

Part 573 Safety Recall Report

24V-092

Manufacturer Name : Vicinity Motor Corporation

Submission Date : FEB 08, 2024

NHTSA Recall No. : 24V-092

Manufacturer Recall No. : CA-000-051



Manufacturer Information :

Manufacturer Name : Vicinity Motor Corporation

Address : 3168 - 262nd Street

Aldergrove 00 V4W 2Z6

Company phone : 1-604-607-4000

Population :

Number of potentially involved : 14

Estimated percentage with defect : 70 %

Vehicle Information :

Vehicle 1 : 2022-2022 Vicinity Vi35

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : CNG/LPG

Descriptive Information : Vicinity Motor Corporation (formerly Grande West Transportation) has become aware of a fault possibly affecting a total of 14 Class 6 Vicinity Vi35 CNG buses. These vehicles were produced in 2022. This issue pertains to the Type III CNG tanks and supporting mounting structure found on the Vi35 CNG buses. It is identified as CA-000-051 in all internal and customer-facing documentation.

The affected vehicles have the following last six (6) digits in their VINs:

098624-098637

It is estimated around 70% of the 14 units have this defect.

The nature of the defect is related to insufficient clearance between the Type III CNG tanks and the mounting structure. Due to manufacturing variances, some CNG tanks may come in contact with the mounting structure, thus abrading the carbon fiber layers near the neck. In addition to this, the CNG clamshell safety cables have also been found to be contacting and abrading the carbon fiber layers of the tank. Sustained abrasion on the CNG tanks can lead to a deterioration of the tank structure, significantly heightening the risk of failure. This defect poses a potential threat to the safety of both drivers and passengers, as a compromised CNG tank may result in hazardous situations, such as leaks or ruptures.

Vicinity Motor Corporation is working on composing and arranging on-site field repairs.

Production Dates : JAN 01, 2022 - DEC 31, 2022

VIN Range 1 : Begin : 2G9B35BA3NA098624 **End :** 2G9B35BA1NA098637 Not sequential

Description of Defect :

Description of the Defect : On certain transit buses, the compressed natural gas (CNG) tanks could rub against the mounting structure and/or safety cables. As a result, the tanks could become damaged and rupture.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : A CNG tank rupture can create a risk of an explosion or fire.

Description of the Cause : The root cause of this issue is improper clearance between the CNG cylinder and the mounting structure. In addition, the safety cables may come in contact with the CNG tank and abrade the outer carbon fiber layers.

Identification of Any Warning that can Occur : During periodic inspections of the CNG tanks, the inspector may be able to identify scratches and abrasion marks on the CNG cylinders near the mounting structure and the safety cables.

Involved Components :

Component Name 1 : CNG Mounting Bracket

Component Description : CNG Mounting Bracket

Component Part Number : NR

Component Name 2 : CNG Tank Clamshell Safety Cables

Component Description : CNG Tank Clamshell Safety Cables

Component Part Number : NR

Component Name 3 : Type III CNG Cylinder

Component Description : Type III CNG Cylinder

Component Part Number : NR

Supplier Identification :

Component Manufacturer

Name : Vicinity Motor Corporation

Address : 3168 262 St

Aldergrove Foreign States V4W 2Z6

Country : Canada

Chronology :

Monday, October 16, 2023

VMC Team's meeting with customer. Customer raised concerns about CNG tank showing signs of rubbing.

Wednesday, October 18, 2023

VMC Engineering visits local customer experiencing issue to obtain data.

Thursday, October 19, 2023

VMC commenced working on interim fix for CNG tank.

Tuesday, October 31, 2023

CNG Fuel Tank Discussion between customer and VMC.

Friday, November 3, 2023

VMC attends meeting with CNG tank supplier (Luxfer) to obtain information on how to identify faulty CNG tanks.

Monday, November 6, 2023

VMC attends meeting with CNG tank supplier (Luxfer) to further discuss repair methods.

Tuesday, November 7, 2023

VMC attends meeting with CNG tank supplier (Luxfer) to obtain information on approved repair methods.

Friday, November 17, 2023

VMC updates customer with additional findings on possible root causes.

Thursday, November 23, 2023

CNG Cradle Re Work Meeting between VMC and customer.

Friday, December 1, 2023

CNG Cradle Adjustment Meeting between VMC and customer.

Thursday, December 7, 2023

VMC Engineering visits customer on Vancouver Island to further investigate issue regarding cradle adjustments.

Friday, December 15, 2023

CNG Updates Meeting - Internal VMC Meeting

Tuesday, January 9, 2024

VMC Engineering informs Transport Canada of defect and acquires Transport Canada recall number.

Wednesday, January 31, 2024

VMC Engineering informs NHTSA of defect and acquires NHTSA recall number for Vi33 Models.

Thursday, February 8, 2024

VMC Engineering informs NHTSA of defect and acquires NHTSA recall number for Vi35 Models.

Description of Remedy :

Description of Remedy Program : Vicinity Motor Corporation will notify owners in writing and arrange for a service team to inspect the affected units. As an interim solution for the issue regarding the interference between the CNG tanks and the supporting member, if possible, adjust the mounting structure until an updated replacement member is manufactured. If adjustment is not possible, units must be grounded, and put out of service until the updated replacement member becomes available. Customers will be notified once the replacement member is available. All affected units must have this part replaced.

A finalized solution is available for the issue involving the safety cables contacting the CNG tanks. Depending on the severity of the damage, the CNG tanks can be either repaired or replaced if necessary.

Reimbursement and Remedy costs have been covered, and will continue to be covered under warranty to rectify this issue.

How Remedy Component Differs from Recalled Component : Once available, the revised CNG mounting structure will offer more clearance between the CNG tanks and the structure, thus preventing future incidences of interference and contact.

To prevent further damage from the safety cables, a protective rubber shield must be installed as well, as outlined in the Campaign documentation (CA-000-051).

Identify How/When Recall Condition was Corrected in Production : Corrective actions have been communicated with our manufacturing partners. Final confirmation steps were added to predelivery inspections (PDI) to ensure that the corrective action have been implemented.

Recall Schedule :

Description of Recall Schedule : Owner's and dealerships will be notified by end of February 2024.

Planned Dealer Notification Date : FEB 09, 2024 - FEB 29, 2024

Planned Owner Notification Date : FEB 09, 2024 - FEB 29, 2024

* NR - Not Reported