



INSTRUCTION TO SERVICE

ITS-61549		02/03/2026
SECTION:	246 - Air, Brake & Levelling System	
SUBJECT:	Inspection for and elimination of moisture in the air system. (Haldex dryer)	
ISSUE:	Programming error in PLC program prevented the compressor discharge cooling line and air dryer from purging.	
SUMMARY:	Change desiccant cartridges, drain air tanks and blow dry air through the system, check for moisture in brake valves.	

ITS-61549

Ref. NHTSA Recall No.	Ref. Transport Canada Recall No.
Not Applicable	Not Applicable

THIS ITS DOCUMENT SHOULD BE RETAINED AND REFERRED TO FOR FUTURE MAINTENANCE UNTIL THE NEW FLYER PARTS AND/OR SERVICE MANUAL IS UPDATED TO REFLECT WORK DONE AS A RESULT OF THIS DOCUMENT. ENSURE THAT THIS DOCUMENT IS AVAILABLE FOR PARTS AND MAINTENANCE STAFF GOING FORWARD.



PROCEDURE:

1. Set park brake and chock wheels.
2. Turn the main battery disconnect switch to the “OFF” position. Lock and tag the switch.
3. Turn the HV disconnect switch to the “OFF” position.
4. Locate the purge tank located on the streetside of the air compressor. Open the drain on the bottom of the purge tank to drain any accumulated moisture.
5. Locate the two drain valves at the lower apron of the bus ahead of the curbside rear wheels to drain any accumulated moisture.
6. Locate the two drain valves and the auto-drain located on the streetside ahead of the front wheel. Open the drain valves to drain any accumulated moisture. Push the manual drain button on the auto-drain valve to drain any accumulated moisture from the wet tank.
7. Using the charging line at the front or rear of the bus, connect the bus to clean, dry shop air and allow shop air to blow through the air system to push moisture in the tanks out through the air tank drains. Blow air through the system for at least 5 min.
8. Close the purge tank drain.
9. Close the rear tank drain.
10. Close the front tank drain.
11. Close the kneeling tank drain.
12. Close the accessory tank drain.
13. Disconnect shop air.
14. Locate the air dryer at the streetside of the bus ahead of the rear wheels. The dryer must be removed to change the desiccant Cartridges.
 - a. Ensure that the air tanks have been drained and the battery switch is in the “OFF” position.
 - b. Raise the vehicle.
 - c. Disconnect the air lines from the air dryer manifolds and disconnect the inlet line to the Cansep oil/water separator.
 - d. Disconnect the electrical connector for both air dryer heater elements.
 - e. Disconnect the electrical connector for the oil/water separator.
 - f. Support the air dryer assembly and remove the mounting fasteners.
 - g. Lower the air dryer assembly from the vehicle.
15. Install new desiccant cartridges NF P/N 6320544 (NYCT P/N 86-33-0300) on the air dryer.
 - a. Ensure air pressure is zero psi in the air system.
 - b. Clean and remove all debris around the cartridge cannister.
 - c. Remove the four retaining bolts from the retaining collar.
 - d. Lift the cartridge canister away from the dryer base.

- e. Inspect and remove any debris from the dryer base and use compressed air to remove any moisture buildup. Discard old o-rings and clean sealing surface.
- f. Ensure that the protective cap for the safety valve housing is not damaged. If cap is off, snap cap back into place.
- g. Flip cartridge canister upside down. Rotate desiccant cartridge 45° and remove from canister.
- h. Install desiccant cartridge into canister and rotate 45° to secure the cartridge to the canister.
- i. Apply silicone-based grease to o-rings NF P/N 5945362
- j. Install replacement nut and plastic locking pins.
- k. Install cartridge canister with retaining collar on dryer base.
- l. Reinstall the four retaining collar bolts and torque the bolts to 32 – 35 Ft-Lbs (43 – 47 Nm) using a cross pattern.

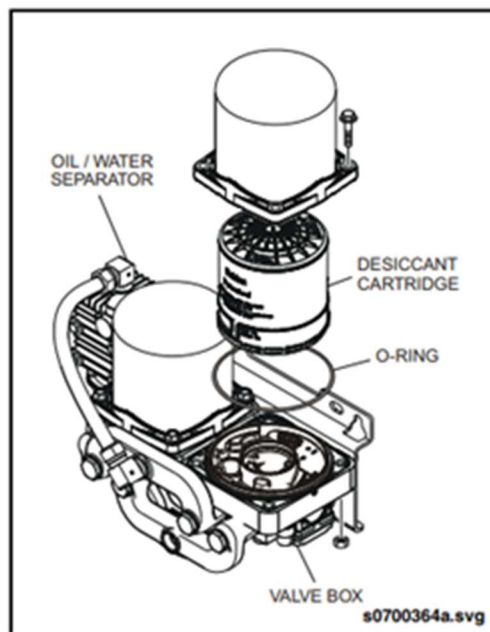


Figure 1: Air Dryer Desiccant Cartridge.

16. Drain the concept oil/water separator unit on the air dryer.
17. Re-install the air dryer assembly in the vehicle.
 - a. Using appropriate lifting equipment, raise the air dryer into the vehicle and align the air dryer assembly with the vehicle mounting bracket and install the mounting fasteners.
 - b. Torque the ½” bolts to 63 Ft-Lbs (85 Nm).
 - c. Apply Loctite 243 NF P/N 081034 and torque the 5/16” bolts to 15 Ft-Lbs (20 Nm).
 - d. Install the nuts and washers to secure the bracket in place. Torque the nuts to 63 Ft-Lbs (85 Nm).
 - e. Connect the electrical connectors on both air dryer heater elements.
 - f. Connect the electrical connectors for the Consep oil/water separator.

- g. Reconnect the air lines to the oil water separator and air dryer manifold.
18. Locate the discharge valve at the air dryer end of the copper cooling line on the air compressor discharge.
 - a. Remove the muffler on the purge valve. If it is saturated with moisture it should be replaced. NF P/N 599210.
 - b. Disconnect and remove the discharge valve and allow any moisture accumulated in the copper cooling line to drain.
 - c. Disconnect the signal line and allow any moisture to drain.
 - d. Blow shop air through the discharge valve to remove moisture then reinstall the discharge valve, signal line and muffler.
19. Using the charge air connection, charge the air system.
20. Remove the mufflers on the R14 and SR-7 valves and inspect them for moisture. If they are saturated they can be replaced with new muffler NF P/N 6420097.
21. Make several service brake applications and observe whether the brakes apply and release smoothly. If they do not or if any excessive moisture is exhausted from the R14 valve and the R14 valve appears contaminated with excessive moisture it should be removed and replaced with a new R14 valve NF P/N 758193 or rebuilt valve.
22. Make several parking brake applications and observe whether the parking brakes apply and release smoothly. If they do not or if excessive moisture is exhausted from the SR7 valve or the SR-7 valve appears contaminated with excessive moisture it should be replaced with a new SR-7 valve NF P/N 758194.
23. Open the dump valves at the front and rear doors and observe if any moisture is exhausted. If notable moisture is seen, exercise the doors several times using the driver's control and the door dump valves to remove moisture.
24. Apply and release the brake interlock several times to check for function. Check to see if any moisture is exhausted at the tow connector.
 - a. If the interlock does not apply and release smoothly and excessive moisture is seen at the tow connector, the BVA and the E6 valve may be contaminated with moisture and should be removed and inspected. Corroded BVA valves should be replaced with a new BVA valve NF P/N 477422 and corroded or damaged E6 valves should be replaced with a new E6 valve NF P/N 5948304.
25. Kneel and raise the bus several times to check the function of the kneeling system and blow out any moisture that may be present. Check to see if any excessive moisture is exhausted from the kneeling block during kneeling.
26. Disconnect the shop air.
27. Check the air compressor to see if there are any oil leaks and check the oil level note if the level is low and by how much for reference.
28. Perform an oil and filter change on the compressor according to the procedure in the Service Manual.
29. Turn the HV disconnect switch to the "ON" position.



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30. Remove the lock and tag and switch the main battery disconnect switch to the "ON" position
31. Remove all tools and debris from work area to return coach to service.



LABOUR ESTIMATE

	Operation	Number of Technician(s)	Hours	Labor Time T X HR
1	Change air dryer desiccant filters, dry and inspect air system.	1	7.5	7.5

PARTS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
1	6320544	DESICCANT CARTRIDGE	2	EA	
2	6498117	SERVICE KIT-1000 HOURS	1	EA	
3	5945362	LUBRICANT – SILICONE COMPOUND	0.01	EA	
4	081034	LOCTITE - 243 MEDIUM 10 ML	0.01	EA	
5	758194	VALVE-SR7 SPRING BRAKE MUFFLER	1	EA	If Required
6	758193	VALVE-R14 RELAY 5.5 PSI MUFFLER	1	EA	If Required
7	5948304	VALVE (E6)	1	EA	If Required
8	477422	VALVE-BRAKE ACTUATOR 85 PSI	1	EA	If Required
9	599210	MUFFLER-1/4 NPT	1	EA	If Required
10	6420097	SILENCER/MUFFLER-VALVES	2	EA	If Required

SPECIAL TOOLS REQUIRED

Item	Part Number	Description	Qty.	Units	Notes
1		No Special Tools Required			