# **Packer Truck Inspection Procedure**

Packer Truck Rental

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# **Purpose:**

The Code of Federal Regulations can be found in the <u>Federal Motor Carrier Safety Regulations Handbook</u>. Every attempt has been made to include all items found during a safety inspection, however, due to different body styles, some items may not be identified in this manual. Any defects or deficiencies found during the inspection should be repaired to meet or exceed Original Equipment Manufacturer (OEM) Standards.

# **Drivers Compartment:**

# Driver's Seat and Seat Belts. CFR 393.93, Reject if:

- a. Seat is loose or will not hold adjustments
- b. Seat belts are missing or damaged

# Driver Controls. CFR 393.209J. Reject if:

- a. Steering wheel is loose or binds
- b. Steering wheel has a spoke cracked through or missing
- **C.** Steering wheel lash exceeds the following parameters:

Steering Wheel	Manual Steering System	Power Steering
Diameter		System
16" or less	2" +	41/4" +
18"	2 1/4"+	43/4" +
19"	2 3/8"+	5" +
20"	2 1/2"+	5 1/4"+
21"	2 5/8"+	5 ½"+
22"	23/4"+	53/4"+

- d. Steering column is not securely fastened
- **e.** Parking brake does not comply with <u>CFR 393.41</u>
- f. Telescopic steering column does not lock into position
- g. Tilt steering column does not lock in at least one position
- h. Power steering will not turn wheels through its full range with standard O.E.M effort (lock to lock) while vehicle is motionless and idling.
- i. Horn does not operate properly CFR 393.81

# Accelerator, Clutch and Brake pedal. CFR 396.3(a)(1), Reject if:

- a. Pedals stick, bind, or fail to return
- b. Power booster for hydraulic brake system fails to operate. (Pump brake pedal to exhaust power assist supply and start engine with foot on brake pedal checking for power boost operation)
- C. Power steering pump hydraulic brake assist fails to operate as designed
- **d.** Electric motor brake booster fails to activate when key is in off position or as designed.

# Windshield. CFR 393.60(c).i. Reject if:

- a. Glass is other than approved safety glass
- b. Any non-transparent material obstructs or impairs driver's clear view of highway or any intersecting highway
- C. Stone chips larger than a 25 cent piece are present within the wiper sweep area on the driver's side
- d. Cracks extend above the height of the steering wheel or are more than 2" from the top or 1" from a side
- **e.** Any windshield defect that could damage a windshield wiper blade
- f. Any accessories are located more than 4" from the top of the wiper sweep area

# Windshield wipers and washer operation. CFR 393.78.i. Reject if:

- a. Windshield wipers do not operate as specified by the manufacturer or 45 cycles per minute
- b. Wiper blades are torn, smear or streak windshield
- C. Wipers do not clear windshield of washer fluid after 5 strokes
- d. Washers do not operate

# Mirrors. CFR 393.80.1. Reject if:

- a. There is not one at each side located to reflect to the driver a clear vision of the highway
- b. The glass is fogged, cracked or missing
- C. Missing a convex type mirror on right side

#### Heaters and defrosters. Reject if:

- **a.** Defroster and blower are not capable of working as designed <u>CFR 393.79</u>
- b. Heater cores are leaking coolant
- C. Heaters do not conform to CFR 393.77

#### Brake Warning devices and gauges CFR 393.51:

#### **Hydraulic Brakes:**

- **a.** A warning signal, audible or visible, fails to operate before or upon application of the brakes in the event of a complete failure of a partial system
- b. Inoperative antilock brake system on any vehicle built after March 1, 1999, unless equipped when manufactured at an earlier date. <u>CFR393.55</u>

#### Air Brakes:

- **a.** A warning signal, audible and visible, fails to operate continuously whenever the pressure of the compressed air is below a specified pressure, which must be at least one-half of the compressor governor cutout pressure
- b. The pressure gauge indicating the pounds per square inch (psi) or kilopascals (kPa) available for braking is missing, inoperative or inaccurate
- **C.** Antilock brakes are inoperative on any commercial vehicle built after March 1, 1998, unless equipped when manufactured at an earlier date. CFR 393.55(c)(2)

# Hydraulic Brakes Applied or Assisted By Air or Vacuum: CFR393.51

a. A warning signal, audible or visible, fails to operate continuously whenever the pressure or vacuum does not meet the requirements listed above

# **Passenger Compartment:**

# Lighting. CFR 393.11 Reject if:

- a. Step lights do not operate or bulb protection lens or lenses missing
- b. Aisle or under seat lighting does not operate if so equipped
- C. Restroom "low intensity" light inoperative
- d. Restroom emergency indicator inoperative, if so equipped

#### Flooring. CFR 393.84 Reject if:

- a. Floor damage allowing road debris or exhaust to enter interior compartment
- b. Any carpet or molding could cause trip hazard
- **C.** Oil or grease accumulation on a traction surface
- d. Flooring or Step structure is not sufficient to support weight

#### Seating. CFR 393.91 Reject if:

- a. Torn upholstery that exposes sharp metal or springs
- b. Seating is not securely attached
- C. Adjustment mechanisms are not operating properly
- **d.** Perform seating verification. (14 inches of lateral measurement is equal to one seat, allowing for 7 inches of leg room at corners per CFR 571.10.)

#### Windows. Reject if:

- a. Separated, cracked or shattered glass is exposed to passengers
- b. Window tinting that exceeds specifications defined under the Michigan Vehicle Code being Public Act 300 for driver's windows
- **C.** Glazing is other than a type specified in CFR 393.60

# **Doors.** <u>CFR 396.3(a) (1)</u> Reject if:

- a. Missing or unable to stay closed
- b. Door cannot operate properly

#### **Exterior:**

# Lighting. CFR 393.11 Reject if any fail to operate or are dim or lack the proper color lens:

- a. Headlamps, hi and low beams
- b. Turn signal lamps
- c. Identification and clearance lamps for vehicles over 80" wide
- d. One back up lamp
- e. License plate lamp
- f. Tail lamps
- g. Side marker lamps
- h. Center marker lamps if over 30' in length (does not have to operate with turn signals.)
- i. Hazard warning flashing lamps
- j. Stop lamps including 3 brake lamp if equipped

# Reflectors. CFR 393.11 Reject if missing or lack the proper color:

- a. Rear
- b. Front Side
- C. Rear side
- d. Center (if over 30' in length)
- e. Not marked with letters SAE or DOT

#### Tires. CFR 393.75 Reject if:

- a. Any tire, other than a steering axle, with less than 2/32 inches of treadwhen measured at any point on a major groove
- b. Any tire on a steering axle with less than 4/32 inch tread when measured at any point on a major tread groove
- c. Any part of ply, belt, or cord is exposed
- d. There is any bump, bulge or separation
- e. Tire is marked "not for highway use" or any similar designation
- f. Any other conditions or markings believed to render the tire as unsafe
- g. Front tire is retreaded, recapped or re-grooved
- h. Any tire has been re-grooved or recut below original tread design depth, except tires which are identified as having extra under tread rubber
- i. Tires used on same axle are not same size or type of construction (Mixed bias, belted, radial or snow)
- i. Tire is flat or has an audible leak
- k. Any tire carries a greater weight than is specified on the tire
- I. Any tire is not properly inflated

#### Wheels and Attachments. CFR 393.205 Reject if:

- a. Wheels or rims are cracked or broken
- b. Stud or bolt holes are elongated
- **C.** Nuts or bolts are missing or loose
- d. No visible or measurable amount of lubricant showing in hub
- **e.** Any wheel carries a greater weight than is specified on the wheel

#### Fuel Tank Filler and Cap. CFR 393.65 thru CFR 393.69 Reject if:

- a. Cap is not present
- b. Cap does not fit or seal is missing or damaged
- **C.** Fill pipe opening is located inside passenger or cargo compartment
- d. Fuel can spill onto exhaust or electrical system

# Battery compartment. CFR 393.30 Reject if:

- a. Battery cables are loose, worn or frayed
- b. Accessory feeds and wiring are not overload protected
- C. Battery is cracked or leaking
- d. Battery is not protected from terminals shorting out by excess movement (Hold Downs)
- **e.** Unsuitable insulated protection to electrical components <u>CFR 393.28</u>

### Engine Compartment. <a href="#">CFR 396.3</a> Reject if:

- a. Oil, fuel or coolant lines or hoses are leaking or damaged
- b. Drive belts are cracked, frayed, oil soaked, or damaged
- C. Power steering system leaks (CFR 393.209(e))
- d. Throttle will not return properly or springs are missing and worn
- **e.** Motor mounts are broken or worn to allow excessive movement
- f. Master cylinder fluid level is less than ¾ full
- g. Brake fluid reservoir is leaking or damaged
- h. Brake fluid is contaminated
- i. Any visual leak from an electrical component such as an alternator, auxiliary heater, etc.
- j. Any electrical cable insulation that is chafed, frayed, damaged or burnt and causing bare cable to be exposed

#### Bumpers. Reject if: CFR 393.203

- a. Bumper is not firmly attached to frame or chassis
- b. Bumper is not within 30 inches above a level ground
- C. Bumper is less than 18 inches from the widest part of the bus
- d. Bumper extends beyond the widest part of the vehicle

# Body. CFR 393.203 Reject if:

- **a.** Vehicle is not free of any deformations arising from a collision, crash or other impact, excepting minor dents and blemishes
- b. Structural integrity of the body panels including floor, sides and other portions of the outer shell are not sturdy, rigid and complete

#### **Underbody:**

#### Suspension. CFR 393.207 Reject if:

- a. Axle positioning part is cracked, broken, loose or missing
- b. Axle is not in proper alignment
- C. Leaf spring is cracked, broken, missing or shifted out of position
- d. Coil spring is cracked or broken
- **e.** Torsion bar or system is cracked or broken
- f. Air system is worn, damaged or leakage is greater than 3 psi in a 5 minute period
- **g.** Air is allowed into suspension system before at least 55 psi is in the braking system.
- h. Air suspensions must be level when in operation (not tilting to left or right)
- i. Rubber Shear Spring (Mor/ryde) has a tear across the spring over 3" wide and more than ¼" deep

## Steering. CFR 393.209 Reject if:

- a. Steering universal joints are worn, faulty or repaired by welding
- b. Steering gear box is loose or missing mounting bolts
- C. Steering gear box or mounting bracket is cracked
- d. Pitman arm on the steering gear is loose
- **e.** Power steering will not turn wheels through its full range with standard O.E.M effort (lock to lock) while vehicle is motionless and idling
- f. There is any movement under steering load of a stud nut
- **g.** Any motion, other than rotational, between any linkage member and its attachment point
- h. Loose clamp or clamp bolt on tie rod or drag link
- 1. Linkage components are not secured with proper pins or devices
- j. Power steering leaks
- **k.** Any movement in a ball joint other than rotational while suspension is supported by a floor jack, hoist, or jack stand.

#### Brakes. CFR 393.40 Reject if:

- a. Air or hydraulic leaks are present
- b. Any brake part is missing, excessively worn, loose or broken
- C. There is no braking action at any wheel
- **d.** Any brake hose or tubing that is leaking, restricted, deteriorated, insecurely fastened or retained, improperly joined or damaged
- e. Any brake hose or tubing contacts a wheel, tire, steering component or frame
- f. Brake lining is broken, not firmly attached to shoe, contaminated with oil, fluid or grease
- g. Brake drum is scored greater than .060 inches
- h. Brake drum that has a thickness less than the minimum stamped on the assembly or as stated by the manufacturer
- i. Brake drum that is broken or has a crack extending to an open edge
- j. Air drum brake lining thickness is less than 1/4 inches at shoe center
- k. Hydraulic or electric drum brake lining thickness is less than 1/16 inches at shoe center
- I. Disc brake lining is less than 1/8 inches at thinnest point
- m. There is a mismatch of air chamber sizes or slack adjuster lengths
- n. Automatic Slack Adjusters missing from a vehicle built after 10/20/1994
- O. Evidence of metal to metal contact to a rotor
- p. Evidence of rusted or discolored rotor surface or cracked to the edge
- **q.** Any wheel seal is leaking that shows evidence of contamination to the braking surfaces
- r. Any automatic slack adjuster is out of adjustment

# Frame and cross members. CFR 393.201 Reject if:

- a. Frame is cracked, loose, sagging or broken
- b. Holes have been drilled in the top or bottom rail flanges, except as specified by the manufacturer
- **C.** Frame components are missing, cracked, rust holes, broken, loose or in deteriorated condition
- d. Body support components are missing, cracked, rust holes, broken, loose or in deteriorated condition

# Drive Shaft. CFR 393.89 Reject if:

- a. Universal joints, Slip joints, or carrier bearings show excessive wear
- b. Shaft safety guard(s)/Loops are missing or ineffective

### Exhaust System. CFR 393.83 Reject if:

- **a.** Any part of the system is temporarily repaired with wrap or patches
- b. There are holes, cracks, loose or leaking seams
- **C.** A muffler cutout or similar device is present
- **d.** Any part of the system passes through the passenger compartment
- **e.** System is not securely fastened with proper clamps and hangers
- f. Exposed system does not have adequate heat shields to protect electrical wiring, fuel supply, suspension components or other combustible parts of the vehicle from damage
- **g.** Exhaust discharges immediately below the fuel tank or fuel filler pipe
- h. Exhaust discharges at or more than 6 inches forward of the rearmost part of a bus powered by a gasoline engine
- i. Exhaust discharges at or more than 15 inches forward of the rearmost part of the bus or to the rear of all doors or windows designed to be opened, except emergency exits, on a bus powered by fuels other than gasoline

#### Fuel System. CFR 393.65 thru CFR 393.69 Reject if:

- a. There is fuel leakage at any point in any system
- b. Any part of the fuel system is not securely fastened
- **C.** Any fuel tank or line not specifically designed or manufactured in accordance with FMCSA 393 Subpart E
- d. Any fuel line is contacting high temperature surfaces or moving parts
- **e.** Fuel tank or line intrudes into or above any driver or passenger compartment
- f. Any part of the fuel tank is forward of the front axle
- **g.** Any part of the system extends beyond the widest part of the bus