

# **Proactive Methods and Tools for CMV Readiness**

**Tuesday, April 15  
12:30 – 1:30 p.m.**

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**Unit # 209144 (sample)**

**Class:** 33                    **Plow #:** 209145  
**Wing #:** 209146    **Sander #:** 209147  
**Antifreeze:** yellow  
**Power steering:** power steering fluid  
**Engine oil wgt.:** 15W40  
**Transmission:** ATF (red)  
**Front hubs:** 50W synthetic  
**PTO:** 75W90 synthetic  
**Lug nut torque:** 450 dry, 500 wet  
**Hydraulic:** standard (red)  
**Differential:** 75W90 synthetic  
**Grease:** chassis (red or black)  
**Special grease:** none  
**Tires:** (size, load range, air pressure)  
- Front axle: 315/80Rx22.5, L, 130  
- Rear axle(s): 11Rx24.5, G, 100  
**Brakes:** (maximum stroke)  
- Front: 2" - Rear: 2 ½"



**1000 - Mile Service Record  
Class 33/35**

(non-plow CMVs @ 4000 miles)



Unit #: \_\_\_\_\_

Date: \_\_\_\_\_

Mileage: \_\_\_\_\_

= Checked/OK/complete

NA= not applicable

= not OK/defect/problem

- Review Operator/Service Manuals
- Review Operator's Vehicle Inspection Report for defects/problems
- Review Unit Data Sheet
- Conduct a **THOROUGH** pre-trip vehicle inspection (FMCSR 396)

**Fluids/Lubricants:** (FMCSR 393)

- Windshield washer fluid level
- Antifreeze level and strength
- Power steering fluid level
- Engine oil level
- Transmission fluid level (hot)
- PTO pump fluid level
- Front hub lubricant level
- Hydraulic fluid level
- Differential(s) lubricant level
- Grease chassis, box, and all components (wing, sander, etc.)

**Brakes:** (FMCSR 393)

- Spring brake operation
- ABS warning light indicator
- Low air pressure warnings activate at \_\_\_\_\_ p.s.i.
  - Buzzer
  - Light
- Governor cut out p.s.i.: \_\_\_\_\_ (should be 105-135 p.s.i.)
- Governor cut in p.s.i.: \_\_\_\_\_ (never less than 80 p.s.i.) (difference between cut in and cut out should not exceed 25-30 p.s.i.)
- Compressor air pressure build time from 85 to 100 p.s.i. \_\_\_\_\_ (must be 2 minutes or less with engine idling at 600 to 900 r.p.m.)
- Brake linings (pads) (no less than 1/4 inch remaining)

Brake push rod stroke:

(maximum inches of travel with 100 p.s.i. full application of foot brake)

- #2 axle driver side: \_\_\_\_\_
- #2 axle passenger side: \_\_\_\_\_
- #3 axle driver side: \_\_\_\_\_
- #3 axle passenger side: \_\_\_\_\_
- #1 axle driver side: \_\_\_\_\_
- #1 axle passenger side: \_\_\_\_\_
- Air tanks: drain moisture (wet tank first), check for excessive water or oil

**Other:** (FMCSR 393, 396)

- Tire pressures: check with gauge
- Check tires for tread depth, cuts, bulges, nails, etc.
- Check all lug nuts with torque wrench
- Exhaust system: damage, leaks
- Air cleaner restriction
- Battery: water level, corrosion
- Clean cab interior and windows
- Brake pins: free up and lube
- Fuel water separator (drain if needed)
- Air dryer heating element connection
- Breathers: PTO, AT, differentials
- Write Unit Service Request, if needed
- Write Unit Service Report for oil change or other service

**Comments:**

**Unit serviced by:**

(legible signatures; print name also)

1. \_\_\_\_\_

2. \_\_\_\_\_



# **INSTRUCTIONS**

## **3134 - 1000 Mile Service Record**

The 1000-Mile Service Record is to be provided to Operators, via their Supervisor, with these basic instructions:

- a. Complete a 1000-Mile Service Record at each service.
- b. Make a photocopy and place it with the Operator's Vehicle Inspection Report in the pocket provided on the drivers' door of each truck.
- c. Place the original in an office file accessible by Operators (in case they lose the truck copy, another can be easily made and re-placed in the truck).
- d. If the 1000-mile service interval is missed due to Snow and Ice or other emergency, a new 1000-Mile Service Record is to be used at the 1000-mile interval, or on the pre-trip closest to 1000 mile interval, completing the brake section only.
- e. Continue according to d. above, completing a complete brake check and new form every 1000 miles, or on the pre-trip closest to 1000 miles, until the unit is able to be scheduled for service – which the Supervisor will do as soon as feasible after the snow and ice or other priority event.
- f. If a form is lost and no copy is readily available, the operator will perform a complete brake check, which should include measuring the brakes, before taking a CMV on the road.



# Pre-Trip Brake Inspection Guide

## Shop Air Brake System Inspection

**Emergency Brakes** (Spring brakes) - are activated by pulling out the Parking Brake Control on the dash. Pulling it out will release the air from the Spring Brake System on the rear axle of the truck. With out air in the system, the spring will expand, thereby moving the push rod. This will then apply the brakes. Pushing in the Parking Brake Control will fill the system with air pressure, collapsing the spring, which releases the brakes and allows the truck to roll or move freely.

**Service Brakes** – are activated by depressing the service brake pedal. When the brake pedal is pushed, air pressure is sent to all brake foundations. The air pressure moves the diaphragms and in turn moves the push rods and s-cams, applying the brake pads to the brake drum. Releasing the service brake pedal allows air to escape from the brake foundations, releasing the brakes, which allows the truck to roll or move freely.

### ***Sequence for air brake system check:***

#### **In the Shop**

- ? Air up system to maximum p.s.i. (100-120 p.s.i.) using shop air, then disconnect shop air.
- ? With the system at rest, check for 2 p.s.i. air loss rate for one minute.
- ? Release the parking brake and apply the service brake - check 3 p.s.i. air loss rate for one minute.
- ? If the system is working properly, fill out the pre-trip inspection paper work and turn it in.
- ? Start engine and gently move the vehicle to test service brake.
- ? Drive the truck outside.

#### **Outside - The truck must be on level ground**

- ? While moving, apply foot pedal to test the service brake. Feel for steering pull to either side.
- ? Stop the truck and shut the engine off. Turn the key to the “on” position and pump the service brake pedal; check low air warning signals.
- ? Turn the key “Off” and continue to pump service brake until parking brake valve applies (pops out).
- ? Start the engine, put transmission in low gear and gently try to move the vehicle. If the vehicle doesn’t move, the parking (emergency) brakes are working. (On 2006 or newer vehicles, it may be necessary to move the truck and apply emergency brake at 3-5 m.p.h.)

? Allow the air system to reach maximum p.s.i. and continue on your way.