Picture Process Map (PPM) Air Brakes System Check (AZ/MD)



February 2024

PURPOSE

This Picture Process Map (PPM) aims to provide Goodwill Transportation Drivers with a guide for daily inspections, such as a system check. This ensures that the air brake system functions correctly, which is essential for the vehicle's safe operation, especially when towing a trailer. Malfunctions or failures in the system can lead to accidents, particularly when hauling heavy loads.

GLOSSARY

Air pressure gauge- allows the driver to monitor the air pressure to ensure it remains within safe and operational limits

Emergency brakes- safety feature designed to activate in case of a separation between the trailer and the towing vehicle while in motion

Governor cut out pressure- full pressure reading for your vehicle

LABPS- stands for leaks, alarms, button pops out, parking brakes, and service brakes

Air Brakes System Check

- 1. Check for leaks and do the following:
 - a. Apply the foot brake.
 - b. Release the parking brake.
 - c. Turn the engine off.
 - d. Watch the air pressure gauge and listen for air leaks.



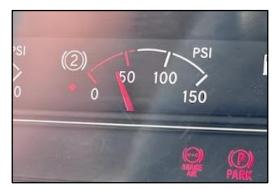




Air Brakes System Check

- Turn the key on to start the engine and pump the brake pedal to lower the vehicle's air pressure. The low air alarm should come on before the pressure drops to 60 psi.
- Continue pumping the brake pedal until the brake buttons pop out, engaging the emergency brakes. This should happen when the air pressure drops between 20 and 45 psi.
- 4. Restart the engine and build the air pressure back up to maximum.
 - a. The pressure should rise from 85 to 100 psi within 45 seconds with the engine running at operating RPMs.
 - b. Make sure that the air dryer and governor cut out at the same pressure as they did when you first checked them during the inspection.







Air Brakes System Check

- 5. Attempt to move the vehicle once the air pressure is back to normal.
 - a. Keep the buttons in the out position.
 - b. Put the vehicle in low gear and gently tug forward. This will check the emergency and parking brakes.

Important Note: If the parking brakes are not holding and the vehicle can still move, do not use the vehicle and immediately report it to your supervisor.

6. Release the parking brakes and make sure the vehicle rolls freely.



