# Payson Fire Department Standard Operating Procedures

Section: General

Subject: Vehicle Inspections | Date Adopted: 2/98

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## **PURPOSE**

The purpose of this policy is to specify the minimum vehicle safety inspection criterion for the Payson Fire Department.

## **POLICY**

All PFD vehicles will be inspected in compliance with U.S. Department of Transportation Federal Motor Carrier Safety Regulations, part 393 - Parts and Accessories necessary for safe operation, and part 396 Inspections, Repair and Maintenance.

## **PROCEDURE**

All Payson Fire Department officers, engineers, drivers, agents, representatives, and employees who operate town vehicles will systematically inspect and maintain all motor vehicle subject to its control.

- 1. VEHICLE INSPECTION REPORT: Before driving a motor vehicle, the driver shall:
  - a. Review the last vehicle inspection report required to be carried in the vehicle,
  - b. The on duty crew shall complete an inspection report in writing at the beginning of every shift for the front-line vehicles and at least once per week on vehicles that are not regularly staffed,
  - c. The inspection report shall document inspection and proper operation of:
  - Service brakes
  - Parking brakes
  - Steering mechanism
  - Lighting devices and reflectors
  - Tires
  - Wheels and rims
  - Horn and siren
  - Windshield and windshield wipers
  - Rear vision mirrors
  - Emergency equipment,
  - d. Be satisfied that the motor vehicle is in safe operating condition,
  - e. Note any and all deficiencies; sign the report if the vehicle is safe to operate,
  - f. If the vehicle is not safe to be driven an "**OUT OF SERVICE**" sign will be placed on the vehicle and that vehicle will not be driven until repairs are made. (All out of service criteria will be found in the Federal Motor Carrier Safety Regulations Appendix G Subchapter B-Minimum Periodic Inspection Standards),

- g. Prior to operating a motor vehicle, the Town of Payson, town employees or their agents shall effect repairs of any items listed on the vehicle inspection report that would be likely to affect the safe operation of that vehicle,
- h. The Town of Payson or their agent (s) shall verify in writing on the report which list any defect(s) or deficiency that the defect(s) or deficiency has been corrected or that correction is unnecessary before the vehicle is to be operated,
- i. The Town of Payson shall retain the original copy of each vehicle inspection report and all documentation of repairs for at least 3 months from the date the report was prepared, and
- j. A legible copy of the last 7 vehicle inspection reports shall be carried on the vehicle.
- 2. DEFICIENCIES: A vehicle does not pass inspection if it has one or more of the following defects or deficiencies:

## **Brake system:**

#### Service Brakes:

- a. Absent of braking action on any axle required to have brakes upon application of the service brakes (such as missing brakes or brake—shoe failing to move upon application of a wedge, Scam, or disc brake) Missing or broken mechanical components including brake shoes, lining pads, springs, anchor pins, spiders, cam rollers, push rods, and air chamber mounting bolts.
- b. Loose brake components including air chambers, spiders, and cam shaft support brackets.
- c. audible air leak at brake chamber.
- d. Any brake 1/4" past the readjustment limit or any two brakes less than 1/4" beyond the readjustment limit shall be fail inspection. Stroke shall be measured with the wheels chocked, engine off and reservoir pressure not less than 90 psi with brakes fully applied.
- e. Brake linings or pads saturated with oil, grease, or brake fluid.
- f. Missing brakes on any axle required to have brakes.
- g. Mismatched air chambers or slack adjusters across any power unit steering axle.
- h. Brake drums or rotors with any external crack that opens upon brake application (do not confuse short hairline heat cracks with flexural cracks).

## Parking Brakes:

- a. No brakes on the vehicle are applied upon actuation of the parking brake.
- b. Parking brake will not hold vehicle on a grade of less than 7%

#### Brake Hose:

- a. Hose with any damage extending through the outer reinforcement ply. (Rubber impregnated fabric cover is not a reinforcement ply)
- b. Bulging or swelling when air pressure is applied.
- c. Any audible air leaks when service or parking brakes are applied.

- d. Two air hoses improperly joined together.
- e. Air hose cracked, broken or crimped.

# Low pressure Warning Device

a. Missing, inoperative, or low pressure warning device will not operate at 55 psi or below.

Hydraulic Brakes (Including power assist over hydraulic)

- a. Master cylinder less than 1/4 full.
- b. No pedal reserve with engine running except by pumping the brake pedal.
- c. Power assist unit fails to operate.
- d. Swelling or bulging brake lines or hose under pressure.
- e. Missing or inoperative check valves.
- f. Has any visually observed leaking hydraulic fluid in the brake system.
- g. Fluid lines or connections leaking, crimped, cracked, or broken.
- h. Brake failure or low fluid warning light on or inoperative.

## **Exhaust System:**

- a. Any exhaust system determined to be leaking at a point forward of or directly below the crew cab.
- b.No part of the exhaust system of any motor vehicle shall be located as to cause burning or charring, or damage to the electrical system, fuel system or any combustible part of a vehicle.

## **Fuel System:**

- a. Fuel system with a visible leak at any point.
- b. Fuel tank filler cap missing.
- c. Fuel tank not securely attached to the motor vehicle by reason of loose, broken, or missing mounting bolts or brackets.

## Lighting devices:

a. All lighting devices and reflectors required shall be operable.

# Steering Mechanism:

## Steering column

- a. Any missing or looseness of U-bolt or positioning parts.
- b. Worn, faulty or obviously repair welded universal joint.

# Front Axle Beam and Steering Components

a. Any crack.

b. Any welded repair.

# Steering Gear Box

- a. Any mounting bolts loose or missing.
- b. Any crack in gear box or mounting brackets.

#### Pitman Arm

a. Any looseness of the pitman arm on the steering gear output shaft.

# **Power Steering**

a. Auxiliary power assist cylinders loose.

## **Ball and Socket Joints**

- a. Any movement under steering load of a stud nut.
- b. Any motion, other than rotational, between any linkage member and its attachment point of more than 1/4".

# Tie Rods and Drag Links

- a. Loose clamps or clamp bolts on tie rods or drag links.
- b. Any looseness in a threaded joint.

#### Nuts

a. Loose or missing nuts on tie rod ends, drag links, pitman arms, steering arms or tie rod arms.

## Suspension:

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

## Spring Assembly

- a. Any leaves in a leaf spring assembly broken or missing. Coil spring broken.
- b. Rubber spring missing.
- c. One or more leaves displaced in a manner that could result in contact with a tire, rim, brake drum or frame.
- d. Broken tension bar spring in a torsion bar suspension.
- e. Deflated air suspension, system failure, leak, etc.

#### Frame:

- a. Any cracked, broken, loose, or sagging frame member.
- a. Any loose or missing fasteners including fasteners attaching functional component such as engine, transmission, steering box, suspension, and body parts.

## Tires:

# Tires on any steering axle

- a. A tread depth less than 4/32" when measured at any point in a major tread groove.
- b. Has body ply or belt material exposed through the tread or sidewall.
- c. Has any tread or sidewall separation.
- d. Has a cut or crack where the ply or belt material is exposed.
- e. Tires labeled "Not for Highway Use" or other markings that would exclude use on a steering axle.
- f. A tube type radial tire without a radial tube.
- g. Mixing bias and radial tires on the same axle.
- h. Tire flap protrudes through valve slot in rim and touches stem.
- i. Weight carried exceeds tire load limit.
- j. Tire is flat or has a noticeable leak.
- k. Any vehicle with recapped tires on a steering axle.

# All non steering axle tires

- a. A tread depth less than 2/32" when measured at any point in a major tread groove.
- b. Has body ply or belt material exposed through the tread or sidewall.
- c. Has any tread or sidewall separation.
- d. Has a cut or crack where the ply or belt material is exposed.
- e. Tires labeled "Not for Highway Use" or other markings that would exclude use on the highway.
- f. A tube type radial tire without a radial tube.
- g. Mixing bias and radial tires on the same axle.
- h. Tire flap protrudes through valve slot in rim and touches stem.
- i. Weight carried exceeds tire load limit.
- j. Tire is flat or has a noticeable leak.

## Wheels and Rims:

- a. Lock or side rings bent, broken, improperly seated, sprung or mismatched ring.
- b. Wheels or rims cracked, broken or elongated bolt holes.

- c. Any loose, missing, broken, cracked, stripped or otherwise ineffective fasteners.
- d. Any cracks in welds attaching disc wheel to rim.
- e. Any weld repair on aluminum or steel wheel on the steering axle.

# Windshield Glazing:

- a. Any discoloration or vision reducing matter
- c. Any damage area larger than 3/4" in diameter.
- d. Any damaged area with in 3" of other damaged areas.

# Windshield Wipers:

a. Any vehicle that has an inoperative wiper, missing, or damage parts that render it ineffective in inclement weather.