



Reliability Driven™

Service Bulletin No. 3090

MODEL J4500 Series Coaches w/ Disc Brakes–ADB22X	TYPE Service Information	SECTION/GROUP 4 – Brakes and Air System	DATE Nov. 16, 2015
SUBJECT OPERATIONAL CHECK OF AIR BRAKE SYSTEM WITH DISC BRAKES – ADB22X			
CONDITIONS Service Information Only			

Description:

The following procedure outlines the operational checks for the primary and secondary brake system and the park brake automatic actuation operation on J4500 series coaches equipped with ZF axles and ADB22X disc brakes.

NOTICE

MCI J4500 coaches have an emergency park brake air tank that is isolated from the service brake air tanks. The primary and secondary air gauges monitor only the service brake tanks.

Service Procedure:

WARNING

Read this entire procedure before beginning work.

Use Safe Shop Practices At All Times.

NOTICE

This vehicle configuration can be identified as having spring brake chambers with two air lines on the drive axle and two park brake valves located in the driver's area as shown in Figure 1. The park brake valve (Item 1 in Figure 1) is used to apply and release the park brake under normal operating conditions. The emergency park brake release valve (Item 2 in Figure 1) is used in the event there is a sudden loss of air in the service brake air system below 45 psi, which would actuate the park brake system. If the emergency park brake release valve is pressed and held by the driver, the system then applies air to the park brake system, allowing the operator to move the coach to the side of the road, if required.

1. Apply park brake.
2. Chock both sides of the tires.
3. Press the MASTER POWER SWITCH to the ON position, but do not engage the ENGINE START SWITCH.
4. Using the service brake foot valve, make several applications until the air pressure gauge on the dash reads below 80 psi on both needles.
5. Start the coach. Allow the air system pressure to reach governor cut-out. Turn the engine OFF.



Figure 1. Lower, LH console.

<u>ITEM</u>	<u>DESCRIPTION</u>
1	Park brake valve
2	Emergency park brake release valve

6. Press the MASTER POWER SWITCH to the ON position, but do not engage the ENGINE START SWITCH.
7. Monitor the pressure gauges on the dash for any air system leakage. Repair any leaks.
8. Release the park brakes. The brakes on the drive axle will release.
9. Apply service brake valve. The brakes on all axles will engage.



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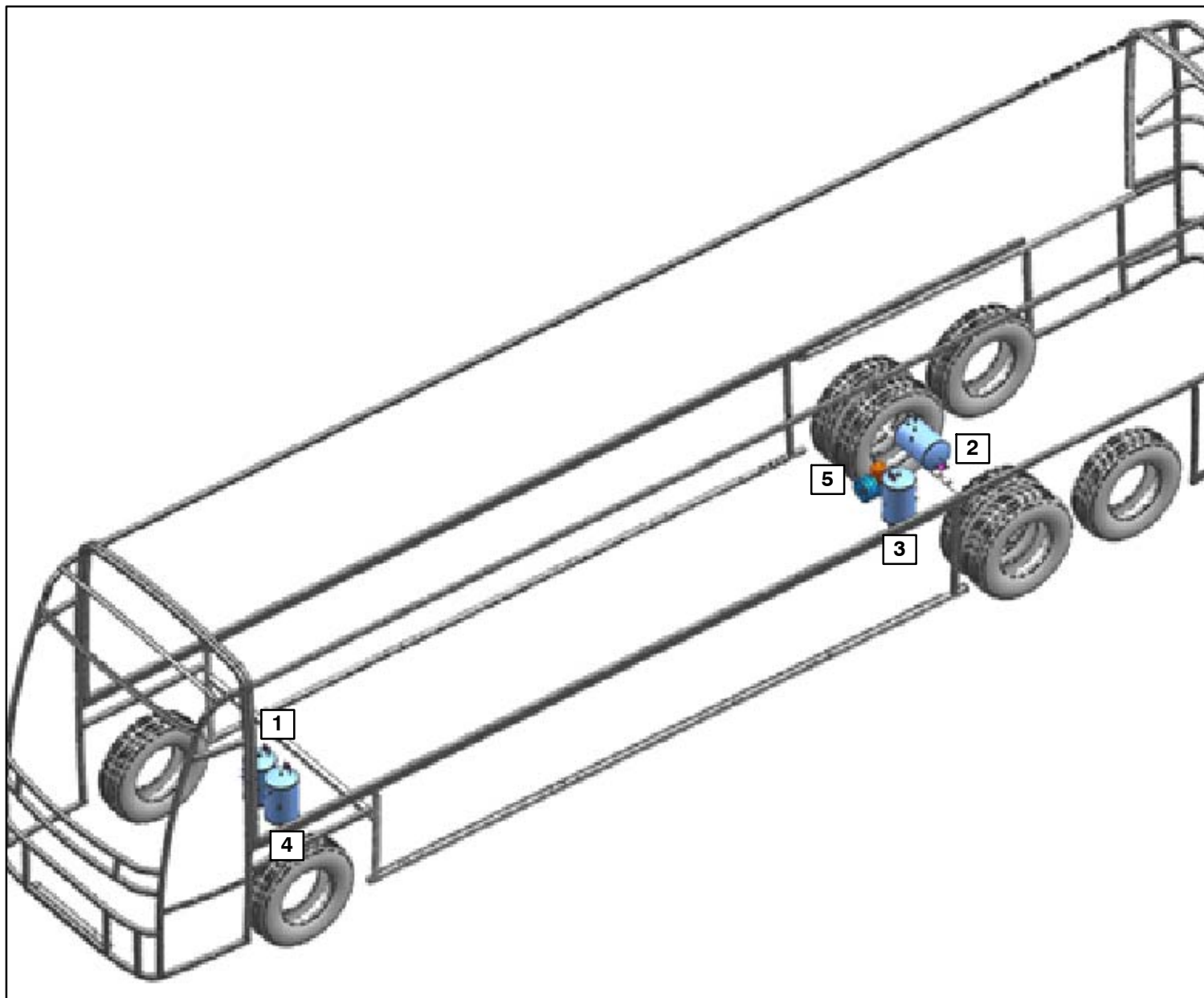


Figure 2. Air tank identification.

<u>ITEM</u>	<u>DESCRIPTION</u>
1	Front accessory air tank
2	Rear accessory air tank
3	Primary air tank
4	Secondary air tank
5	Air dryer



10. Exhaust, by pulling the ring on the primary service air tank located in front of the drive axle. The air pressure of the primary gauge in the driver's area will indicate the loss of air pressure.
11. Apply the service brake valve. The front and drive axle brakes will engage.
12. With the primary service air tank still without air pressure, exhaust the secondary air tank located on the roadside, behind the front axle. When the air pressure in the brake system drops below a nominal 45 psi, the park brake valve (Item 1 in Figure 1) will automatically actuate and the brakes on the drive axle will engage.
13. With no air pressure in the primary and secondary air tanks from Step 12, apply and hold down the emergency park brake release valve (Item 2 in Figure 1). The brakes on the drive axle will release. When the force holding down the emergency park break release valve is removed, the air in the system will exhaust and the drive axle brakes will engage.

NOTICE

There should be enough air to allow three park brake overrides before the system is exhausted.

14. To check the secondary brake system, start the coach and build up the air pressure to air governor cutout. Turn the engine OFF.
15. Press the MASTER POWER SWITCH to the ON position, but do not engage the ENGINE START SWITCH.
16. Release the park brakes.
17. Drain the secondary service reservoir.
18. Apply the service brake valve. The drive and tag axle brakes will engage.
19. Start the engine and bring the air pressure to air governor.

Procedure complete.