

Kim, Seong Hun

From: noreply@salesforce.com on behalf of California Air <mcertfees@arb.ca.gov>
Sent: Monday, June 16, 2025 11:17 AM
To: Kim, Seong Hun
Subject: [From: External] MS Fee Payment Confirmation for Invoice MSF241249
Attachments: MSF241249 - signed.pdf

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Seong Hun Kim

Attached is documentation for your MS Fee payment for Invoice Name MSF241249. Please include a copy of this invoice and email with each application that is listed when submitting your application to the applicable MS Fee program.

1. Payment ID – 24RA0393
2. Date of Payment – 6/10/2025
3. Payment Status - Paid



MOBILE SOURCE CERTIFICATION AND COMPLIANCE FEE PAYMENT FORM FOR ON-ROAD APPLICATIONS ONLY

CARB USE ONLY

Invoice Name	MSF241249
Invoice Date	May 19, 2025

COMPANY INFORMATION

Company Name	Volkswagen Group of America, Inc.
Address	3800 Hamlin Road
City	Auburn Hills
State	MI
Zip	48326
Country	United States
Contact Name	Seong Hun Kim
Contact Telephone Number	2489314347
Contact Email	sunny.kim@vw.com
CARB Customer Number	CCAM000085

APPLICATION INFORMATION

Payment Row Number	Product Description or File Name	Model Year/Calendar Year	Unique Application Identifier: Test Group, Engine Family, Trailer Family, Vehicle Family, ZEP Family, if applicable (ID listed in payment row must match the unique identifier given to the certification application)	Category Type	Fee Type	Amount
1	VW_Tiguan_LK1&2	Model Year 2026	TVGAJ02.0V3G	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 48,447.00
2	VW_ID.4 82 AWD	Model Year 2026	TVGAT00.0VZA	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,111.00
3	VW_ID.4 82 RWD	Model Year 2026	TVGAV00.0VZR	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,111.00
4	VW_ID.4 AWD	Model Year 2026	TVGAT00.0V8A	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,111.00
5	VW_ID.4 RWD	Model Year 2026	TVGAV00.0V8R	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,111.00
6	VW_ID.Buzz AWD 91	Model Year 2026	TVGAV00.0V9A	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,111.00
7	VW_ID.Buzz RWD 91	Model Year 2026	TVGAV00.0V9R	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,111.00
8	VW_ID.Buzz AWD 89	Model Year 2026	TVGAV00.0VSA	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,111.00
9	VW_ID.Buzz RWD 89	Model Year 2026	TVGAV00.0VSR	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,111.00

Total Due	\$ 145,335.00
------------------	---------------

I, Tony Dambrasi

Tony Dambrasi, May 01, 2021 11:04:03Z

(Responsible Party Signature Here)

_, attest that any information provided is true, accurate, and complete.



Volkswagen AG, a member of the Volkswagen Group

Application for Emissions Certification

2026 Model Year

Durability Group: TVGAEEVNNVZ2

Evap. Family: N/A

Test Group: TVGAV00.0V9R

Certificate Number: TVGAV00.0V9R-XXX

Test Group Description: BEV, Electric Drive

Battery Capacity (kWh): Li-Ion Battery capacity 91kWh
Nominal Voltage 382V

Applicable Exhaust Standards: 50 State
Federal: Tier 3 Bin 0
California: ZEV

Carlines Covered: ID. Buzz

Vehicles Tested: * EPA Confirmatory Test

VID	Config.	Test Type / #	Test Type / #
VN41S-14-0270	0	MCT - Mode D / SVGA10087118 *	MCT- Mode B / SVGA10086036

Issue Date:09/26/2025

Questions, Contact:
EEO Office, Auburn Hills, Michigan

Table of Contents

Section 01	Correspondence and Communications
Section 02	Durability Group Description
Section 03	Evaporative/Refueling Family Description
Section 04	Durability Procedure Description
Section 05	Test Group Description
Section 06	Test Vehicle Description
Section 07	Test Results
Section 08	Emission Testing Waiver Statements
Section 09	OBD System Description
Section 10	Description of Alternate-fueled Vehicles
Section 11	AECD Description
Section 12	Description of vehicles covered by certificate and test parameters
Section 13	Projected Sales
Section 14	Request for Certificate
Section 15	Other Information
Section 16	Confidential Information
Section 17	California ARB Information

1. Correspondence and Communication

Please refer to the Common Section

2. Durability Group Description

Not Applicable

3. Evaporative / Refueling Family Description

Not Applicable

4. Durability Procedure Description

Not Applicable

5.0 Test Group Description

Evap. Family:	N/A
Test Group Name:	TVGAV00.0V9R
Certificate Number:	TVGAV00.0V9R-XXX
Engine displacements covered:	Electric – 0.0
Arrangement and number of cylinders:	N/A
Vehicle class(es) covered:	LDV / PC
Federal Emissions Standards Class:	Tier 3 Bin 0
California Emissions Standards Class:	ZEV

5.1 Test Group Emission Standards

Not Applicable

6. Test Vehicle Description

Certificate Number: TVGAV00.0V9R-XXX
Models: ID. Buzz Pro S, ID. Buzz Pro S Plus
Test Group: TVGAV00.0V9R
Evaporative/Refueling Family: N/A

VID	Config.	Vehicle Type	Tests Performed
VN41S-14-0270	0	FEDV	MCT - Mode D , MCT - Mode B
VN41S-14-0270	0	FEDV	MCT - Mode D – EPA Confirmatory Test

7. Test Results

Please refer to the Certification Summary Information Report.

Certification Summary Information Report

Test Group		TVGAV00.0V9R			Evaporative/Refueling Family			--		
Models Covered by this Certificate										
Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup			
Volkswagen Group of America, Inc.	1 - Volkswagen	395 - ID. Buzz	California + CAA Section 177 states	2-Wheel Drive, Rear	Automatic	1	No			
Volkswagen Group of America, Inc.	1 - Volkswagen	395 - ID. Buzz	Federal	2-Wheel Drive, Rear	Automatic	1	No			
Engine Description										
Hybrid Type		--			Hybrid Description			--		
Engine Type		--			Mfr Engine Description			--		
Engine Block Arrangement		--			Mfr Engine Block Arrangement Description			--		
Camless Valvetrain Indicator		--			Oil Viscosity/Classification					
Number of Cylinders/Rotors		--			Mechanically Variable Compression Ratio Indicator			--		
After Treatment Device(s) (ATD)										
Mfr After Treatment Device (ATD) Comments		--								
Direct Ozone Reduction (DOR) Device		--								
Mfr Emission Control Device Comments		--								
Official Test Numbers										
Test Group Fuel	FTP	US06	SC03	Cold CO	Highway	EPA City Litmus Value	EPA City Litmus Threshold	EPA Highway Litmus Value	EPA Highway Litmus Threshold	CREE Weighting Factor
Electricity	--	--	--	--	--	--	--	--	--	--
SFTP LEV-III Official Test Numbers										
Test Group Fuel	FTP	US06	SC03							
Electricity	--	--	--							
Official Charge Depleting Test Numbers										
Test Group Fuel	UDDS	Highway								
Electricity	--	--								

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	--
Hybrid Electric Vehicle And Fuel Cell Information			
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if Other	--
Battery Type	Lithium Ion	Number of Battery Packs	1
Total Voltage of Battery Packs	382	Battery Energy Capacity	240
Battery Specific Energy	164.2	Battery Charger Type	Both
Number of Capacitors	--	Capacitor Rating (In Farads)	--
Mfr Capacitor Comments	--		
Hydraulic System Description	--		
Regenerative Braking Type	Electrical Regen Brake		
Regenerative Braking Source	Rear Wheels	Driver Controlled Regenerative Braking	Yes
Mfr Regenerative Braking Description	--		
Drive Motor(s)/Generator(s)	1		
Motor/Generator Type 1	Alternating Current / 3 phases	Rated Motor/Generator Power	210
Mfr Fuel Cell Description	--		
Fuel Cell On-Board H2 Storage Capacity (kg)	--	Usable H2 Fill Capacity (kg)	--
Mfr Hybrid Electric/ Electric Vehicle Comments	1 Battery Pack contains 13 Battery Modules, Battery Total Voltage = Nominal Voltage		

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	--						
Emission Data Vehicle Information									
Vehicle ID / Configuration	VN41S-14-0270 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	SVGAV00.0VZ2	Original Evaporative/Refueling Family	--						
Original Test Vehicle Model Year	2025								
Vehicle Model									
Represented Test Vehicle Make	Volkswagen	Represented Test Vehicle Model	ID. Buzz						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Electric Motor</td> <td>Electricity</td> </tr> </tbody> </table>				Drive Source and Fuel#	Drive Source	Fuel	1	Electric Motor	Electricity
Drive Source and Fuel#	Drive Source	Fuel							
1	Electric Motor	Electricity							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes						
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	Yes								
Odometer Correction -- Initial	0	Odometer Correction Factor	0.9917						
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor								
Odometer Correction Units	Miles								
Engine Code	ECNB	Rated Horsepower	282						
Displacement (liters)	0.01								
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--						
Charge Air Cooler Type	N/A	Drive Mode While Testing	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	6076	Equivalent Test Weight (pounds)	6500						
GVWR (lbs)	7408	N/V Ratio	112.2						
Axle Ratio	9.81								
Transmission Type	Two Stage Trans. with 1 Gear	# of Transmission Gears	1						
Transmission Lockup	No	Creeper Gear	No						
Dynamometer Coefficients:									
Target Coefficients			Set Coefficients						
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients		
City/Highway/Evap	43.42	0.3101	0.02395	26.62	0.0912	0.02591	15.8		
Emission Control Device Comments				REAR:ECNB					

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	--
Manufacturer Test Vehicle Comments	MY25 VW ID. Buzz tested in D-mode & B-mode.		

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	--
Test #	SVGA10086036	Test Procedure	77 - Multi-Cycle Test (MCT)
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	04/19/2024	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Volkswagen AG WOB1		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7614	Odometer Units	K
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	94.91
Charge Depleting Range (Calculated miles)	367.182	Charge Depleting Range (Actual miles)	367.182
Charge Depleting Range Highway (Calculated miles)	300.217	Derived 5-Cycle Coefficient Model Year	--
All Electric Range Unadjusted (miles)	--	Equivalent All Electric Range (miles)	367.182
Number of Charge Depleting Bags/Phases Conducted	8	Transition Bag/Phase Number	--

Charge Depleting Bag/Phase #1

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.44
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-2.165
Drive Trace Energy Economy Rating	-1.5331
Drive Trace Inertia Work Ratio Rating	-3.079
Integrated DC KW-HRS	1.7924
Manufacturer Fuel Economy	24.092

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	--																
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>10.264</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>-0.4272</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-0.429</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>0.02</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>2.9468</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>28.71</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	10.264	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	-0.4272	Drive Trace Energy Economy Rating	-0.429	Drive Trace Inertia Work Ratio Rating	0.02	Integrated DC KW-HRS	2.9468	Manufacturer Fuel Economy	28.71
Test Result/Emission Name	Unrounded Test Result																		
Actual Distance Driven (miles)	10.264																		
Carbon-Related Exhaust Emissions	0																		
Drive Trace Absolute Speed Change Rating	-0.4272																		
Drive Trace Energy Economy Rating	-0.429																		
Drive Trace Inertia Work Ratio Rating	0.02																		
Integrated DC KW-HRS	2.9468																		
Manufacturer Fuel Economy	28.71																		
Charge Depleting Bag/Phase #3																			
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>7.436</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>-1.433</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-1.143</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>-1.9861</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>1.7541</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>23.589</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	7.436	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	-1.433	Drive Trace Energy Economy Rating	-1.143	Drive Trace Inertia Work Ratio Rating	-1.9861	Integrated DC KW-HRS	1.7541	Manufacturer Fuel Economy	23.589
Test Result/Emission Name	Unrounded Test Result																		
Actual Distance Driven (miles)	7.436																		
Carbon-Related Exhaust Emissions	0																		
Drive Trace Absolute Speed Change Rating	-1.433																		
Drive Trace Energy Economy Rating	-1.143																		
Drive Trace Inertia Work Ratio Rating	-1.9861																		
Integrated DC KW-HRS	1.7541																		
Manufacturer Fuel Economy	23.589																		
Charge Depleting Bag/Phase #4																			
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>175.713</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>17.3577</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-0.0712</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>35.27</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>64.495</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>36.705</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	175.713	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	17.3577	Drive Trace Energy Economy Rating	-0.0712	Drive Trace Inertia Work Ratio Rating	35.27	Integrated DC KW-HRS	64.495	Manufacturer Fuel Economy	36.705
Test Result/Emission Name	Unrounded Test Result																		
Actual Distance Driven (miles)	175.713																		
Carbon-Related Exhaust Emissions	0																		
Drive Trace Absolute Speed Change Rating	17.3577																		
Drive Trace Energy Economy Rating	-0.0712																		
Drive Trace Inertia Work Ratio Rating	35.27																		
Integrated DC KW-HRS	64.495																		
Manufacturer Fuel Economy	36.705																		
Charge Depleting Bag/Phase #5																			
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>7.444</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>-0.7913</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-0.5243</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>-1.2399</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>1.7136</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>23.02</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	7.444	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	-0.7913	Drive Trace Energy Economy Rating	-0.5243	Drive Trace Inertia Work Ratio Rating	-1.2399	Integrated DC KW-HRS	1.7136	Manufacturer Fuel Economy	23.02
Test Result/Emission Name	Unrounded Test Result																		
Actual Distance Driven (miles)	7.444																		
Carbon-Related Exhaust Emissions	0																		
Drive Trace Absolute Speed Change Rating	-0.7913																		
Drive Trace Energy Economy Rating	-0.5243																		
Drive Trace Inertia Work Ratio Rating	-1.2399																		
Integrated DC KW-HRS	1.7136																		
Manufacturer Fuel Economy	23.02																		
Charge Depleting Bag/Phase #6																			

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	--
-------------------	--------------	------------------------------	----

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.276
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.306
Drive Trace Energy Economy Rating	-0.3642
Drive Trace Inertia Work Ratio Rating	0.96
Integrated DC KW-HRS	2.895
Manufacturer Fuel Economy	28.173

Charge Depleting Bag/Phase #7

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.426
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-1.3321
Drive Trace Energy Economy Rating	-1.3869
Drive Trace Inertia Work Ratio Rating	-2.168
Integrated DC KW-HRS	1.7155
Manufacturer Fuel Economy	23.101

Charge Depleting Bag/Phase #8

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	21.627
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	4.8243
Drive Trace Energy Economy Rating	-0.3881
Drive Trace Inertia Work Ratio Rating	9.98
Integrated DC KW-HRS	8.0738
Manufacturer Fuel Economy	37.332

Manufacturer Test Comments

MY25 VW ID. Buzz tested in B-mode.

Certification Summary Information Report

Test Group		TVGAV00.0V9R				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	--
Test #	SVGA10087118	Test Procedure	77 - Multi-Cycle Test (MCT)
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	07/17/2024	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Volkswagen AG WOB1		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5392	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
PHEV/EV Charge Depleting Test Information			
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	94.657
Charge Depleting Range (Calculated miles)	357.058	Charge Depleting Range (Actual miles)	357.058
Charge Depleting Range Highway (Calculated miles)	303.141	Derived 5-Cycle Coefficient Model Year	--
All Electric Range Unadjusted (miles)	--	Equivalent All Electric Range (miles)	357.058
Number of Charge Depleting Bags/Phases Conducted	8	Transition Bag/Phase Number	--
Charge Depleting Bag/Phase #1			
Test Result/Emission Name		Unrounded Test Result	
Actual Distance Driven (miles)		7.5111351	
Carbon-Related Exhaust Emissions		0	
Drive Trace Absolute Speed Change Rating		-0.6957	
Drive Trace Energy Economy Rating		-1.0149	
Drive Trace Inertia Work Ratio Rating		-0.9788	
Integrated DC KW-HRS		1.8642501	
Manufacturer Fuel Economy		24.8198185	
Charge Depleting Bag/Phase #2			

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	--																
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>10.2557325</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>-2.51</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-0.857</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>-2.928</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>2.9014199</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>28.2907135</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	10.2557325	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	-2.51	Drive Trace Energy Economy Rating	-0.857	Drive Trace Inertia Work Ratio Rating	-2.928	Integrated DC KW-HRS	2.9014199	Manufacturer Fuel Economy	28.2907135
Test Result/Emission Name	Unrounded Test Result																		
Actual Distance Driven (miles)	10.2557325																		
Carbon-Related Exhaust Emissions	0																		
Drive Trace Absolute Speed Change Rating	-2.51																		
Drive Trace Energy Economy Rating	-0.857																		
Drive Trace Inertia Work Ratio Rating	-2.928																		
Integrated DC KW-HRS	2.9014199																		
Manufacturer Fuel Economy	28.2907135																		
Charge Depleting Bag/Phase #3																			
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>7.4595609</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>-0.1509</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-0.4266</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>-0.2702</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>1.8601699</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>24.9367211</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	7.4595609	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	-0.1509	Drive Trace Energy Economy Rating	-0.4266	Drive Trace Inertia Work Ratio Rating	-0.2702	Integrated DC KW-HRS	1.8601699	Manufacturer Fuel Economy	24.9367211
Test Result/Emission Name	Unrounded Test Result																		
Actual Distance Driven (miles)	7.4595609																		
Carbon-Related Exhaust Emissions	0																		
Drive Trace Absolute Speed Change Rating	-0.1509																		
Drive Trace Energy Economy Rating	-0.4266																		
Drive Trace Inertia Work Ratio Rating	-0.2702																		
Integrated DC KW-HRS	1.8601699																		
Manufacturer Fuel Economy	24.9367211																		
Charge Depleting Bag/Phase #4																			
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>166.8244934</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>0</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>0</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>0</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>61.6189531</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>36.9363946</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	166.8244934	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	0	Drive Trace Energy Economy Rating	0	Drive Trace Inertia Work Ratio Rating	0	Integrated DC KW-HRS	61.6189531	Manufacturer Fuel Economy	36.9363946
Test Result/Emission Name	Unrounded Test Result																		
Actual Distance Driven (miles)	166.8244934																		
Carbon-Related Exhaust Emissions	0																		
Drive Trace Absolute Speed Change Rating	0																		
Drive Trace Energy Economy Rating	0																		
Drive Trace Inertia Work Ratio Rating	0																		
Integrated DC KW-HRS	61.6189531																		
Manufacturer Fuel Economy	36.9363946																		
Charge Depleting Bag/Phase #5																			
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>7.4999547</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>-0.5853</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-0.9707</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>-0.8131</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>1.7219062</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>22.958888</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	7.4999547	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	-0.5853	Drive Trace Energy Economy Rating	-0.9707	Drive Trace Inertia Work Ratio Rating	-0.8131	Integrated DC KW-HRS	1.7219062	Manufacturer Fuel Economy	22.958888
Test Result/Emission Name	Unrounded Test Result																		
Actual Distance Driven (miles)	7.4999547																		
Carbon-Related Exhaust Emissions	0																		
Drive Trace Absolute Speed Change Rating	-0.5853																		
Drive Trace Energy Economy Rating	-0.9707																		
Drive Trace Inertia Work Ratio Rating	-0.8131																		
Integrated DC KW-HRS	1.7219062																		
Manufacturer Fuel Economy	22.958888																		
Charge Depleting Bag/Phase #6																			

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	--
-------------------	--------------	------------------------------	----

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.2799692
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	1.27
Drive Trace Energy Economy Rating	-0.385
Drive Trace Inertia Work Ratio Rating	2.109
Integrated DC KW-HRS	2.8689922
Manufacturer Fuel Economy	27.9085681

Charge Depleting Bag/Phase #7

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.5117497
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-0.3018
Drive Trace Energy Economy Rating	-0.5415
Drive Trace Inertia Work Ratio Rating	-0.5448
Integrated DC KW-HRS	1.7734609
Manufacturer Fuel Economy	23.6091586

Charge Depleting Bag/Phase #8

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	29.0006351
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated DC KW-HRS	10.5723984
Manufacturer Fuel Economy	36.4557478

Manufacturer Test Comments

MY25 VW ID. Buzz EPA Confirmatory Test(20240182004) driven in D-Drive mode.

Certification Summary Information Report

Test Group		TVGAV00.0V9R				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Fuel Properties

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	--
Consolidated List of Standards			
Exhaust Standards			
Cert Region	Federal	Cert/In-Use Code	Cert
Vehicle Class	LDV/Passenger Car	Standard Level	Federal Tier 3 Bin 0
Fuel	Electricity	Test Procedure	Multi-Cycle Test (MCT)
Useful Life	Emission Name	Rounded Result	RAF
		NMOG / NMHC	Upward Diesel Adjustment Factor
		Downward Diesel Adjustment Factor	Mult DF
		Add DF	Std
150,000 miles	CO	--	--
150,000 miles	CREE	--	--
Cert Region	Federal	Cert/In-Use Code	Cert
Vehicle Class	LDV/Passenger Car	Standard Level	Federal Tier 3 Bin 0
Fuel	Electricity	Test Procedure	Federal fuel 2-day exhaust (w/can load)
Useful Life	Emission Name	Rounded Result	RAF
		NMOG / NMHC	Upward Diesel Adjustment Factor
		Downward Diesel Adjustment Factor	Mult DF
		Add DF	Std
150,000 miles	CO	--	--
Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Cert
Vehicle Class	LDV/Passenger Car	Standard Level	California ZEV
Fuel	Electricity	Test Procedure	Multi-Cycle Test (MCT)
Useful Life	Emission Name	Rounded Result	RAF
		NMOG / NMHC	Upward Diesel Adjustment Factor
		Downward Diesel Adjustment Factor	Mult DF
		Add DF	Std
150,000 miles	CO	--	--
150,000 miles	CREE	--	--
Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Cert
Vehicle Class	LDV/Passenger Car	Standard Level	California ZEV
Fuel	Electricity	Test Procedure	Federal fuel 2-day exhaust (w/can load)
Useful Life	Emission Name	Rounded Result	RAF
		NMOG / NMHC	Upward Diesel Adjustment Factor
		Downward Diesel Adjustment Factor	Mult DF
		Add DF	Std
150,000 miles	CO	--	--

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	--
Glossary			
Useful Life			
4	4,000 miles	120	120,000 miles
50	50,000 miles	150	150,000 miles
100	100,000 miles		
Emission Name			
HC-TOTAL	Total Hydrocarbon	AS-VOLT	Average System Voltage
CO	Carbon Monoxide	CO2 BAG 1	Bag 1 Carbon Dioxide
CO2	Carbon dioxide	CO2 BAG 2	Bag 2 Carbon Dioxide
CREE	Carbon-Related Exhaust Emissions	CO2 BAG 3	Bag 3 Carbon Dioxide
OPT-CREE	Optional Carbon-Related Exhaust Emissions	CO2 BAG 4	Bag 4 Carbon Dioxide
NOX	Nitrogen Oxide	NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides
PM	Particulate Matter	NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides
PM-COMP	SFTP Composite Particulate Matter	DT-IWRR	Drive Trace Inertia Work Ratio Rating
HC-NM	Non-methane Hydrocarbon	DT-ASCR	Drive Trace Absolute Speed Change Rating
OMHCE	Organic material Hydrocarbon Equivalent	DT-EER	Drive Trace Energy Economy Rating
OMNMHCE	Organic material non-methane HC equivalent	COMB-CREE	Combined Carbon-Related Exhaust Emissions
NMOG	Non-methane organic gases	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions
HCHO	Formaldehyde	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only
H3C2HO	Acetaldehyde	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	LEAK-DIA	Effective Leak Diameter (inches)
CO-COMP	SFTP Composite Carbon Monoxide	LEAK-GAS CAP	Gas Cap Leakage (cc/min)
ETHANOL	C2H5OH - Ethanol	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only
FE BAG 1	Bag 1 Fuel Economy	KW-HRS	Integrated DC KW-HRS
FE BAG 2	Bag 2 Fuel Economy	CH4 BAG 1	Bag 1 Methane
FE BAG 3	Bag 3 Fuel Economy	CH4 BAG 2	Bag 2 Methane
FE BAG 4	Bag 4 Fuel Economy	CH4 BAG 3	Bag 3 Methane
MFR FE	Manufacturer Fuel Economy	CH4 BAG 4	Bag 4 Methane
HC	Hydrocarbon for Running Loss and ORVR	CO BAG 1	Bag 1 Carbon Monoxide
METHANE	CH4 - Methane	CO BAG 2	Bag 2 Carbon Monoxide
METHANOL	CH3OH - Methanol	CO BAG 3	Bag 3 Carbon Monoxide
N2O	Nitrous Oxide	CO BAG 4	Bag 4 Carbon Monoxide
SPITBACK	Spitback Hydrocarbon in grams	NMOG BAG 1	Bag 1 Non-methane organic gases
AMP-HRS	Integrated Amp-hours	NMOG BAG 2	Bag 2 Non-methane organic gases
START-SOC	System Start State of Charge Watt-hours	NMOG BAG 3	Bag 3 Non-methane organic gases
END-SOC	System End State of Charge Watt-hours	NMOG BAG 4	Bag 4 Non-methane organic gases
ACT-DISTANCE	Actual Distance Driven (miles)		
Certification Region			

Certification Summary Information Report

Test Group	TVGAV00.0V9R	Evaporative/Refueling Family	
CA	California + CAA Section 177 states	FA	Federal
Exhaust Emission Standard Level			
B1	Federal Tier 2 Bin 1	T3B160	Federal Tier 3 Bin 160
B2	Federal Tier 2 Bin 2	T3B125	Federal Tier 3 Bin 125
B3	Federal Tier 2 Bin 3	T3B110	Federal Tier 3 Transitional Bin 110
B4	Federal Tier 2 Bin 4	T3B85	Federal Tier 3 Transitional Bin 85
B5	Federal Tier 2 Bin 5	T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover
B6	Federal Tier 2 Bin 6	T3B70	Federal Tier 3 Bin 70
B7	Federal Tier 2 Bin 7	T3B50	Federal Tier 3 Bin 50
B8	Federal Tier 2 Bin 8	T3B30	Federal Tier 3 Bin 30
B9	Federal Tier 2 Bin 9	T3B20	Federal Tier 3 Bin 20
B10	Federal Tier 2 Bin 10	T3B0	Federal Tier 3 Bin 0
B11	Federal Tier 2 Bin 11	HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)	HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	HDV2B250	Federal Tier 3 HD Class 2b Bin 250
L2	California LEV-II LEV	HDV2B200	Federal Tier 3 HD Class 2b Bin 200
L2OP	California LEV-II LEV Optional	HDV2B170	Federal Tier 3 HD Class 2b Bin 170
U2	California LEV-II ULEV	HDV2B150	Federal Tier 3 HD Class 2b Bin 150
S2	California LEV-II SULEV	HDV2B0	Federal Tier 3 HD Class 2b Bin 0
ZEV	California ZEV	HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630
OT	Other	HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570
T1	Federal Tier 1	HDV3B400	Federal Tier 3 HD Class 3 Bin 400
PZEV	California PZEV	HDV3B270	Federal Tier 3 HD Class 3 Bin 270
L2LEV160	California LEV-II LEV160	HDV3B230	Federal Tier 3 HD Class 3 Bin 230
L2ULEV125	California LEV-II ULEV125	HDV3B200	Federal Tier 3 HD Class 3 Bin 200
L2SULEV30	California LEV-II SULEV30	HDV3B0	Federal Tier 3 HD Class 3 Bin 0
L2LEV395	California LEV-II LEV395	L4SULEV100	California LEV-IV SULEV100
L2ULEV340	California LEV-II ULEV340	L4SULEV125	California LEV-IV SULEV125
L2LEV630	California LEV-II LEV630	L4SULEV15	California LEV-IV SULEV15
L2ULEV570	California LEV-II ULEV570	L4SULEV150	California LEV-IV SULEV150
L3LEV160	California LEV-III LEV160	L4SULEV170	California LEV-IV SULEV170
L3ULEV125	California LEV-III ULEV125	L4SULEV175	California LEV-IV SULEV175
L3ULEV70	California LEV-III ULEV70	L4SULEV20	California LEV-IV SULEV20
L3ULEV50	California LEV-III ULEV50	L4SULEV200	California LEV-IV SULEV200
L3SULEV30	California LEV-III SULEV30	L4SULEV230	California LEV-IV SULEV230
L3SULEV20	California LEV-III SULEV20	L4SULEV25	California LEV-IV SULEV25
L3LEV395	California LEV-III LEV395	L4SULEV30	California LEV-IV SULEV30
L3ULEV340	California LEV-III ULEV340	L4SULEV75	California LEV-IV SULEV75
L3ULEV250	California LEV-III ULEV250	L4SULEV85	California LEV-IV SULEV85
L3ULEV200	California LEV-III ULEV200	L4ULEV125	California LEV-IV ULEV125

Certification Summary Information Report

Test Group		TVGAV00.0V9R	Evaporative/Refueling Family		--
L3SULEV170	California LEV-III SULEV170		L4ULEV200	California LEV-IV ULEV200	
L3SULEV150	California LEV-III SULEV150		L4ULEV250	California LEV-IV ULEV250	
L3LEV630	California LEV-III LEV630		L4ULEV270	California LEV-IV ULEV270	
L3ULEV570	California LEV-III ULEV570		L4ULEV40	California LEV-IV ULEV40	
L3ULEV400	California LEV-III ULEV400		L4ULEV400	California LEV-IV ULEV400	
L3ULEV270	California LEV-III ULEV270		L4ULEV50	California LEV-IV ULEV50	
L3SULEV230	California LEV-III SULEV230		L4ULEV60	California LEV-IV ULEV60	
L3SULEV200	California LEV-III SULEV200		L4ULEV70	California LEV-IV ULEV70	
Transmission Type Code					
AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)		M	Manual	
A	Automatic		OT	Other	
AM	Automated Manual		SA	Semi-Automatic	
CVT	Continuously Variable		SCV	Selectable Continuously Variable (e.g. CVT with paddles)	
Drive System Code					
4	4-Wheel Drive		P	Part-time 4-Wheel Drive	
F	2-Wheel Drive, Front		A	All Wheel Drive	
R	2-Wheel Drive, Rear				
Additional Terms and Acronyms					
AFC	Alternative Fuel Converter		ICI	Independent Commercial Importer	
CSI	Certificate Summary Information		ORVR	Onboard Refueling Vapor Recovery	
DF	Deterioration Factor		SIL	Shift Indicator Light	
Evap	Evaporation, Evaporative		Trans	Transmission	

8. Emission Testing Waiver Statements

Not Applicable

9.0 OBD System Description

Not Applicable

10. Description of Alternate Fueled Vehicles

Not applicable

11. Auxiliary Emission Control Devices (AECD) Descriptions

Not Applicable

12.0 List of Certified Vehicles

Durability Group	TVGAEEVNNVZ2
Test Group	TVGAV00.0V9R
Evap Family	N/A
Emission Control System:	N/A

Engine Displacement:	0.0 liter
Valves per Cylinder:	N/A
Sales Area:	50 states
MMS:	N/A
SIL:	N/A

Engine Code	Model	Vehicle Class	Engine Code Characteristics			HP @RPM	Torque @RPM [lb-ft]	Trans. / OD	ETW	Curb Weight [lbs]	Tire size	N/V Ratio
			Cat. Code	Compression ratio	Idle [rpm]							
ECNB	ID. Buzz Pro S	LDV	N/A	N/A	N/A	Please see Section 12	Please see Section 12	EQ550-1P	6500	6010 (USA 6-Seater)	Front: 235/50 R20 Rear: 265/45 R20	Rear: 112.187
										6041 (USA 7-Seater)		
										5997 (Canada 7-Seater)		
										5774 (Canada 5-Seater)		
	ID. Buzz Pro S Plus	LDV	N/A	N/A	N/A	Please see Section 12	Please see Section 12	EQ550-1P	6500	6010 (USA 6-Seater)	Front: 235/50 R20 Rear: 265/45 R20	Rear: 112.187
										6041 (USA 7-Seater)		
										5997 (Canada 7-Seater)		
										5774 (Canada 5-Seater)		

12.1 Transmissions

Transmission	Transmission Characteristic				
	Drivetrain	Gear Count	Gearbox Ratios		
			Axle	Gear 1	Drive Ratio
Rear: EQ550-1P	RWD	1	3.895	2.519	9.809

12.2 Test conditions

Model	ETW	Road Track Coefficients						TRL50	TCDT	Fan Pos.	Drive Mode for Testing	Shift Sched. I.D.
		F0	F1	F2	F0	F1	F2					
	[lbs]	[lb*f]	[lb*f/mph]	[lb*f/(mph) ²]	[N]	[N/(km/h)]	[N/(km/h) ²]	[hp]	[s]			
ID. Buzz	6500	43.42	0.3101	0.02395	193.15	0.8571	0.04114	15.8	25.68	20	D and B modes	automatic

Vehicle Starting procedure:

Turning on the ignition by sitting on the driver-seat or by pressing the "Stop/Start" button.

The vehicle will show "ON" in the instrument cluster.

To get the vehicle into "READY" the doors must be closed and the seatbelts have to be buckled in.

By pressing the brake pedal and shifting the gear lever into ether R or D/B the car will switch into "READY".

ESP/ABS Deactivation procedure

Dyno Mode must be activated.

Refer to Section 16 for Dyno Mode activation procedure.

Fan Position during dyno testing:

Road Speed Fan (Modulated)

Automatic Headlight System:

Automatic headlight system must be disabled prior to any emissions or fuel economy / range testing. Automatic headlights can be turned off via the infotainment / MMI screen.

Please contact VWGoA Engineering and Environmental Office if you need assistance with disabling the automatic headlights.

Daytime Running Lights (DRL):

Daytime running lights must be disabled prior to fuel economy / range testing. DRLs can be turned off via the infotainment / MMI screen.

Please contact VWGoA Engineering and Environmental Office if you need assistance with disabling the daytime running lights.

SAE Tested Version:

Vehicles in this test group were tested according to SAE J1634 ver. 2017/2021/2025.

Constant Speed used for test: 65mph

CSC Lenth: 176 miles

12.3 e-Motor Details

Model Name	ID. Buzz Pro S / Pro S Plus
Engine Identification Number	Rear: ECNB
Engine Management System	Vitesco
Nominal Voltage	382 Volts
<u>ECNB (Rear Axle)</u>	
Transmission Arrangement (Parallel / Transaxial / Other)	parallel
Motor Maximum Speed	~11600 rpm
Gearbox Outlet Shaft (gear engaged)	Direct Drive
Direct Current (DC) / Alternating Current (AC) number of phases	Alternating Current (AC) / 3 phases
Maximum Net Torque (at zero speed) acc. to SAEJ2907	560 Nm
Maximum Net Power acc. to SAEJ2907	210 kW @ 3581 - 6500 rpm
Maximum Net Torque acc. to SAEJ2907	560 Nm @ 0 - 3581 rpm
Horsepower acc. to SAEJ2907	282 hp @ 3581 - 6500 rpm

12.4 Battery details

Battery Manufacturer	CATL
Battery Type	Lithium-ion (NMC)
Number of Battery Cells	208
Cell Design	Prismatic
Number of Battery Modules	13
Battery Cathode	Li-Ni-Co-Mn Lithium Nickel Cobalt Manganese,
Battery Anode	Graphite based
Electrolyte Type	Seperator Electrolyte
Total Weight of Battery System	558 kg
Nominal voltage	382 Volts
Battery Working Voltage	260 – 442 Volts
Total System Energy Capacity (Ah) *	240 Ah
Energy Density (Wh/Kg) *	164.2 Wh/kg
Battery Thermal Management	liquid

(*) Battery capacity and energy density were measured on a single cell basis and this single data was used to estimate the pack level capacity and energy density.

12.5 Charging details

Connecting the charging cable

1. Unlock the vehicle
2. Press gently on the charging socket flap to open it
3. Remove the charging cable from the charging station and fully unwind
4. Insert the charging connector straight into the charging socket and check that it is fully plugged in

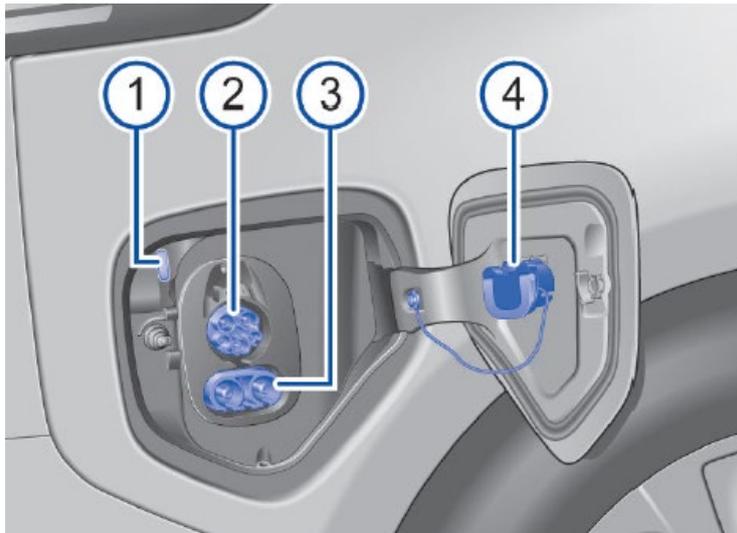
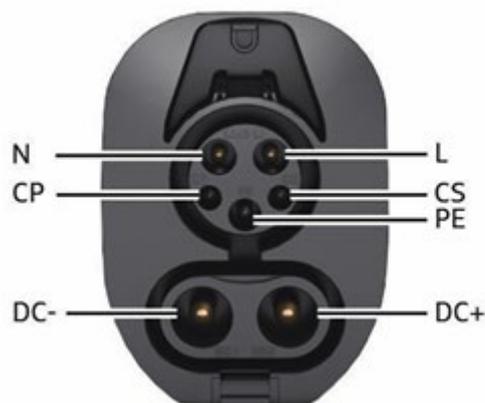


Figure: Behind the rear-right charging socket flap:

1. Charging process indicator
2. Charging socket with AC connection
3. Charging socket with DC connection
4. Protective cap on the support

High-voltage battery charging socket



Starting the charging process

To achieve the desired range with immediate charging, set the maximum battery charge level on the charging information screen.

Charging displays

Light on charging unit	Meaning
White Blinking	Connecting
Green Pulsing	Charging high-voltage battery
Green Pulsating and flashing red	Emergency charging mode active. Reduced charging power, fault detected, e.g. the charging connector is not fully inserted
Green Lit up	Charging process completed
Green Flashing	A time-delayed charging process has been activated and has not yet begun.
Red Lit up	Charging system malfunction or an error has occurred

If the charging connector cannot be removed from the vehicle charging connection, unlock the vehicle via the central locking system. Immediately unplug the charging connector. If this is not successful, manually unlock the charging connector as described in the manual.

The picture below shows the emergency release of the charging connector located in the right luggage compartment trim.



Charging Unit

The 11kW charging unit converts the AC current from the charging connection to DC current. It is located in the rear of the vehicle. The charging unit itself is water-cooled.

Voltage Range AC	180V – 264V
Voltage Range DC	195V – 470V
Max. AC charging power	~ 11 kW
Operating range	-40°C - 65°C
Weight	~ 9.8 kg

Charging times

Charing time for direct current (DC)	With maximum charging output (10% to \leq 80 %)	26 min
Recharged Energy for direct current (DC)	in 10 min max. DC	30 kWh
Charging time for alternating current (AC)	With 11 kW (0% to \leq 100 %)	9 h
Recharged Energy for alternate current (AC)	in 1h max. AC	9.6 kWh

13.0 Test Group Projected Sales

Refer to Section 16 of this Test Group Application

13.1 Compliance Plans

Refer to Section 16 of the Common Section

15.3 ORVR Safety Application for Carry-Over ORVR Systems

Not Applicable

US EPA Fee Form

[Help and EPA Instructions](#)

* Required Field

General Information

Date: 09/24/2025

Process Code *

Submit New Fee Filing Form

Manufacturer Code *

VGA

Manufacturer Name *

Volkswagen Group of America

Contact Name *

Gregory Allen

Contact Email Address *

Gregory.Allen@vw.com

Contact Phone *

248-754-4209

Calendar Year complete application submitted to EPA *

2025

PLEASE NOTE: These fees apply to complete certification applications received by EPA from January 1, 2025, through December 31, 2025. The applicable fee is determined by the

calendar year in which the complete certification application is received, not the model year.

Engine Family / Evaporative Family / Test Group *

TVGAV00.0V9R

Certificate Request Type (Industry Sector Code)

Certificate Request Type *

- On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (Federal) (A, B, D, J, T, V)
- On-Highway HDE Dyno Cert (Federal) (E, H)
- On-Highway LD ICI, MDPV ICI, HDV ICI (A, B, D, J, T, V)
- On-Highway Motorcycle (C)
- On-Highway HDV Evap (F)
- On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (California-Only) (A, B, D, J, T, V)
- On-Highway HDE Dyno Cert (California-Only) (E, H)
- Nonroad CI (L)
- Nonroad SI (B, S)
- Locomotive (G, K)
- All Nonroad Recreational, excluding Marine engines (X, Y)
- All Marine (Including IMO) (M, N, W)
- Component Certification for Evaporative Emissions (P)

IMO Name (Required for dual US/IMO Marine Only)

ICI VIN Number (Required for ICIs Only)

Do you qualify for a Reduced Fee? *

No

Payment Information

Amount Owed

\$32,939.00

Payment Type *

Offline ACH

Comments

MY2026 Certification Fee for TVGAV00.0V9R.

Pay.gov Tracking ID: 27RLKVA3

Agency Tracking ID: 77164638478

EPA Form Number 3520-29

OMB Control No. 2060-0545

Approval expires 7/31/2027

The public reporting and recordkeeping burden for this collection of information is estimated to average 12 minutes per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

VOLKSWAGEN

GROUP OF AMERICA

Mr. Joshua Kimball
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Anthony D'Ambrosi Name
Dir. Homologation Title
EEO - Certification Department
(248) 754-4396 Phone
Tony.DAmbrosi@vw.com E-Mail

September 25, 2025 Date

Subject: MY 2026 Volkswagen Group Light Duty Vehicle Initial Application for Emissions
Certification for Test Group TVGAV00.0V9R with Evaporative Family N/A.

Dear Mr. Kimball,

We submit, with this letter, the model year 2026 Part 1 Application for Emissions Certification for the following Test Group:

<u>Test Group</u>	<u>Standards</u>	<u>Sales Area</u>
TVGAV00.0V9R	Tier 3 Bin 0 LEVIII ZEV	Federal California

Copies of the Certification Fee filing form is contained in sections 15 of the included electronic application.

All vehicles within this test group comply with all applicable regulations contained in 40 CFR Part 86, Part 1066 and the compliance statements contained in sections 8 and 14.

This submission constitutes our final application and the request for issuance of a Certificate of Conformity.

If you have any questions with regard to this information, please contact our office in Auburn Hills at (248) 754-4396.

Sincerely,

D'Ambrosi Anthony
VWPKI
5406C07D40F4331C
Digitally signed by D'Ambrosi
Anthony VWPKI
5406C07D40F4331C
Date: 2025.09.28 20:37:27 -04'00'

Anthony D'Ambrosi
Volkswagen Group of America, Inc.
Engineering and Environmental Office

Enclosure(s)

VOLKSWAGEN

GROUP OF AMERICA

Ms. Robin U. Lang, Chief
Emissions Certification and Compliance Division
California Air Resources Board
4001 Iowa Avenue
Riverside, California 92507

Anthony D'Ambrosi Name
Dir, Homologation Title
EEO - Certification Department
(248) 754-4396 Phone
Tony.DAmbrosi@vw.com E-Mail

September 25, 2025 Date

Subject: MY 2026 Volkswagen Group Light Duty Vehicle Initial Application for Emissions
Certification for Test Group TVGAV00.0V9R with Evaporative Family N/A.

Dear Ms. Lang,

We submit, with this letter, the model year 2026 Part 1 Application for Emissions Certification
for the following Test Group:

<u>Test Group</u>	<u>Standards</u>	<u>Sales Area</u>
TVGAV00.0V9R	Tier 3 Bin 0 LEVIII ZEV	Federal California

This submission constitutes our final application and the request for issuance of the
Executive Order.

If you have any questions with regard to this information, please contact our office in
Auburn Hills at (248) 754-4396.

Sincerely,

D'Ambrosi Anthony
VWPKI
5406C07D40F4331C
Digitally signed by D'Ambrosi
Anthony VWPKI
5406C07D40F4331C
Date: 2025.09.28 20:38:18 -04'00'

Tony D'Ambrosi
Volkswagen Group of America, Inc.
Engineering and Environmental Office

Enclosure(s)

California ARB Information

17.1 California Compliance Statements

Production Vehicle same as Test Vehicle Statement

The production vehicles represented by the particular engine families will be in all material respects of the same design as those for which vehicle approval is granted.

Environmental Performance Label Information

VW Group applies new EPA label in lieu of the CA EP label.

California Emissions Warranty Statement

Please refer to California Emissions Warranty booklets located in Section 16 of the Common Section.

Service Information Compliance Statement

In accordance with Title 13 CCR 1969, the Volkswagen Group hereby states compliance with the service information option of (I)(1)(C)

17.2 Fill Pipe Specifications

Not applicable

17.3 Evaporative Emission Deterioration Program

Not applicable

17.4 Assembly line NMOG / NMHC Factor

Not applicable

17.5 Continuity of Emissions

Not applicable

17.6 Applicable Deterioration Factors

Not applicable

17.7 Method of Determining Battery State of Charge

The current battery charge level of the high-voltage battery is shown by the battery-symbol with a percentage value in the digital instrument cluster, and is also available in the charging settings in the infotainment system. The State of Charge is available through the data link connector (DLC).

17.8 Battery Charging Capacity

Please refer to Section 12.4 Battery details

17.9 Recharging Procedures

Please refer to Section 12.5 Charging details

17.10 Climate Control System Description

Please refer to Section 16.7

17.11 Battery Specific Energy data and Calculations (C/3 energy capacity)

Please refer to the separately provided C/3 report.

The specific energy of batteries used to power a ZEV was determined in accordance with the U.S. Advanced Battery Consortium's Electric Vehicle Battery Procedure Manual (January 1996), Procedure No. 2, "Constant Current Discharge Test Series," using the C/3 rate. The weight calculation (section 12.4) reflects a completely functional battery system as defined in the Appendix of the Manual, including pack(s), required support ancillaries (e.g., thermal management), and electronic controller.

17.12 Proper and Safe Operation of the Vehicle

Please refer to Section 16.4

VWGoA has implemented a nationwide recycling program for the transportation and recycling of lithium ion (li-ion) batteries used to power full battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs). The program is available to affiliate dealers.

Additionally, as part of the Alternative Fuel Vehicles Safety Training Program, VW Group vehicles have an extensive list of precautionary / safety related measures that can be found at the links below:

Volkswagen:

<https://www.nfpa.org/education-and-research/emergency-response/emergency-response-guides/volkswagen>

Audi:

<https://www.nfpa.org/education-and-research/emergency-response/emergency-response-guides/audi>

17.13 Vehicle and Battery Break-in

Volkswagen Group BEV's are operated either on-track or on a mileage accumulation dynamometer for 2,000 miles using the Standard Road Cycle (SRC).

17.14 Propulsion Related Parts Length and Terms of Warranty

Propulsion-related Parts- and Battery Warranty Statement

CCR 1962.4 (i) (3)

(H) Identification of the length and terms of the propulsion-related parts warranty and battery warranty, pursuant to CCR, title 13, section 1962.8.

Low-Cost Propulsion is covered by 4yr/50k warranty (bumper to bumper). High-Cost Propulsion is covered by 7yr/70k warranty. The parts list will be available with the part 2 final application.

17.15 Battery Label Information

CCR 1962.4 (i) (3)

(G) Sample label pursuant to CCR, title 13, section 1962.6, including label format, size, and location.

This test group is not part of the ZEVIII program related to CCR 1962.4 in MY2026.

For Battery Degradation please refer to Section 16.10

17.16 Data Standardization Requirements / Vehicle Communication Protocol

CCR 1962.4 (i) (3)

(F) Data used by the manufacturer to establish that the battery state of health parameter will correlate to usable battery energy as determined per the 2026 ZEV and PHEV Test Procedures within the required accuracy per CCR, title 13, 1962.5, and include a chart or table identifying the expected degradation in usable battery energy relative to time and mileage over the useful life for vehicles in the test group as defined under subsection (d)(2)

Please refer to Section 16.10

CCR 1962.4 (i) (3)

(G) A copy of instructions provided to vehicle owners on how to access, in vehicle and without the use of tools, the battery state of health parameter, distance traveled since battery state of health last reset, actual rate of charge occurring, and maximum charge rate vehicle can currently accept as required by CCR, title 13, 1962.5.

Please refer to Section 16.11

CCR 1962.4 (i) (3)

(L) An attestation that all vehicles, except as otherwise allowed in CCR, title 13, section 1962.5(g), in the test group covered by the application comply with the requirements of CCR, title 13, section 1962.5, and that the manufacturer will comply with the required deadlines for submission of results and data for production vehicle evaluation testing under CCR, title 13, section 1962.5(e)(5). For vehicles with deficient requirements per CCR, title 13, section 1962.5(g), the manufacturer must include a list of the deficient requirements and any changes in or resolutions of those deficient requirements from the equivalent previous model year test group.

This test group is not part of the Phase-In of CCR 1962.5 in MY2026.

See "VW Group Fleet Compliance Status – ZEVIII - §1962.5 "UDS" Data Standardization"
VW's 2026 MY Certification Preview Meeting with CARB

CCR 1962.4 (i) (3)

(M) Identification of the communication protocol utilized by vehicles in the test group for communication of the required standardized data to an off-board tool, per CCR, title 13, section 1962.5.

This test group is not part of the Phase-In of CCR 1962.5 in MY2026.

See "VW Group Fleet Compliance Status – ZEVIII - §1962.5 "UDS" Data Standardization"
VW's 2026 MY Certification Preview Meeting with CARB

17.17 Data Link Connector & Location

Will be available with Update Application

21.0 Vehicle Emission Control Information Label

VECI Label ID.BUZZ MY26 RWD 91KW

VW Volkswagen LOGO VEHICLE EMISSION CONTROL INFORMATION			
Conforms to regulations: 2026 MY BEV			
U.S. EPA: BIN0	LDV	OBD: N/A	Fuel: Electric
California: ZEV	PC	OBD: N/A	Fuel: Electric
No adjustments needed			
Group: TVGAV00.0V9R Evap: N/A		DMC	0EH 010 005 AB

21.1 Powertrain Control Module (PCM) Information

Model	Engine Code	Software ID/ Master	Cal ID	CVN	Comments
ID. Buzz	ECNB	0EA.906.014.HN 4719	0EA014HN4719EzJ6	57B3A35D	w/o heatpump / OCDC with 11kW ID.S.5.6
			0EA014HN4719IHuU	F3F756DD	with heatpump / OCDC with 11kW ID.S.5.6

21.3 Rear Drive Motor Control Module (DMCM)

Model	Engine Code	Software ID	Master	Comments
ID. Buzz	ECNB	0ET.907.121.AE	7300	ID.S.5.6

21.4 Gateway Information / Sensor Actuator Module (SAM)

Model	Engine Code	Software ID	Master	Comments
ID. Buzz	ECNB	1EE.937.089.Q	0570	ID.S.5.6

21.5 Battery Energy Control Module (BECM) Information

Model	Engine Code	Software ID	Master	Comments
ID. Buzz	ECNB	0Z1.915.184.AL	1142	ID.S.5.6

21.6 HV Battery Charger Information / DC/DC-Converter (OCDC)

Model	Engine Code	Software ID	Master	Comments
ID. Buzz	ECNB	1EK.915.692.L	1209	ID.S.5.6

21.7 Brake System Control Module Information

Model	Engine Code	Software ID	Master	Comments
ID. Buzz	ECNB	1EA.907.379.BR	0757	ID.S.5.4

21.8 Brake Servo Control Module (Brake Boost) Information

Model	Engine Code	Software ID	Master	Comments
ID. Buzz	ECNB	1N3.909.059.AA	0853	SOP SW

21.9 Thermo-Management Control Module (VTCM) Information

Model	Engine Code	Software ID	Master	Comments
ID. Buzz	ECNB	1N3.907.007.E	0262	ID.S.5.4

21.10 ICAS 1 – Diagnostic Interface Information

Model	Engine Code	Software ID	Master	Comments
ID. Buzz	ECNB	1EE.937.012.K	0711	ID.S.5.6

22. Calibration Information

Not Applicable

23. Vehicle Description

Please refer to Section 12.0 of this Test Group Application

24. Final U.S. Sales

Final Sales will be available with the Final Part 2 Application