



Maintenance Directive

Date November 6, 2024	To All General Managers All Deputy General Managers All Assistant General Managers All General Superintendents, Maintenance All Concerned	Environmental Waste Streams	MD# 60-59-13
		Item: N/A	Rev. 5
		Classification: N/A	Job# 92580

From Daniel Cardoza, VP/Chief Maintenance Officer, NYCT DOB and MTA Bus Co.

Subject COLD WEATHER PROCEDURES

REVISION INDEX				
(Complete Revision Index on last page of this document)				
DATE REVISED	REV. NO.	DESCRIPTION OF REVISION	PAGE NO. AFFECTED	APPROVED
11/06/24	5	Updated bus range for New Flyer XE-40s. Added instructions for outdoor pantograph charging.	ALL	

This directive supersedes all previously issued guidelines on this subject. For buses parked outdoors, (except the New Flyer Electric Buses # 4950 - 5024), the cold weather procedures are as follows:

- At temperatures between **24°F and 10°F**: Run **all buses** at fast idle a maximum of **30 minutes every 4 hours**.
- At temperatures below **10°F**: Run **all buses** at fast idle a maximum of **30 minutes every 3 hours**.

NOTE: All New Flyer buses, (except the New Flyer Electric Buses # 4950 -5024), and all 2015 and newer Nova buses are equipped with a fast idle shutdown feature: when the bus is in “front run” and the ambient temperature is **below 25°F**, the engine **shuts down after 30 minutes** of fast idling. After 30 minutes, run switch should be turned off to avoid battery drain.

▲ ADDITIONAL INSTRUCTIONS FOR ELECTRIC BUSES # 4950-5024, ONLY

Outdoor Plug-In Charging

1. All electric buses parked outdoors overnight shall be plugged in to a charger, regardless of state of charge (SOC).
2. Once the bus is in CHARGE MODE, turn the climate control “ON”
3. Buses should be checked every 2-4 hours to ensure they are still charging, the interiors are getting warm, and there are no charger screen or dash alarms.
4. Bus shall remain on the charger until just before dispatch for service.





Outdoor Overhead (Pantograph) Charging

1. All electric buses parked outdoors overnight shall be connected to a charger, regardless of state of charge (SOC).
2. Start Bus, turn the climate control “ON” and front defroster “MED”.
3. Turn up “Charge Enable” to begin charging.
4. Buses should be checked every 2-4 hours to ensure they are still charging, the interiors are getting warm, and there are no charger screen or dash alarms.
5. Bus shall remain on the charger until just before dispatch for service.

The above additional steps will heat up the cabin loop, ESS loop and warm up the ESS using energy supplied by the charger, giving the bus maximum stored energy for use in service.

The non-reimbursable tracking number for this work is Job # 92580.

NOTE: The idle running times for ambient temperature below 25°F are based on NYSDEC Regulation 217-3.

COMPLETE REVISION INDEX				
DATE REVISED	REV. NO.	DESCRIPTION OF REVISION	PAGE NO. AFFECTED	APPROVED
11/07/16	1	Revise document to reflect buses with Air Starters	ALL	
11/01/21	2	Added newer bus fleet fast idle programmed logic and removed references to obsolete fleets. Added additional instructions for electric buses.	ALL	
11/07/22	3	Changed date for application to 2022-23 Winter.	ALL	
11/7/23	4	Changed date for application to 2023-24 Winter. Added 2023 New Flyer XE-40s. Updated CP/CMO’s title.	ALL	
11/06/24	5	Updated bus range for New Flyer XE-40s. Added instructions for outdoor pantograph charging.	ALL	