, if mounted outside of the engine compartment, is in a closed, drained, weather-tight, and vented compartment that is latched (*rev. 11-25-98*).

**\*\*OOS if located in passenger compartment.**

B. Check battery cables for corrosion, splicing or otherwise damaged.

**\*\*OOS if electrical cable insulation chafed, frayed, damaged, burnt, causing bare cable to be exposed. (393.28)**

**\*\*OOS if missing or damaged protective grommets insulating electrical cables through metal components panels (393.28)**

**\*\*OOS if Broken or unsecured mounting of electrical components. (396.3(a)(1))**

**\*\*OOS if electrical cables unsupported, hanging or missing clamps that may cause a chafing or frayed condition. (393.28)**

NOTE: A cable is the power conveying part of a high wattage/voltage electrical system. It usually has no circuit overload protection included in the system. (i.e., battery to electric starter or alternator to battery)

## **WIRING — TRANS 309.03(5c)**

The ambulance electrical system shall incorporate a master circuit breaker panel with circuit breakers or other electronic, non-disposable, current protection devices, in each circuit.

To provide RF grounding and minimize potential interference with OEM's computers, the module and chassis cab shall be connected to the chassis frame with a separate dedicated minimum 3/4", braided ground strap with soldered ends that are secured to cleaned metal surfaces on the body and frame with lock washers. To prevent corrosion, both ends of the attached ground strap shall then be sealed with either rust proofing compounds or non-hardening battery terminal sealer. Regular stranded copper wire, while providing a DC ground, does not provide RF grounding and does not meet this requirement.

1. Activate switches on control panel and determine if all work properly. The wiring should be insulated and the connections tight and secure. All wiring systems must be protected by a circuit breaker or adequate fuse. On automatic transmissions, check to see that the neutral safety starting switch is operating. Place the vehicle in drive and attempt to start the vehicle. The vehicle shall only start when the transmission is in either "park" or "neutral".

**\*\* OOS if wiring is showing signs of burning or short-circuiting.**

**\*\* OOS if all braided grounds are detached from either the module or chassis.**

**\*\* OOS if essential equipment is not activated when switch is turned on.**

**\*\* OOS if vehicle starts when transmission is in any gear other than "neutral" or "park".**

## **FUEL TANK AND FUEL SYSTEM INTEGRITY — TRANS 309.03(5d)**

1. All fuel systems and tanks must be maintained free of leaks. The fuel tank shall be attached to the ambulance in a manner that prevents any movement of the tank while the ambulance is in motion.

2. All fuel lines shall be secured in a manner that will prevent wear.

3. The filler pipe or device shall be located so that the fuel, if spilled or overfilled, will not drip or drain on any part of the exhaust system.

4. Every fuel system shall be properly vented to prevent any accumulation of fumes.



5. The fuel systems and tanks shall meet FMVSS 301, fuel system integrity and all other federal and state standards and regulations applicable for the type of fuel used at the time of manufacture.

Visually examine the fuel tank, fuel tank support straps, filler tube, tube clamps, fuel tank vent hoses or tubes, filler housing drain, overflow tubes and filler cap.

\*\* OOS if any part of the system is not securely fastened or supported. (393.65(c))

\*\* OOS if there is fuel leakage at any point in the system. (396.3(a)(1))

\*\* OOS if the fuel filler cap is missing. (393.67(c)(7)v))

\*\* OOS if tank missing protection cage or defective.

## **OXYGEN EQUIPMENT – TRANS 309.03(5e)**

Trans 309.23 Oxygen equipment.

(1) The ambulance shall have a hospital-type piped oxygen system capable of storing and supplying a minimum of 120 cubic feet of medical oxygen. The main oxygen supply shall have a minimum of 500 PSI. The oxygen containers shall be secured in a storage compartment. The cylinder controls shall be accessible from inside the vehicle. The pressure readout shall be visible inside the patient compartment. The piped oxygen system shall include a pressure regulator preset to 50 PSI, +/- 5 PSI, line pressure installed at the cylinder, and nonferrous piping and low-pressure hoses suitable for medical oxygen. Oxygen piping shall be concealed and not exposed to the elements or damage, be securely supported, and be readily accessible for inspection and replacement. Oxygen shall be piped to self-sealing outlets. One duplex oxygen outlet station for the primary patient shall be located on the action wall and at least one other oxygen outlet shall be located in the patient compartment. Two oxygen outlets shall be equipped with a plug-in flowmeter and delivery tube. The flowmeter shall be capable of delivering at least 15 liters per minute.

(2) A portable oxygen unit shall be carried. It shall be located near a patient compartment door and shall be accessible from outside of the ambulance. The portable oxygen unit shall have at least a 13-cubic-foot container and shall be equipped with a yoke, a pressure gauge, a non-gravity-dependent flowmeter, a delivery tube and oxygen masks. The portable oxygen supply shall have a minimum 500 PSI. The unit shall be capable of delivering an oxygen flow of at least 15 liters per minute. Portable cylinders or kits located in the patient compartment shall be secured with quick-release securing fittings. A full spare cylinder shall be stored in the ambulance. Oxygen masks shall be transparent and disposable.

Visually examine the oxygen tanks, support straps, securement, hoses, tubes, regulators and flow meters.

\*\* OOS Main Oxygen Supply Less Than 500PSI

\*\* OOS if any part of the system or tanks are not securely fastened or supported.

\*\* OOS if there is oxygen leakage at any point in the system.

## **UNSAFE STRUCTURE – TRANS 309.03(5f)**

### **CONSTRUCTION — TRANS 309.03(5f)**

1. The ambulance body, equipment, and accessories shall be as represented in their respective final stage ambulance manufacturer current technical data.

2. The final stage ambulance manufacturer shall furnish to a purchaser an authenticated certification and label stating that the ambulance and equipment comply with Federal build specifications and applicable change notices in effect on the date the ambulance is contracted for. The label shall be affixed to the body of the ambulance and clearly visible for inspection.

3.The construction shall provide a reasonably dust proof and weather tight unit. Openings between the chassis and passenger compartment shall be sealed to prevent fumes or exhaust gas from entering the ambulance body.

**\*\*OOS if any opening allows fumes or exhaust into the ambulance body.**

## FRAME — TRANS 309.03(5f)

1. Alterations to the frame side members may only be made by the chassis or body manufacturer.
2. Holes shall not be permitted except where originally provided in the chassis frame. There shall be no welding to the frame except by the chassis or body manufacturer.

Check frame and cross members for cracks, holes, distortions, alterations, and improper welds not completed by chassis or body manufacturer.

**\*\* OOS if frame components are cracked, welded, etc (except welds from the original manufacturer) (393.201(a)).**

## MOUNTING OF BODY - TRANS 309.03(5f)

1. The body shall be securely fastened to the chassis frame. Every body attachment device shall be securely fastened and maintained with proper tension.

Check all body mounts.

**\*\* OOS if 25% or more of body mounts defective, ineffective or missing.**

## WINDSHIELD — TRANS 309.03(5f)

1. The glass in the windshield shall be laminated safety glass identified by the designation AS 1. The mark shall be visible and legible. The glass shall be of such quality as to prevent distortion of view in any direction.

- 2.The windshield may not be obstructed.

Visually inspect windshield for proper "AS 1" safety class designation, cracks, chips, discoloration, and vision obstruction.

**\*\* OOS if the windshield has damage or discoloration severe enough to distort the driver's vision.**

## WINDSHIELD WIPERS — TRANS 309.03(5f)

Every ambulance shall be equipped with 2 complete and operational windshield wipers. The system shall have at least 2 speeds.

1. Manually activate the windshield wipers to determine if both wipers operate on high and low speeds. Wiper blades should contact the windshield firmly and not be torn or damaged. When activated, the wiper blades should clean the windshield effectively and not smear or streak the windshield.

**\*\* OOS if either wiper is inoperative, missing, or ineffective (Annual criteria). OOS when inclement weather would require its use (Spot Check criteria). ((393.78(a) or (393.78(b))**

## DOORS - TRANS 309.10

An ambulance shall have 2 unobstructed door openings in addition to the doors for the driver cab compartment. There shall be at least one door opening on the right forward side and a single door or double doors at the rear of the patient compartment. A forward hinged single door, double doors or a

sliding type door shall have a minimum right-side door opening of 30 inches in width, and 54 inches in height for Types I, I-AD, III and III-AD ambulances and 42 inches in height for Type II ambulances. The opening shall provide clearance to allow access and removal of a patient strapped to a long spine board. Single or double rear loading doors shall cover a clear opening of not less than 46 inches in height and 44 inches in width for Types I, I-AD, III and III-AD ambulances, and the manufacturer's standard for Type II ambulances. The ambulance body doors shall be equipped with not less than 250 square inches of safety glass area per door. Doors shall be designed for easy release from both the interior and exterior of the ambulance, but an accidental opening shall be prevented by an interlocking system that functions even when doors are not completely closed. Each door shall have effective compression or overlapping seals to prevent the entry of dust, water and air. Doors may contain recessed compartments to the interior for storage of supplies and devices.

1. Manually open doors from interior and exterior and check seals around doors.

\*\* OOS Doors not securely latching or interlocking system inoperative.

\*\* OOS if Doors release mechanisms are not able to open doors from both interior and exterior.

\*\* OOS if Door seals missing or defective as to let in exhaust fumes.

## **BUMPERS, STEPS AND STEPWELLS – TRANS 309.11**

Chassis manufacturer's standard bumpers shall be furnished with the exception of the rear bumpers of Types I, I-AD, III and III-AD ambulances. Types I, I-AD, III and III-AD ambulances shall have a sturdy full width rear vehicular and body bumper with step, secured to the vehicle's chassis-frame. The rear bumper and step shall be adequate to support the test weight of 500 pounds without flexing or buckling. If the patient compartment floor is more than 18 inches above the ground on a Type II ambulance, a step shall be installed within 2 inches of an equal distance between the ground and the patient compartment floor. All bumper steps shall be designed to prevent the accumulation of mud, ice or snow and shall be made of antiskid, open grating metal. Steps may be of a folding style but may not be located within or exposed to the interior of the ambulance when the doors are closed. All steps shall extend the full width of the door opening for which they are provided and shall be not less than 5 inches nor more than 10 inches in depth.

1. Visually inspect bumpers and bumper mounts.

\*\* OOS Front or Rear Bumpers missing.

\*\* OOS Rear bumper flexing or buckling under test weight.

## **TIRES & WHEELS TRANS 309.12**

1. Each tire shall have not less than 1/8-inch tread depth. The depth shall be measured at 2 points not less than 15 inches apart in any major tread groove at or near the center of the tire.

2. Wheels, tires and brake drum assemblies shall be in balance.

3. Snow tires with tungsten carbide studs, which shall not project more than one-eighth inch beyond the treads surface of the tire, may be installed on an ambulance from the 15th day of November each year through the 1st day of April of the following year.

4. Recapped tires may not be installed on any ambulance.

5. Tires shall be maintained in good working condition. Tires shall not have serious cuts, bulges, sidewall defects or exposed fabric or cords.

6. Radial and bias tires shall not be mounted on the same axle.

7. Wheels shall not have any cracks, unseated lock rings, loose, broken or missing lugs, studs or clamps, bent or cracked rims or elongated stud holes.

8. Tires shall not be loaded above the manufacturer's weight limits.

A. Visually inspect all tires for condition and wear. Check tire tread depth with tread depth gauge to ensure tire tread is not below required tread depth standards.

**\*\*OOS if less than 4/32-inch tread when measured no less than 15 inches apart in any two adjacent major tread grooves at any location on any tire.**

**\*\*OOS if seventy-five percent or more of the tread width loose or missing in excess of 12 inches in circumference.**

**\*\*OOS if any part of the breaker strip or casing ply is showing in the tread.**

**\*\*OOS if tire is cut, worn or damaged to the extent the ply cord is exposed.**

**\*\*OOS if observable bump, bulge, or knot apparently related to tread or sidewall separation.**

Exception: A bulge due to a section repair is allowed, not to exceed 3/8" in height. A blue triangular label in the immediate vicinity may sometimes identify this bulge.
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**\*\*OOS if tire is flat or has noticeable leak. (e.g., can be heard or felt) (Flat is 50% or less of the maximum inflation pressure marked on the tire sidewall. (393.75(a)(3))**

**\*\*OOS — 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. (393.75(a)(1))**

**\*\*OOS — 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. (393.75(a)(1))**

**\*\*OOS if 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.) (396.3(a)(1))**

**\*\*OOS if weight carried exceeds tire load limit. This includes overloaded tires resulting from low air pressure. (Load Limit - 393.75(f), 393.75(g)(1), 393.75(g), Inflation Pressure - 393.75(h))**

B. Visually check tires to ensure that each axle has the same size and type of tire, does not have a mixture of bias and radial tires and that the steer axle tires have not been recapped, re-grooved or re-treaded.

**\*\*OOS if recapped, re-grooved, or re-treaded tires on steering axle. (393.75(d))**

**\*\*OOS if different size and type of tires on an axle.**

**\*\*OOS if a mixture of bias and radial tires on an axle.**

**\*\*OOS if labeled "not for highway use" or carrying other markings that would exclude use.**

## WHEELS — TRANS 309.03(5g)

1. An ambulance may not be operated with any cracked rims, loose lug bolts or nuts or elongated stud holes.

2. The wheel bearings shall not have more than ¼ inch free play when measured at the tire level.

3. The following measurements are the maximum amount of play permitted in the kingpins or ball joints when measured at the outside of the tire:

A. When the wheel diameter is 16 inches or less, not more than ¼ inch play is permitted.

B. When the wheel diameter is greater than 16 inches the play permitted is 3/8 inch.

4. Visually inspect wheels for cracks, loose or missing lug nuts and bolts, elongated stud holes and improperly seated, sprung, or broken side rings.

\*\*OOS if lock or side ring is bent, broken, cracked, improperly seated, sprung, or mismatched ring(s).

\*\*OOS if there any cracks in the rim except an intentional manufactured crack at a valve stem hole.

\*\*OOS if there are 50% or more elongated stud holes (fasteners tight).

\*\*OOS if loose, missing, broken, cracked, or stripped lug nuts or bolts (both spoke and disc wheels) as

\*\*OOS if loose, missing, broken, cracked, or stripped lug nuts or bolts (both spoke and disc wheels) as follows: for 10 fastener position — 3 anywhere or 2 adjacent; for 8 fastener positions or less (including spoke wheels and hub bolts) — 2 anywhere.

\*\*OOS if any cracks in the welds attaching disc wheel disc to rim.

\*\*OOS if any cracks in welds attaching tubeless demountable rim to adapter.

\*\*OOS if there is any welded repair on aluminum wheel(s) on a steering axle.

\*\*OOS if there is any welded repair other than disc to rim attachment on steel disc wheel(s) mounted on the steering axle.

5. Check front and rear hub/bearing caps. Check that there is no evidence of a leaking from the hub/bearings. Check to see that there is a measureable amount of fluid showing in each hub.

\*\*OOS if any bearing /hub cap, plug, or filter plug is missing or broken allowing an open view into the hub assembly (396.3(a)(1)).

\*\*OOS if smoking from wheel hub assembly due to bearing failure. (396.3(a)(1))

NOTE: Refer to Brakes – Brake Smoke/Fire; as the cause may either be the brakes or a problem in the hub and bearing area.
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\*\*OOS if any wheel seal is leaking. This must include evidence of wet contamination of the brake friction material and accompanied by evidence that further leaking will occur. (396.5(b))

NOTE: Refer to the applicable contaminated friction material criterion in in the "Brake" section.
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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 out-of-service.
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\*\*OOS - Lubricant leaking from the hub and is present on the wheel surface (caused by a loose hub cap or hub cap bolts, or hub cap damage) accompanied by evidence that further leakage will occur. (396.5(b))

\*\*OOS - No measurable amount of lubricant showing in the hub. (396.5(a))

6. Check front wheel bearings and kingpins by raising front end of vehicle off the ground. Attempt to move wheel relative to the spindle either by grasping front tire top and bottom or by using a bar for leverage. Bearing maladjustment or wear is determined by the relative movement between the brake drum (or disc) and the backing plate (or splash shield).

\*\*OOS if there is more than ¼" play in wheel bearings when measured at the tire level.

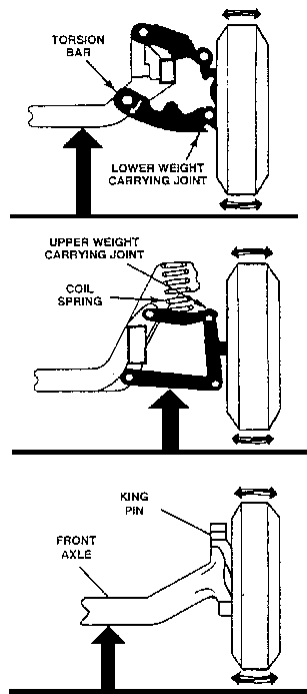
\*\*OOS if there is more than ¼" play in king pin or ball joints with a wheel diameter of 16" or less.

\*\*OOS if there is more than 3/8" or more play in king pin or ball joints with wheel diameter of 17" -18".

\*\*OOS if there is more than 1/2" or more play in king pin or ball joints with wheel diameter over18".

Note: In order to determine if play is due to kingpin or wheel bearing apply brakes. If play is still evident with brake applied movement is due to a defective kingpin. 2/3/99
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Jack position for kingpin inspection.



## REPEAT VIOLATIONS – TRANS 309.03(5i)

Repeat violations from the previous inspection report with no maintenance history or documentation that the problem had been corrected.

**\*\* OOS Repeat violations from previous inspection with no maintenance history or documentation that the problem has been corrected.**

## **ENVIRONMENTAL CLIMATIC EQUIPMENT – TRANS 309.14**

1. Required environmental climatic equipment. All ambulances shall be equipped with a complete climate environmental system to supply and maintain clean air conditions and an inside temperature at a comfortable level in both driver and patient compartments. The various systems for heating, ventilating and air conditioning may be separate or combination systems that permit independent control of environment within each compartment. The driver and patient compartment environments may not be dependent upon one another in any way.
2. Interior environment climate. When an ambulance is prepared for immediate response with medications and solutions on the ambulance, the ambulance's interior climate shall be maintained so that the medications and solutions are kept within the temperature range required by the manufacturer.
3. An inside temperature of not less than 50 degrees Fahrenheit at average minimum January temperatures as established by the U.S. department of commerce, weather bureau, for the area in which the bus is to be operated shall be maintained throughout the Ambulance.
4. The heater hose shall be adequately supported to guard against excessive wear or abrasion and may not interfere with or restrict the operation of any engine function. Heater lines inside the passenger compartment shall be shielded to prevent accidental contact by the driver or passengers.
  - A. Inspect heater(s) for capability to maintain inside temperature of 50 degrees F. Inspect air conditioning for capability to maintain inside temperature to at least 20 degrees below outside ambient air temperature.

\*\* OOS if heater can't maintain temperature of 50 degrees.

\*\* OOS if air conditioning cannot cool interior to at least 20 degrees below outside ambient air temperature.

B. Inspect for leakage and general condition of heating/air conditioning system, including hoses and hose shielding.

## **STRETCHER AND CHAIR STRETCHER AND RESTRAINTS - TRANS 309.21**

1. Every ambulance shall be equipped with one commercial elevating wheeled cot maintained in good working order made up with a sheet and a blanket and a stair chair or carry chair, designed to permit a patient to be carried on stairways and through other narrow areas. Each ambulance shall be equipped with a crash stable slide, center mounted, or equivalent cot fastener assembly of the quick-release type to secure the elevating wheeled cot to the ambulance body. The cot fastener assembly shall be the manufacturer's approved bracket for the cot used.

2. At least 3 strap-type restraining devices for the chest, hip and knee shall be provided for each stretcher, capable of preventing longitudinal or transverse dislodgement of the patient during transit. Shoulder straps shall be required on the cot stretcher. Restraining straps shall be made of nylon or equivalent material and shall be at least 2 inches wide. The straps shall be constructed as a 2-piece assembly with quick-release buckles and shall be removable for easy cleaning. If a second patient is transported in the patient compartment on a long spine board the ambulance shall be equipped with the manufacturer's approved securement for a long spine board and 3 strap-type restraining devices for the chest, hip and knee.

1. Inspect cot, cot securement and cot straps.

\*\* OOS Commercial elevated cot not secured in a crash stable OEM cot fastener.

\*\* OOS Commercial elevated cot not working according to OEM specifications.

\*\* OOS Commercial elevated cot straps missing, defective or unclean.

## **EXTERIOR AND INTERIOR AMBULANCE LIGHTING – TRANS 309.15 & 309.16**

### Trans 309.15 Exterior Ambulance Lighting

Trans 309.15(1)(1) General lamps. Ambulances shall be equipped with headlamps, directional signal lamps, tail lamps, stop lamps, parking lamps, side marker lamps, license plate lamps, backup lamps, hazard warning lamps and clearance lamps meeting the requirements of ch. 347, Stats.

(2) Emergency warning lamps.

(a) All ambulances shall be equipped with warning lamps consisting of:

1. Except as provided in par. (b), 2 top-corner mounted alternating flashing red lamps facing forward with a white flashing light mounted at an equal distance between them;

2. Except as provided in par. (c), 2 top-corner mounted alternating flashing red lights facing to the rear;

3. Two top-corner mounted alternating flashing red lights facing to the right side;

4. Two top-corner mounted alternating flashing red lights facing to the left side; and

5. At least 2, red or red and white, flashing or rotating warning lamps located in, on, behind or in front of the vehicle's radiator grill. The lamps shall be designed and mounted so as to be plainly visible and understandable from a distance of 500 feet during both normal sunlight and hours of darkness.

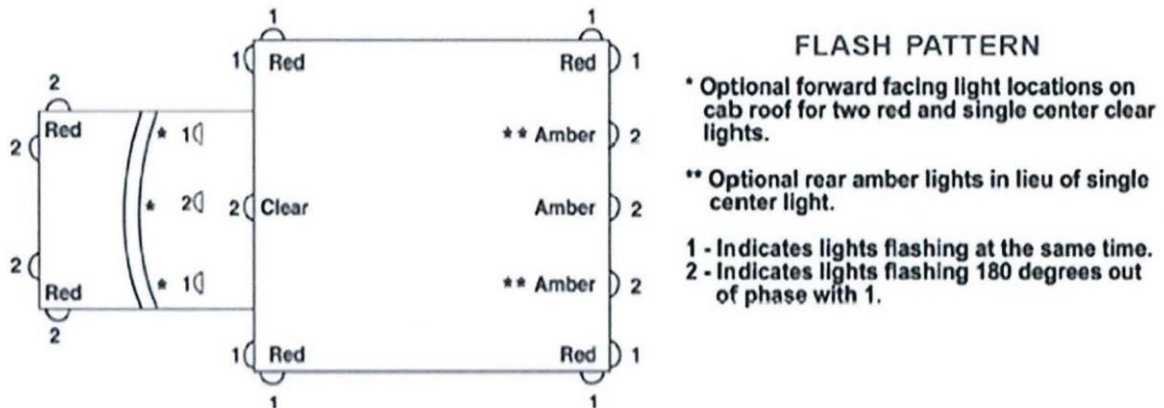
(b) The lights required in par. (a) 1. may be replaced with a light bar with 2 or more rotating or flashing red or red and white lights which covers the same area.

(c) The lights required in par. (a) 2. may be replaced with rotating red or red and white lights revolving or flashing on a horizontal plane.

(d) Emergency warning lamps may not be obstructed by open doors.

(e) Ambulance service providers may not be required to alter emergency warning lamps already installed on ambulances in service prior to November 1, 1986.

- (f) The lamps shall be designed and mounted to be plainly visible and recognizable as emergency vehicle lights from a distance of 500 feet during both normal sunlight and hours of darkness.
- (g) A flashing amber light may be installed to the rear top, positioned equally between the 2 top mounted corner flashing red lights, or 2 amber lights may be installed to the rear mounted to the insides of the 2-corner flashing red lights.
- (3) Floodlamps. Sealed flood lighting units shall be located at the rear and on the left and right sides of the ambulance. Floodlamps shall be integrally mounted below the roof line but not less than 75 inches above the ground and may not be obstructed by open doors. Each flood lamp shall have a minimum of 800 candlepower output. Flood lighting at the rear shall be arranged to illuminate the ground area immediately surrounding the loading doors. The switches shall be shielded and shall control each side separately.
- (4) Figure. Lighting requirements described in this section are illustrated in figure 1.



### Trans 309.16 Interior Ambulance Lighting.

- (1) Driver compartment. The driver compartment shall be equipped with a dome lamp, instrument panel lamps and indicators, master switch panel or console lamps and door-open indicator. The lighting shall be designed and located so that no glare is reflected from surrounding areas to the driver's eyes or line of vision from instrument and switch control panels or other areas that are illuminated while the vehicle is in motion.
- (2) Patient compartment. The patient compartment shall be equipped with overhead or dome lighting and switch panel lighting. Only white or a combination of white and red colored lamps or lenses may be used in the patient compartment. Patient compartment lights shall be automatically activated when the entrance doors are opened or when otherwise controlled by the driver's master switch. Interior light fixtures may not protrude more than 1.5 inches. Fluorescent lights that operate on 12 volts may be used, but they may not extend more than 4 inches from the mounting surface.

#### EXTERIOR & INTERIOR AMBULANCE LIGHTING

Fluorescent fixtures may be mounted at the intersection of the ceiling and walls and shall be equipped with removable covers that positively lock in place.

- (3) Illumination levels. Normal illumination in all patient areas shall be not less than 15-foot candle intensity measured along the entire center line of the clear floor without any outside ambient light. The primary cot and squad bench shall be provided with 35 to 55-foot candles of illumination measured on at least 90% of their surface. Lighting levels shall be controlled by the EMT with switches or with a fireproofed underwriter's laboratory approved rheostat.

1. Inspect exterior and interior lighting, including dash warning lamps and master switch panel lamps in patient compartment.

\*\* OOS Not at least one operative headlamp on low beam

\*\* OOS Not at least one operative red emergency lamp on the rear, front and sides of vehicle

\*\* OOS Not at least one operative stop lamp on rear of vehicle

\*\* OOS Rear turn signal lamp on each side is not operable



\*\* OOS No lighting operative in patient compartment

\*\* OOS Door open indicator light and audible warning inoperative

## **SIREN AND PUBLIC ADDRESS SYSTEM – TRANS 309.17**

1. Each ambulance shall have an electric or electronic siren and amplified public address system. The siren or siren speakers shall be mounted below the windshield and forward of the front wheels. The siren shall produce wail and yelp sound patterns. The wail sound pattern shall have both automatic and manual controls.

(1m) The siren shall be activated by the steering wheel horn. The emergency light control panel shall have a switch marked "horn/siren" to activate either the vehicle's horn or siren. This subsection applies to all ambulances that are put in service July 1, 1999.

2. Ambulance service providers may not be required to alter siren mountings already installed on ambulances in service prior to May 1, 1994.

\*\* OOS Siren is inoperative

## **STANDARD MANDATORY MISCELLANEOUS EQUIPMENT – TRANS 309.205**

1. An ambulance shall be equipped with one personal portable carbon monoxide detector

A. Check carbon monoxide concentrations in ambulance.

\*\* OOS Carbon monoxide concentrations within the vehicle greater than 10 ppm (parts per million) above the outside ambient carbon monoxide concentration.

(May have to provide inspectors with single gas meters for gas operated ambulances.)

## **STEERING SYSTEM – TRANS 309.03(5p)**

1. Steering systems shall comply with 49 CFR 393.209. No changes may be made in the steering apparatus without the approval of the chassis manufacturer.

2. There shall be a clearance of at least 2 inches between the steering wheel and the cowl, instrument panel, windshield, or any other surface.

3. The steering components may not be loose, worn, or binding and steering stops shall be adjusted so the tire does not rub at any point. The steering wheel lash may not exceed that found in 49 CFR 393.209(b).

4. The power steering system shall not leak nor, shall the drive belt be cracked, frayed or worn.

5. Check for secure steering wheel attachment.

\*\* OOS if steering wheel is not properly secured. (393.209(a))

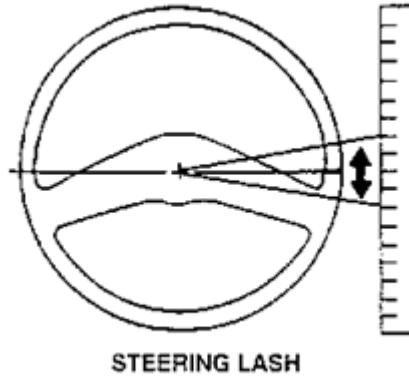
6. Check steering wheel clearance from wheel to cowl.

\*\* OOS if steering wheel to cowl clearance is less than 1 ¾ inches.

7. Check steering wheel lash. With road wheels in straight ahead position, turn steering wheel in one direction just until the steering motion can be observed at the road wheels. Mark steering wheel position. Now turn steering wheel in opposite direction just until steering motion can again be detected at the road wheels. Mark second position. Compare measurements to those listed in defective chart. With power steering systems the engine must be running to perform this test.

Steering Wheel lash: (393.209(d))

Wheel Size	Defect	Manual OOS	Defect	Power OOS
16" or less	2" +	4 1/2"	4 1/2"	6 3/4"
18"	2 1/4"	4 3/4"	4 3/4"	7 1/8"
19"	2 3/8"	5"	5"	7 1/2"
20"	2 1/2"	5 1/4"	5 1/4"	7 7/8"
21"	2 5/8"	5 1/2"	5 5/8"	8 1/4"
22"	2 3/4"	5 3/4"	5 3/4"	8 5/8"



8. Check steering stops by moving the steering wheel from right to left through the full range of steering movement.

**\*\* OOS if any modification or other condition that interferes with the free movement of any steering component. (393.209(d))**

9. Inspect steering column for any looseness in bolts, clamps, positioning parts or universal joints. Check general condition.

**\*\*OOS if any absence or looseness of U-bolts or other positioning parts. (393.209(c))**

**\*\*OOS if any worn, faulty, or obviously repair-welded universal joints.**

10. Inspect steering gear box, pitman arm, connecting rod, ball and socket joints, tie rod, drag links, front axle beam and all steering components.

**A. Front Axle Beam and Other Steering Components**

**\*\*OOS if any cracks. (396.3(a)(1))**

**\*\*OOS if any obvious welded repairs. (396.3(a)(1))**

**\*\*OOS if steering stop is broken or missing permitting tire to rub on frame or other component. (393.209(d))**

**B. Steering Gear Box**

**\*\* OOS if any mounting bolts are loose or missing. (393.209(d))**

**\*\* OOS if any cracks in gearbox or mounting brackets. (393.209(d))**

**\*\* OOS if any obvious weld repair. (396.3(a)(1))**

**\*\* OOS if any looseness of the yoke-coupling to the steering gear input shaft. (393.209(d))**

**C. Pitman Arm**

**\*\*OOS if any looseness of the pitman arm to steering gear output shaft. (393.209(d))**

**\*\*OOS if any obvious welded repair. (393.209(d))**

#### D. Ball and Socket Joints

\*\*OOS if any movement under steering loads of a stud nut. (393.209(d))

\*\*OOS if any motion, other than rotational, between any linkage member and its attachment point of more than 1/8 inch when measured with hand pressure only (Also observe movement while steering is be rocked if practical) (rev.11-25-98) (393.209(d))

\*\*OOS if any obvious welded repair. (393.209(d))

#### E. Tie Rods, Connecting Rods, and Drag Links

\*\*OOS if any loose clamps or clamp bolts or any looseness in any threaded joint. (396.3(a)(1))

11. Inspect power steering belts for proper tension and condition.

12. Inspect power steering system including hoses, hose connections, cylinders, valves, pump and pump mounting for condition, rubbing and leaks.

\*\*OOS if cylinders, valves or pump show evidence of leakage (i.e. dripping or obvious fluid loss).

\*\*OOS if pump mounting parts are broken or loose. (393.209(e))

\*\* OOS if any auxiliary power assist cylinder is loose. (393.209(e))

\*\* OOS if hose, hose connection, or seals are leaking.

13. Inspect power steering reservoir for fluid level at operating temperature.

\*\*OOS if reservoir is empty.

### **BELTS – TRANS 309.03(5q)**

1. Inspect condition of belts.

\*\* OOS Any missing, broken, contaminated by oil or improperly adjusted.

### **SUSPENSION SYSTEM – TRANS 309.03(5r)**

1. The suspension system shall comply with the requirements in 49 CFR 393.207. The ambulance shall be equipped with front and rear shock absorbers.

A. The shock absorbers shall be maintained free of leaks and all mountings shall be in good working order.

2. An ambulance shall not be operated with any broken spring leaf or worn, loose, dislocated shackles or "U" bolts.

3. If air suspension present, check all components of air ride suspension.

\*\* OOS if deflated air suspension.

4. If liquid suspension present, check all components of liquid spring suspension.

\*\* OOS if deflated liquid suspension.

5. Inspect for broken or sagging springs.

\*\* OOS if any spring leaves in a leaf spring assembly are broken, or any center bolt is broken, loose or missing. (393.207(c))

\*\* OOS if one or more leaves are displaced in such a manner that it could result in contact with a tire, rim, brake drum, or frame. (393.207(c))

\*\* OOS if any coil spring is broken. (393.207(d))

\*\* OOS if any rubber spring is missing. (393.207(a))

6. Inspect spring hanger brackets and shackles, spring assembly center bolts, "U" bolts, clips, and other attaching parts.

\*\* OOS if any U-bolt or other spring to axle clamp bolt is cracked, broken, loose, or missing. (393.207(a))

\*\* OOS if a broken torsion bar in torsion bar suspension. (393.207(e))

\*\* OOS if any spring hanger, other axle positioning part or spring attaching part is cracked, broken, loose or missing resulting in shifting of an axle from its normal position. (393.207(a))

7. Inspect shock absorbers and mountings for oil leakage, condition of bushings and attachments.

\*\*OOS if the shock absorbers are loose, broken, or missing.

### **GROSS VEHICLE WEIGHT RATING – TRANS 309.03(5s)**

\*\* OOS if Ambulance is over the GVWR

### **GROSS AXLE WEIGHT RATING – TRANS 309.03(5t)**

\*\* OOS if an Ambulance axle is over the GAWR

### **KNOWINGLY RESISTS OR OBSTRUCTS INSPECTOR –TRANS 309.03(6)**

\*\*The vehicle shall be rendered out of service and the provider may be assessed monetary penalties when the provider knowingly resists or obstructs the inspector while the inspector is doing any act in an official capacity and with lawful authority.

-For purposes of this subsection, "obstructs" includes, without limitation, knowingly giving or demonstrating false information to the inspector.

### **PENALTIES – TRANS 309.03(7)**

The penalty for violating sub. (5) (a) to (h) or (j) to (t) is a forfeiture of up to \$50.00 per violation. The penalty for violating sub. (5) (i) is a forfeiture of up to \$100.00. The penalty for violating sub. (6) is a forfeiture of up to \$200.00.

### **NOTIFICATION AFTER AMBULANCE IS INVOLVED IN A CRASH – TRANS 309.03(8)**

The ambulance service provider shall notify the inspector as soon as possible if an ambulance is involved in a motor vehicle crash which involves serious injury or death.

If an ambulance is being placed back into service after being involved in a crash, the ambulance service shall notify the inspector and shall provide proof of the repairs in writing before being placed back into service.

### **ENFORCEMENT POLICY TRANS - 309.03(9)**

The department shall consider the age, condition, and equipment of ambulances before granting approval for their continued use. The department shall not permit the use of any ambulance for emergency medical purposes which is deemed to be unsafe or unfit for such service.

In construing and enforcing the provisions of this chapter, the act, omission or failure of any officer, agent, servant or other person acting for or employed by the registered owner or the lessee of the ambulance is deemed to be the act, omission or failure of such registered owner or lessee. This paragraph does not apply to violations of ch. 346, Stats.