

## **WORK INSTRUCTIONS**

## **SUBJECT**

Nikola Safety Recall # 23VDC0301; NHTSA Recall # 23V-249 Park Valve Module Replacement

**Issue Date:** 5/8/2023

# APPLICABLE MODELS / VINS

**Model:** 2022 - 2024 Tre BEV

VINs: 1N9ABB1A6N2393001 thru 1N9ABB1A5N2393040

1N9APB1A4N2393001 thru 1N9APB1A2N2393188 1N9APB1A0P2393189 thru 1N9APB1AXP2393264 1N9APB1A8R2393265 thru 1N9APB1A9R2393324

### **OVERVIEW**

The Bendix Intellipark Park Valve Module (PVM) may intermittently become stuck in the un-parked position and may not transition from un-parked to parked when the Park Switch is pulled on the vehicle dashboard.

PARTS REQUIRED		
Qty.	Part No.	Description
1	PN01358487 or PN01358489	Park Valve Module
COMMENTS		

N/A

## LABOR INFORMATION

Labor Operation: Park Valve Module Replacement

Labor Code: 12-502730100

Labor Time: 0.5 Hours

## **DISPOSITION INFORMATION**

Return the removed PVM to:

**Coolidge Quarantine Inventory** 

**Nikola Corporation** 

**680 East Houser Road** 

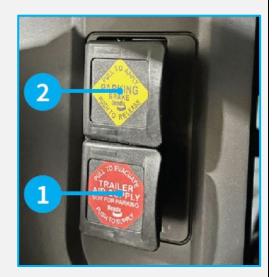
Coolidge, AZ 85128

PSW-WI-TBR0001 Page | 1



# **Brake Air System Bleed**

- 1. Place wheel chocks on the truck's tag axle wheels.
- 2. Fan the truck brakes as follows:
  - a. If a trailer is connected, pull the Trailer Air Supply Brake switch (1) to evacuate its air and apply/set the trailer brakes.
  - b. Push in the Truck Parking Brake switch (2) to release the parking brakes.



c. Pump the brake pedal until the system air pressure drops to under **60 psi (413.7 kPa)**.

**Note:** The "BRAKE" telltale lamp/warning message will appear, and air pressure gauge color will change to RED on the cluster display.







# WORK INSTRUCTIONS

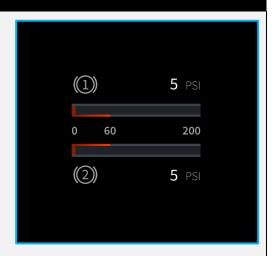
# **PROCEDURE**

d. Continue to pump the brake pedal until the system air pressure drops below **5 psi** (**34.5 kPa**).

**Note:** The "BRAKE" telltale lamp/warning message will continue to appear, and an audible alert will sound.



e. Without pressing the brake pedal, press the START / STOP button once to transition the truck into the OFF mode.







# Parking Brake Valve Module Removal

1. Use the manual battery disconnect (MBD) to disconnect the vehicle's electrical system.



2. Locate the PVM (1) at the rear of the truck, installed above the E-axle.



3. Remove the four air hoses (1) from the PVM.

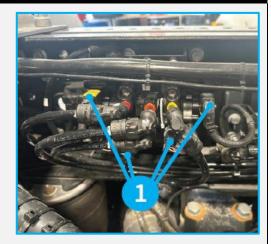
**Note:** Mark the air hoses for ease of installation.



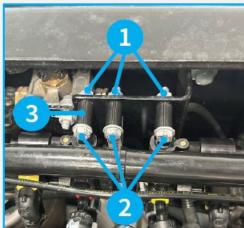


4. Remove the four electrical connectors (1) from the PVM.

**Note:** Mark the electrical connectors for ease of installation.



- 5. Remove the three nuts (1) from the three bolts (2).
- 6. Remove the three bolts (2) from the PVM (3).
- 7. Remove the PVM (3) from the truck.



8. Locate the label (2) and record the serial number from the removed PVM (1).

Note: The serial number will be a five-digit number (A) found on the label (2)





9. Record the vehicle mileage.



# **Parking Brake Valve Module Installation**

1. Check and make sure the PVM (1) being installed has a cable tie (2) installed as seen in the figure.

Note: Do not remove the cable tie. The cable tie identifies the newly updated PVM.



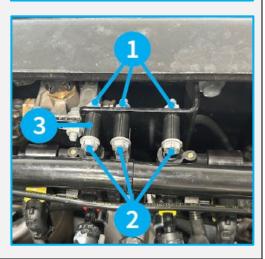
2. Locate the label (2) and record the serial number from the new PVM (1).

Note: The serial number will be a five-digit number (A) found on the label (2)





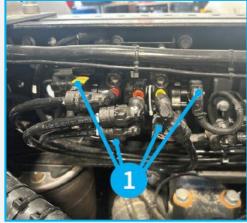
- 3. Position the PVM (3) into place on the truck.
- 4. Install the three bolts (2) into the PVM (3).
- 5. Install the three nuts (1) onto the three bolts (2).
- 6. Use a torque wrench to torque the three bolts (2) to 175 ± 25 lb-in (20 ± 3 N·m).





7. Install the four electrical connectors (1) to the PVM.

Note: Make sure the four electrical connectors are installed in the correct location as marked during removal.





8. Install the four air hoses (1) to the PVM.

**Note:** Make sure the four air hoses are installed in the correct location as marked during removal.





9. Use the MBD to reconnect the vehicle's electrical system.



10. While pressing the brake pedal, press the START / STOP button once to transition the truck into the ON / Standby mode.



- 11. Check the brake system air pressure as follows:
  - a. Allow the E-compressor to build initial air pressure to 179 ± 1 psi (1234 ± 6.9 kPa).

**Note:** Pressure will drop and hold at approximately 165 psi (1137.6 kPa). This is normal.

- b. Press the brake pedal and keep applying pressure for one minute.
- c. Check and make sure no more than 3 psi (20.7 kPa) have been lost.

### PROCEDURE IS COMPLETE