



# MAINTENANCE INFORMATION

MI22-12

 DATE:
 November 2022
 SECTION: 12 BRAKE & PNEUMATIC

 SUBJECT:
 AIR TANKS DRAINING SEQUENCE

First Release

11-02-2022

# APPLICATION

Model	VIN			
ALL PREVOST VEHICLES				

## DESCRIPTION

It is very important to drain the air tanks in the proper order to confirm the various check valves and safety valves are functioning properly.

# IMPORTANT NOTICE

This procedure provides guidelines on how to drain air tanks. However, please note that this procedure is not a substitute for similar documents issued by your federal, state, or provincial transportation authority.

# SAFETY PRECAUTIONS

- Eye protection should always be worn when working in a shop.
- Rules for Personal Protection Equipment should always be respected. Wear your PPE including but not limited to the following:



# PROCEDURE



# DANGER

Park vehicle safely, apply parking brake, stop the engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button. On Commuter type vehicles, set the battery master switch (master cut-out) to the OFF position.

Lockout & Tag out (LOTO) must be performed during set-up, maintenance or repair activities. Refer to your local procedure for detailed information regarding the control of hazardous energy.



FIGURE 1: AIR TANKS LOCATION - REAR END



FIGURE 2: AIR TANKS LOCATION – FRONT END

Perform the following air tanks draining sequence.

#### NOTE

All air tanks are provided with a bottom drain valve.

- 1. Raise the vehicle from under the axles or use the chassis hoisting points as the drive axle wheels must remain free to turn. Refer to MI18-18 GENERAL HOISTING AND TOWING PROCEDURES.
- 2. Start the engine and allow enough time to fill all the air tanks to full pressure (between 120 psi and 140 psi max).
- 3. Shut down the engine.
- 4. Drain the **Wet** tank and then close the drain valve. Confirm the Accessory pressure gauge value is above 65 psi.



FIGURE 3: ACCESSORY PRESSURE GAUGE IN DRIVER INFORMATION DISPLAY

5. Confirm Primary and Secondary pressure gauges indicate <u>full pressure</u>, that is above 120 psi.



FIGURE 4: SECONDARY SYSTEM AIR PRESSURE GAUGE - FRONT BRAKES



FIGURE 5: PRIMARY SYSTEM AIR PRESSURE GAUGE - REAR BRAKES

- 6. Drain the **Accessory** tank and then close the drain valve. The Accessory pressure gauge should indicate 0 psi.
- 7. Confirm Primary and Secondary pressure gauges still indicate full pressure, that is above 120 psi.
- 8. Drain the **Primary** tank and then close the drain valve. Confirm Secondary pressure gauge indicate full pressure, that is above 120 psi.
- 9. Drive axle brake test (with secondary system pressurized only): With <u>park brake released</u>, confirm the spring brake engages (modulated) when service brake pedal is depressed. Ask a colleague to validate that the drive axle wheels cannot be turned by hand when service brake pedal is depressed.

- 10. Drain the **Secondary** tank and then close the drain valve. All pressure gauges should indicate 0 psi.
- 11. Start the engine. Confirm the *low air pressure indicator LED* on the Primary & Secondary pressure gauge illuminates and the audible alarm sounds. Confirm the air compressor builds pressure on all tanks until the compressor disengages at full pressure. Visual and audible warnings should turn off.

The Accessory pressure gauge should remain at 0 psi until Primary and Secondary pressure gauges reach 70 psi.

- 12. Shut down the engine.
- 13. **Air leak test**. Depress the service brake pedal and hold for 60 seconds. The air pressure drop should not exceed 3 psi per minute (3 psi / 60 sec).

To use this test, select *Air Leakage Monitor* in *Pre-Trip Assistance* menu on your Driver Information Display and follow the instructions displayed.

F	Pre-Trip Assistant	1/3
	Exterior Lamp Inspection Air Leakage Monitor	
		21348.6

14. Test the emergency spring brake application. Release the parking brake. Pump the service brake pedal to drop the Primary & Secondary tank air pressure. The *Low Air Pressure* alarm should sound at 75 psi (prescribed pressure may be lower on older vehicles). The parking brake valve should pop out at 60 psi (prescribed pressure may be lower on older vehicles). This confirms the activation of the emergency spring brakes.

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Allow air pressure to reach 95 psi before releasing the parking brake.

### PARTS / WASTE DISPOSAL

Discard according to applicable environmental regulations (Municipal/State [Prov.]/ Federal)



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