Bugatti Automobiles S.A.S, a member of the Volkswagen Group

Application for Emissions Certification

2021 **Model Year**

Durability Group: MVGAGPGNNGLB
Evap. Family: MVGAR0200GCB

Test Group: MVGAV08.0GLB

Certificate Number: MVGAV08.0GLB-XXX

Durability Group Description: Four Stroke, Otto Cycle, Gasoline Fueled, Sequential Port Fuel Injection,
Catalyst Codes: TEX1347, TEX0504

Test group Description: 8.0l SFI/AIR/4WU-TWC/2TWC/4TC/2CAC/4WR-HO2S/4HO2S

Applicable Exhaust Standards: 50-State: Federal: Tier 3 BIN 160
California: LEV III LEV 160

Applicable Evaporative Standards: 50-State: Federal: Tier 3
California: LEVIII

Carlines Covered: Bugatti Chiron

Vehicles Tested:

VID	Config.	Test Type / #	Test Type / #
BG744 5008	0	FTP / MVGA10065581	HFET / HVGA10044875
BG744 5008	0	Cold CO / HVGA10044869	50˚F FTP / HVGA10044877
BG744 5008	0	US06 / MVGA10065582	SC03 / HVGA10044873
BG744 6020	0	3-Day / HVGA10044887	2-Day / HVGA10044885
BG744 6020	0	Running Loss / HVGA10044888	ORVR / HVGA10044886
BG744 6020	0	BETP / HVGA10044892	

Issue Date: 09-16-2020

For Questions, Contact:
EEO Office, Auburn Hills, Michigan

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1. Correspondence and Communication

Please refer to the Common Section

2. Durability Group Description

Durability Source Basics	
Durability Procedure	Assigned DF
Durability Group Name	MVGAGPGNNGLB
Source of Durability Data	MVGAGPGNNGLB
Relation Factor BAT VWADP / BAT SRC	n.a.
Engine Type	Piston
Combustion Method	Otto cycle 4 stroke
Fuel Used	gasoline
Basic Fuel Metering System	Port Injection
Displacement [l]	8.0

Catalyst / After treatment device specifics		
	Durability Group Statistics	**Durability Data Vehicle**
Catalyst Construction		Monolith
Precious Metal Composition TWC		Pd/Rh
PTOX TWC		n.a.
NAC:1 SCRC: 2		n.a.
Total Catalyst Volume [l]		10.47
Total Precious Metal Loading [g]		63.6
Precious Metal Load Rate PM [g] / CV [l]		6.07
Cat. Grouping Statistic		7.94
Durability Group Limit (25% or 0.2 g/l)		assigned
Test Group Covered		MVGAV08.0GLB

3. Evaporative / Refueling Family Description

Evaporative / Refueling Family Name		MVGAR0200GCB
Vapor storage device	Canister	Yes
	Other	-
Basic canister design	Working Capacity (g)	200
	Bed Volume (cm^3)	3480
	Number, config.	1
	Geometry	Cylinder
	Construction	4 chambers
	Bleeding trap	-
	Bleed trap Working Capacity (g)	-
	Material	plastic
Fuel System		MPI
Type of refueling system	Integrated	Yes
	Non-integrated	-
	Other	-
Fill pipe seal mechanism	Liquid seal	Yes
	Mechanical Seal	-
	Other	-
Method of controlling vapor flow to the engine	Vacuum	Yes
	Purge valve	Yes
	Other	-
Purge control system	Valve type	Duty cycle
	Control	ECM
Vapor hose material	4 layer hose	Yes
	Stainless Steel	-
	Alloy	Yes (aluminum)
Fuel tank material	Metal	Yes (aluminum)
	Plastic	-
	Other	-
Test groups combined with this Evap. family		**MVGAV08.0GLB**

4. Durability Procedure Description

Please refer to the Common Section. This test group is using EPA's assigned deterioration factors

5.0 Test Group Description

Evap. Family	MVGAR0200GCB
Test Group Name	MVGAV08.0GLB
Certificate Number	MVGAV08.0GLB-xxx
Engine displacements covered	8.0 Liters
Arrangement and number of cylinders	W16 in-line
Vehicle class(es) covered	LDV
Federal Emissions Standards Class	Tier3 BIN160
California Emissions Standards Class	LEV III / LEV 160

5.1 Test Group Emission Standards

Please refer to Certification Summary Information Report included in Section 7 for applicable emission standards.

6. Test Vehicle Description

Certificate Number: MVGAV08.0GLB-xxx
Models: Bugatti Chiron
Test Group: MVGAV08.0GLB
Evaporative/Refueling Family: MVGAR0200GCB

VID	Config.	Vehicle Type	Tests Performed
BG744 5008	0	Cert. Emission 4k miles	HFET, Cold FTP, SC03, ASM, Cold CO, CST
BG744 PT50 Chiron	0	Cert. Emission 4k miles	FTP, US06
BG744 6020	0	Cert. Emission 150k miles	ORVR, 2-day SHED, 3-day SHED

7. Test Results

Please refer to the Certification Summary Information Report.

Certification Summary Information Report

Manufacturer	Volkswagen Group of America, Inc.	**Manufacturer Code**	VGA
Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB
Certificate Number	--	**CARB Executive Order #**	--
Certificate Issue Date	--	**Certificate Revision Date**	--
Certificate Effective Date	--	**Conditional Certificate**	--
CSI Revision #	--	**CSI Submission/Revision Date**	09/16/2020 07:58:00 AM
Model Year	2021		

Test Group Information

CSI Type	Update for Correction	**Running Change Reference Number**	--
GHG Exempt Status	Not Exempt		

Drive Sources and Fuel(s)

Drive Source #1: Combustion Engine

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Gasoline	Multipoint/sequential fuel injection	No

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Rechargeable Energy Storage System Indicator**	--
Multiple Fuel Combustion	--	**Off-board Charge Capable Indicator**	--
Fuel Cell Indicator	--	**EPA Vehicle Class**	LDV
Federal Clean Fuel Vehicle	No	**Federal Clean Fuel Vehicle Standard**	--
Federal Clean Fuel Vehicle ILEV	No	**California Partial Zero Emissions Vehicle Indicator**	No
Durability Group Name	MVGAGPGNNGLB	**Durability Group Equivalency Factor**	1
Reduced Fee Test Group	No	**Certification Region Code(s)**	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	--	**CAP2000 Conditional Certificate?**	N/A
Independent Commercial Importer?	--	**Alternative Fuel Converter Certificate?**	--
SFTP Federal Composite Compliance Identifier	Tier 3	**SFTP Tier 2 Composite CO Option**	No
SFTP LEV-III Composite Compliance Indicator	Yes		
OBD Compliance Type	CARB	**OBD Demonstration Vehicle Test Group**	MVGAV08.0GLB
Test Group OBD Compliance Level	Full - no deficiencies	**Number of Test Group OBD Deficiencies**	0
OBD Deficiencies Comments	E-20-188		
Mfr Test Group Comments	MY2021 Test Group for 8.0L W16 Bugatti Chiron		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Evaporative/Refueling Family Information

Evaporative Summary Information Type	New	**Submission/Correction Date**	09/15/2020 07:04:58 PM
Integrated ORVR?	Yes	**Fuel(s)**	Gasoline
Multiple Fuel Storage	--		
Bladder Fuel Tank?	No		
Fuel Tank Material	Metal	**Fuel Tank Material Description**	ALUMINUM
Fill Pipe Seal Type	Liquid seal		
Air Intake System Vapor Storage Device?	No	**Air Intake System Vapor Storage Device Description**	--
Fuel System Vapor Storage Canister?	Yes	**Other Vapor Storage**	--
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	200	**Number of Primary Canisters**	1
Number of Bleed Canisters	0	**Bleed Canister Total Working Capacity (grams)**	--
Mfr Evaporative/Refueling Family Comments	Integrated Bleed Canister		

Leak Family Details

Leak Family Indicator	Yes		
Canister Bleed Test Indicator	Yes	**Applicability of Evaporative Canister Bleed Test**	50 State
Evaporative Canister Bleed Test Comments	--		
CARB Fuel Only (Rig) Test Indicator	No	**Applicability of CARB Fuel Only (Rig) Test**	--
CARB Fuel Only (Rig) Test Comments	--		

Leak Family Name	Applicability of Leak Family Requirements	Leak Family Standard (inches)	Leak Family Description
MVGAR0200GCB-001	50 State	0.02	MVGAR0200GCB-001

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.	5 - Bugatti	501 - Chiron	Federal	All Wheel Drive	Automated Manual-Selectable (e.g. Automated Manual with paddles)	7	Yes
Volkswagen Group of America, Inc.	5 - Bugatti	501 - Chiron	California + CAA Section 177 states	All Wheel Drive	Automated Manual-Selectable (e.g. Automated Manual with paddles)	7	Yes

Engine Description

Hybrid Type	--	**Hybrid Description**	--
Engine Type	4-Stroke Spark Ignition	**Mfr Engine Description**	--
Engine Block Arrangement	W-shaped engine	**Mfr Engine Block Arrangement Description**	--
Camless Valvetrain Indicator	No	**Oil Viscosity/Classification**	10W60 VW 50101 / 50500
Number of Cylinders/Rotors	16	**Mechanically Variable Compression Ratio Indicator**	N

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

After Treatment Device(s) (ATD)

ATD Number	ATD Type	ATD Precious Metal	Substrate Material	Substrate Construction
1	Three-way catalyst	Palladium + Rhodium	Metal	Monolith
2	Three-way catalyst	Palladium + Rhodium	Metal	Monolith
3	Three-way catalyst	Palladium + Rhodium	Metal	Monolith
4	Three-way catalyst	Palladium + Rhodium	Metal	Monolith
5	Three-way catalyst	Palladium + Rhodium	Metal	Monolith
6	Three-way catalyst	Palladium + Rhodium	Metal	Monolith

Mfr After Treatment Device (ATD) Comments 4 PRE-CATALYSTS / 2 UNDERFLOOR CATALYSTS

Direct Ozone Reduction (DOR) Device Not Equipped

Mfr Emission Control Device Comments --

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Engine Configuration Number 1

Engine Displacement (liters)	8.0	**Engine Rated Horsepower**	1500
Number of Inlet Valves Per Cylinder	2	**Number of Exhaust Valves Per Cylinder**	2
Air Aspiration Method	Turbocharged	**Number of Air Aspiration Devices**	4
Air Aspiration Device Configuration	Parallel	**Charge Air Cooler Type**	Liquid
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	Yes		
Cylinder Deactivation Description	16 - 8 cylinder deactivation capability.		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	INLET AND OUTLET CONTINUOUSLY VARIABLE / MECHANICAL-HYDRAULIC		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	0	**Number of Air/Fuel Sensors**	8
Air/Fuel Sensor # 1 Type	Heated oxygen	**Air/Fuel Sensor # 1 Description**	--
Air/Fuel Sensor # 2 Type	Heated oxygen	**Air/Fuel Sensor # 2 Description**	--
Air/Fuel Sensor # 3 Type	Heated oxygen	**Air/Fuel Sensor # 3 Description**	--
Air/Fuel Sensor # 4 Type	Heated oxygen	**Air/Fuel Sensor # 4 Description**	--
Air/Fuel Sensor # 5 Type	Heated oxygen	**Air/Fuel Sensor # 5 Description**	--
Air/Fuel Sensor # 6 Type	Heated oxygen	**Air/Fuel Sensor # 6 Description**	--
Air/Fuel Sensor # 7 Type	Heated oxygen	**Air/Fuel Sensor # 7 Description**	--
Air/Fuel Sensor # 8 Type	Heated oxygen	**Air/Fuel Sensor # 8 Description**	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	**Cooled Exhaust Gas Recirculation**	--
EGR Type	--	**Exhaust Gas Recirculation Description if 'Other'**	--
Closed Loop Air Injection System	No		
Air Injection Type	Secondary Air Injection	**Air Injection Type if 'Other'**	--
Mfr Engine Configuration Comments	Engine Code (DALA). CHARGE AIR COOLER (AIR / LIQUID) - - SFI/AIR/4WUTWC/2TWC/4TC/2CAC/4HO2S(2)/ORVR. This configuration is in the Bugatti Chiron.		

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
Gasoline	MVGA10065581	MVGA10065582	HVGA10044873	HVGA10044869	HVGA10044875	10.0	228.2	18.4	286.1	--

SFTP LEV-III Official Test Numbers

Test Group Fuel	FTP	US06	SC03
Gasoline	MVGA10065581	MVGA10065582	HVGA10044873

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Emission Data Vehicle Information

Vehicle ID / Configuration	BG744 5008 / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	HVGAV08.0GLB	**Original Evaporative/Refueling Family**	HVGAR0200GCB
Original Test Vehicle Model Year	2017		

Vehicle Model

Represented Test Vehicle Make	BUGATTI	**Represented Test Vehicle Model**	Bugatti Chiron

Leak Family Details

Leak Family Identifier	--	**Leak Family Name**	--

Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	--	**Rechargeable Energy Storage System Indicator**	--
Rechargeable Energy Storage System	--	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	400	**Odometer Correction Factor**	0.998
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Kilometers		
Engine Code	DALA	**Rated Horsepower**	1500
Displacement (liters)	7.993		
Air Aspiration Method	Turbocharged	**Air Aspiration Method, if 'Other'**	
Number of Air Aspiration Devices	4	**Air Aspiration Device Configuration**	Parallel
Charge Air Cooler Type	Liquid	**Drive Mode While Testing**	All Wheel Drive
Shift Indicator Light Usage	Not eqipped	**Aged Emission Components**	4,000 (mi)
Curb Weight (lbs)	4519	**Equivalent Test Weight (pounds)**	4750
GVWR (lbs)	--	**N/V Ratio**	32.4
Axle Ratio	3.64		
Transmission Type	Semi-Automatic	**# of Transmission Gears**	7
Transmission Lockup	Yes	**Creeper Gear**	No

Certification Summary Information Report

Test Group	MVGAV08.0GLB	Evaporative/Refueling Family	MVGAR0200GCB

Dynamometer Coefficients:

Coefficient Category	Target Coefficients A (lbf)	Target Coefficients B (lbf/mph)	Target Coefficients C (lbf/mph**2)	Set Coefficients A (lbf)	Set Coefficients B (lbf/mph)	Set Coefficients C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
City/Highway/Evap	64.453	0.49989	0.023164	-23.056	-0.4423	0.030031	19.6
Cold CO	70.898	0.54988	0.02548	-25.362	-0.4866	0.033035	N/A
US06	64.453	0.49989	0.023164	-23.056	-0.4423	0.030031	N/A

Emission Control Device Comments --

Manufacturer Test Vehicle Comments EXHAUST EDV - MY 2017 Bugatti Chiron tested as Chiron PC with Semi-Automatic 7 speed - ETW: 4750 Bugatti Chiron tested as a Chiron 2 dr. PC - ETW: 4750

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**HVGA10044865**	**Test Procedure**	**21 - Federal fuel 2-day exhaust (w/can load)**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	61 - Tier 2 Cert Gasoline
Test Date	08/18/2016	**Fuel**	Gasoline
Fuel Batch ID	WAP420	**Fuel Calibration Number**	2
Vehicle Class	LDV/Passenger Car	**DF Type**	EPA Assigned
Verify Test Lab ID	Audi AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5732	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	893.9	--
FE BAG 1 (Bag 1 Fuel Economy)	10	10
CO2 BAG 2 (Bag 2 Carbon Dioxide)	908.7	--
FE BAG 2 (Bag 2 Fuel Economy)	9.8	9.8
CO2 BAG 3 (Bag 3 Carbon Dioxide)	725.2	--
FE BAG 3 (Bag 3 Fuel Economy)	12.3	12.3
METHANE (CH4 - Methane)	0.0198	--
CO (Carbon Monoxide)	0.391	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-2.24	--
DT-EER (Drive Trace Energy Economy Rating)	-0.91	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-3.33	--
HCHO (Formaldehyde)	0.0011	--
MFR FE (Manufacturer Fuel Economy)	10.4	10.4
NOX (Nitrogen Oxide)	0.0454	--
N2O (Nitrous Oxide)	0.005	--
HC-NM (Non-methane Hydrocarbon)	0.0383	--
NMOG (Non-methane organic gases)	0.0398	--
PM (Particulate Matter)	0.001	--
HC-TOTAL (Total Hydrocarbon)	0.0579	--

Certification Summary Information Report

Test Group	MVGAV08.0GLB	Evaporative/Refueling Family	MVGAR0200GCB

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	856	856
Optional Carbon-Related Exhaust Emissions	858	858

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	855	--

Manufacturer Test Comments E0 4k FED. FUEL FTP - Tested as BUGATTI Chiron PC 2 dr. EDV - ETW: 4750

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal Tier 3 Bin 160	CREE	856	--	--	--	0.49	--	856	--	--
Fed	120,000 miles	Federal Tier 3 Bin 160	METHANE	0.0198	--	--	--	0.0042	--	0.024	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 160	N2O	0.0050	--	--	--	0.001	--	0.006	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	CO	0.39	--	--	--	0.365	--	0.8	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG	0.0398	--	1.10	--	0.0155	--	0.055	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG+NOX	0.0852	--	--	--	--	--	0.118	0.160	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NOX	0.0454	--	--	--	0.0176	--	0.063	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	PM	0.0010	--	--	--	0.000	--	0.001	0.010	Pass
CA	150,000 miles	California LEV-III LEV160	CO	0.391	--	--	--	0.365	--	0.76	4.20	Pass
CA	150,000 miles	California LEV-III LEV160	NMOG	0.0398	1	1.10	--	0.0155	--	0.055	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	NMOG+NOX	0.0852	--	--	--	--	--	0.118	0.160	Pass
CA	150,000 miles	California LEV-III LEV160	NOX	0.0454	--	--	--	0.0176	--	0.063	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	PM	0.0010	--	--	--	0.000	--	0.001	0.010	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**HVGA10044869**	**Test Procedure**	**11 - Cold CO**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	29 - Cold CO E10 Premium Gasoline (Tier 3)
Test Date	08/19/2016	**Fuel**	Gasoline
Fuel Batch ID	COP302	**Fuel Calibration Number**	6
Vehicle Class	LDV/Passenger Car	**DF Type**	EPA Assigned
Verify Test Lab ID	Audi AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5836	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	1082.9	--
FE BAG 1 (Bag 1 Fuel Economy)	7.9	7.9
CO2 BAG 2 (Bag 2 Carbon Dioxide)	957.1	--
FE BAG 2 (Bag 2 Fuel Economy)	9.2	9.2
CO2 BAG 3 (Bag 3 Carbon Dioxide)	767.7	--
FE BAG 3 (Bag 3 Fuel Economy)	11.4	11.4
CO (Carbon Monoxide)	1.41	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.96	--
DT-EER (Drive Trace Energy Economy Rating)	-1.28	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-3.22	--
HCHO (Formaldehyde)	0.0311	--
MFR FE (Manufacturer Fuel Economy)	9.4	9.4
NOX (Nitrogen Oxide)	0.0304	--
N2O (Nitrous Oxide)	0.005	--
HC-NM (Non-methane Hydrocarbon)	1.0375	--
NMOG (Non-methane organic gases)	0	--
PM (Particulate Matter)	0	--
HC-TOTAL (Total Hydrocarbon)	1.1117	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	931	--

Certification Summary Information Report

Test Group MVGAV08.0GLB **Evaporative/Refueling Family** MVGAR0200GCB

Manufacturer Test Comments E10 - Worst Case Exhaust 4k Cold-CO - Tested as BUGATTI Chiron PC 2 dr. EDV - ETW: 4750

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	50,000 miles	Federal Tier 3 Bin 160	CO	1.41	--	--	--	0.11	--	1.5	10.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	HC-NM	1.04	--	--	--	0.0155	--	1.1	1.8	Pass
CA	50,000 miles	California LEV-III LEV160	CO	1.41	--	--	--	0.11	--	1.5	10.0	Pass

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**HVGA10044877**	**Test Procedure**	**52 - Fed. fuel 50 F exh.**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/23/2016	**Fuel**	Gasoline
Fuel Batch ID	TIEP03	**Fuel Calibration Number**	21
Vehicle Class	LDV/Passenger Car	**DF Type**	EPA Assigned
Verify Test Lab ID	Audi AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5904	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	965	--
FE BAG 1 (Bag 1 Fuel Economy)	9.1	9.1
CO2 BAG 2 (Bag 2 Carbon Dioxide)	961.6	--
FE BAG 2 (Bag 2 Fuel Economy)	9.2	9.2
CO2 BAG 3 (Bag 3 Carbon Dioxide)	758	--
FE BAG 3 (Bag 3 Fuel Economy)	11.7	11.7
CO (Carbon Monoxide)	0.658	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.53	--
DT-EER (Drive Trace Energy Economy Rating)	-0.38	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.84	--
MFR FE (Manufacturer Fuel Economy)	9.8	9.8
NOX (Nitrogen Oxide)	0.0614	--
N2O (Nitrous Oxide)	0.007	--
HC-NM (Non-methane Hydrocarbon)	0.186	--
NMOG (Non-methane organic gases)	0.2046	--
PM (Particulate Matter)	0.003	--
HC-TOTAL (Total Hydrocarbon)	0.2222	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	906	--

Manufacturer Test Comments E10 - Worst Case Exhaust 4k FED. FUEL 50'F FTP - Tested as BUGATTI Chiron PC 2 dr. EDV - ETW: 4750

Certification Summary Information Report

Test Group MVGAV08.0GLB **Evaporative/Refueling Family** MVGAR0200GCB

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	4,000 miles	California LEV-III LEV160	CO	0.66	--	--	--	--	--	0.7	4.2	Pass
CA	4,000 miles	California LEV-III LEV160	NMOG	0.2046	--	1.10	--	--	--	0.205	99.999	Pass
CA	4,000 miles	California LEV-III LEV160	NMOG+NOX	0.2660	--	--	--	--	--	0.266	0.320	Pass
CA	4,000 miles	California LEV-III LEV160	NOX	0.0614	--	--	--	--	--	0.061	99.999	Pass

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**HVGA10044866**	**Test Procedure**	**3 - HWFE**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	61 - Tier 2 Cert Gasoline
Test Date	08/18/2016	**Fuel**	Gasoline
Fuel Batch ID	WAP420	**Fuel Calibration Number**	2
Vehicle Class	LDV/Passenger Car	**DF Type**	EPA Assigned
Verify Test Lab ID	Audi AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5749	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0.071	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.6	--
DT-EER (Drive Trace Energy Economy Rating)	-1.2	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.22	--
HCHO (Formaldehyde)	0	--
MFR FE (Manufacturer Fuel Economy)	18.2	18.2
NOX (Nitrogen Oxide)	0.0026	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0008	--
NMOG (Non-methane organic gases)	0.0008	--
PM (Particulate Matter)	0	--
HC-TOTAL (Total Hydrocarbon)	0.0008	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	491	491
Optional Carbon-Related Exhaust Emissions	491	491

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	491	--

Manufacturer Test Comments E0 4k HWFET - Tested as BUGATTI Chiron PC 2 dr. EDV - ETW: 4750

Certification Summary Information Report

Test Group MVGAV08.0GLB **Evaporative/Refueling Family** MVGAR0200GCB

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 160	CREE	491	--	--	--	0.49	--	491	--	--
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG	0.0008	--	1.10	--	0.0155	--	0.016	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG+NOX	0.0034	--	--	--	--	--	0.036	0.160	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NOX	0.0026	--	--	--	0.0176	--	0.020	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	NMOG	0.0008	--	1.10	--	0.0155	--	0.016	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	NMOG+NOX	0.0034	--	--	--	--	--	0.036	0.160	Pass
CA	150,000 miles	California LEV-III LEV160	NOX	0.0026	--	--	--	0.0176	--	0.020	99.999	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**HVGA10044875**	**Test Procedure**	**3 - HWFE**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/17/2016	**Fuel**	Gasoline
Fuel Batch ID	TIEP03	**Fuel Calibration Number**	21
Vehicle Class	LDV/Passenger Car	**DF Type**	EPA Assigned
Verify Test Lab ID	Audi AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5658	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0.072	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.65	--
DT-EER (Drive Trace Energy Economy Rating)	-0.91	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.04	--
MFR FE (Manufacturer Fuel Economy)	18	18
NOX (Nitrogen Oxide)	0.0022	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0008	--
NMOG (Non-methane organic gases)	0.0009	--
PM (Particulate Matter)	0.002	--
HC-TOTAL (Total Hydrocarbon)	0.0008	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	492	999
Optional Carbon-Related Exhaust Emissions	492	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	492	--

Manufacturer Test Comments E10 - Worst Case Exhaust 4k HWFET - Tested as BUGATTI Chiron PC 2 dr. EDV - ETW: 4750

Certification Summary Information Report

Test Group MVGAV08.0GLB **Evaporative/Refueling Family** MVGAR0200GCB

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 160	CREE	999	--	--	--	0.49	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG	0.0009	--	1.10	--	0.0155	--	0.016	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG+NOX	0.0031	--	--	--	--	--	0.036	0.160	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NOX	0.0022	--	--	--	0.0176	--	0.020	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	NMOG	0.0009	--	1.10	--	0.0155	--	0.016	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	NMOG+NOX	0.0031	--	--	--	--	--	0.036	0.160	Pass
CA	150,000 miles	California LEV-III LEV160	NOX	0.0022	--	--	--	0.0176	--	0.020	99.999	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**HVGA10044873**	**Test Procedure**	**95 - SC03**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/16/2016	**Fuel**	Gasoline
Fuel Batch ID	TIEP03	**Fuel Calibration Number**	21
Vehicle Class	LDV/Passenger Car	**DF Type**	EPA Assigned
Verify Test Lab ID	Audi AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5618	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0213	--
CO (Carbon Monoxide)	0.461	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	99	--
DT-EER (Drive Trace Energy Economy Rating)	99	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	99	--
MFR FE (Manufacturer Fuel Economy)	10.4	10.4
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0028	--
NMOG (Non-methane organic gases)	0.0031	--
PM (Particulate Matter)	0	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0028	--
HC-TOTAL (Total Hydrocarbon)	0.0239	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	852	--

Manufacturer Test Comments E10 - Worst Case Exhaust 4k SC03 - Tested as BUGATTI Chiron PC 2 dr. EDV - ETW: 4750

Certification Summary Information Report

Test Group MVGAV08.0GLB **Evaporative/Refueling Family** MVGAR0200GCB

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 160	CO	0.4610	--	--	--	0.365	--	0.826	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG	0.0031	--	1.10	--	0.0155	--	0.019	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NOX	0.0000	--	--	--	0.0176	--	0.018	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	PM	0.0000	--	--	--	0.000	--	0.000	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	CO	0.4610	--	--	--	0.365	--	0.826	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	NMOG	0.0031	--	1.10	--	0.0155	--	0.019	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	NOX	0.0000	--	--	--	0.0176	--	0.018	99.999	Pass

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Emission Data Vehicle Information

Vehicle ID / Configuration	BG744 6020 / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	HVGAV08.0GLB	**Original Evaporative/Refueling Family**	HVGAR0200GCB
Original Test Vehicle Model Year	2017		

Vehicle Model

Represented Test Vehicle Make	BUGATTI	**Represented Test Vehicle Model**	Bugatti Chiron

Leak Family Details

Leak Family Identifier	--	**Leak Family Name**	--

Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	--	**Rechargeable Energy Storage System Indicator**	--
Rechargeable Energy Storage System	--	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	12	**Odometer Correction Factor**	0.998
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Kilometers		
Engine Code	DALA	**Rated Horsepower**	1500
Displacement (liters)	7.993		
Air Aspiration Method	Turbocharged	**Air Aspiration Method, if 'Other'**	
Number of Air Aspiration Devices	4	**Air Aspiration Device Configuration**	Parallel
Charge Air Cooler Type	Liquid	**Drive Mode While Testing**	All Wheel Drive
Shift Indicator Light Usage	Not eqipped	**Aged Emission Components**	4,000 (mi)
Curb Weight (lbs)	4511	**Equivalent Test Weight (pounds)**	4750
GVWR (lbs)	--	**N/V Ratio**	32.4
Axle Ratio	3.64		
Transmission Type	Semi-Automatic	**# of Transmission Gears**	7
Transmission Lockup	Yes	**Creeper Gear**	No

Certification Summary Information Report

Test Group	MVGAV08.0GLB	Evaporative/Refueling Family	MVGAR0200GCB

Dynamometer Coefficients:

Coefficient Category	Target Coefficients A (lbf)	Target Coefficients B (lbf/mph)	Target Coefficients C (lbf/mph**2)	Set Coefficients A (lbf)	Set Coefficients B (lbf/mph)	Set Coefficients C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
City/Highway/Evap	64.453	0.49989	0.023164	-23.056	-0.4423	0.030031	19.6
Cold CO	70.898	0.54988	0.02548	-25.362	-0.4866	0.033035	N/A
US06	64.453	0.49989	0.023164	-23.056	-0.4423	0.030031	N/A

Emission Control Device Comments --

Manufacturer Test Vehicle Comments EVAP EDV - MY 2017 Bugatti Chiron tested as Chiron PC with Semi-Automatic 7 speed - ETW: 4750 Bugatti Chiron tested as a Chiron 2 dr. PC - ETW: 4750

Test #	**HVGA10044885**	**Test Procedure**	**23 - 2-day evap**
Exhaust Test # for this Evap Test	HVGA10044882	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/31/2016	**Fuel**	Gasoline
Fuel Batch ID	TIEP03	**Fuel Calibration Number**	21
Vehicle Class	N/A	**DF Type**	EPA Assigned
Verify Test Lab ID	Volksawgen AG		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	3278	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.327	--

Manufacturer Test Comments --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.3270	0.013	0.340	0.500	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.3270	0.013	0.340	0.500	Pass

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**HVGA10044887**	**Test Procedure**	**34 - Federal fuel 3-day evap**
Exhaust Test # for this Evap Test	HVGA10044884	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	09/08/2016	**Fuel**	Gasoline
Fuel Batch ID	TIEP03	**Fuel Calibration Number**	21
Vehicle Class	N/A	**DF Type**	EPA Assigned
Verify Test Lab ID	Volksawgen AG		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	3364	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.418	--

Manufacturer Test Comments --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.4180	0.016	0.434	0.500	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.4180	0.016	0.434	0.500	Pass

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**HVGA10044886**	**Test Procedure**	**24 - Federal fuel refueling test (ORVR)**
Exhaust Test # for this Evap Test	HVGA10044883	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	09/06/2016	**Fuel**	Gasoline
Fuel Batch ID	TIEP03	**Fuel Calibration Number**	21
Vehicle Class	N/A	**DF Type**	EPA Assigned
Verify Test Lab ID	Volksawgen AG		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	3308	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC (Hydrocarbon for Running Loss and ORVR)	0.024	--

Manufacturer Test Comments --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC	0.0240	0.006	0.030	0.200	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC	0.0240	0.006	0.030	0.200	Pass

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**HVGA10044888**	**Test Procedure**	**32 - Federal Fuel Running Loss**
Exhaust Test # for this Evap Test	HVGA10044884	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	09/08/2016	**Fuel**	Gasoline
Fuel Batch ID	TIEP03	**Fuel Calibration Number**	21
Vehicle Class	N/A	**DF Type**	EPA Assigned
Verify Test Lab ID	Volksawgen AG		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	3364	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0001	--

Manufacturer Test Comments --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.0001	0.000	0.000	0.050	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.0001	0.000	0.000	0.050	Pass

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**HVGA10044892**	**Test Procedure**	**65 - Evap Canister Bleed Test**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	06/17/2016	**Fuel**	Gasoline
Fuel Batch ID	TIEP03	**Fuel Calibration Number**	21
Vehicle Class	N/A	**DF Type**	EPA Assigned
Verify Test Lab ID	Volksawgen AG		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3278	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0069	--

Manufacturer Test Comments Bugatti BETP

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.0069	0	0.007	0.020	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.0069	0	0.007	0.020	Pass

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Emission Data Vehicle Information

Vehicle ID / Configuration	BG744-PT50 CHIRON / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	MVGAV08.0GLB	**Original Evaporative/Refueling Family**	MVGAR0200GCB
Original Test Vehicle Model Year	2021		

Vehicle Model

Represented Test Vehicle Make	BUGATTI	**Represented Test Vehicle Model**	Bugatti Chiron

Leak Family Details

Leak Family Identifier	--	**Leak Family Name**	--

Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	--	**Rechargeable Energy Storage System Indicator**	--
Rechargeable Energy Storage System	--	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	0	**Odometer Correction Factor**	0.9995
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Kilometers		
Engine Code	DALA	**Rated Horsepower**	1500
Displacement (liters)	7.993		
Air Aspiration Method	Turbocharged	**Air Aspiration Method, if 'Other'**	
Number of Air Aspiration Devices	4	**Air Aspiration Device Configuration**	Parallel
Charge Air Cooler Type	Liquid	**Drive Mode While Testing**	All Wheel Drive
Shift Indicator Light Usage	Equipped, not shifted by SIL	**Aged Emission Components**	4,000 (mi)
Curb Weight (lbs)	4414	**Equivalent Test Weight (pounds)**	4750
GVWR (lbs)	--	**N/V Ratio**	24.3
Axle Ratio	2.58		
Transmission Type	Automated Manual- Selectable (e.g. Automated Manual with paddles)	**# of Transmission Gears**	7
Transmission Lockup	No	**Creeper Gear**	No

Certification Summary Information Report

Test Group	MVGAV08.0GLB	Evaporative/Refueling Family	MVGAR0200GCB

Dynamometer Coefficients:

Coefficient Category	Target Coefficients A (lbf)	Target Coefficients B (lbf/mph)	Target Coefficients C (lbf/mph**2)	Set Coefficients A (lbf)	Set Coefficients B (lbf/mph)	Set Coefficients C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
City/Highway/Evap	64.453	0.5	0.023174	-10.746	-0.8574	0.031442	19.7
Cold CO	70.898	0.54988	0.02548	-11.82	-0.943	0.034571	N/A
US06	64.453	0.5	0.023174	-10.746	-0.8574	0.031442	N/A

Emission Control Device Comments SFI/AIR/4WU-TWC/2TWC/4TC/2CAC/4WR-HO2S/4HO2S

Manufacturer Test Vehicle Comments EDV (FTP/US06) because of 3mg Phase-In fullfillment Bugatti Chiron tested as a Chiron 2 dr. PC - ETW: 4750

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**MVGA10065581**	**Test Procedure**	**21 - Federal fuel 2-day exhaust (w/can load)**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	06/04/2020	**Fuel**	Gasoline
Fuel Batch ID	TIEP07	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	EPA Assigned
Verify Test Lab ID	Volksawgen AG		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7865	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	898.1	--
FE BAG 1 (Bag 1 Fuel Economy)	9.6	9.6
CO2 BAG 2 (Bag 2 Carbon Dioxide)	911.9	--
FE BAG 2 (Bag 2 Fuel Economy)	9.5	9.5
CO2 BAG 3 (Bag 3 Carbon Dioxide)	699.2	--
FE BAG 3 (Bag 3 Fuel Economy)	12.4	12.4
METHANE (CH4 - Methane)	0.0236	--
CO (Carbon Monoxide)	0.47	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.73	--
DT-EER (Drive Trace Energy Economy Rating)	-0.88	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.34	--
MFR FE (Manufacturer Fuel Economy)	10.2	10.2
NOX (Nitrogen Oxide)	0.0075	--
N2O (Nitrous Oxide)	0.002	--
HC-NM (Non-methane Hydrocarbon)	0.0484	--
NMOG (Non-methane organic gases)	0.0533	--
PM (Particulate Matter)	0	--
HC-TOTAL (Total Hydrocarbon)	0.0714	--

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	852	999
Optional Carbon-Related Exhaust Emissions	853	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	851	--

Manufacturer Test Comments 4k FED. FUEL FTP - Tested as BUGATTI Chiron PC 2 dr. EDV - ETW: 4750

Certification Summary Information Report

Test Group MVGAV08.0GLB **Evaporative/Refueling Family** MVGAR0200GCB

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	120,000 miles	Federal Tier 3 Bin 160	CREE	999	--	--	--	0.49	--	999	--	--
Fed	120,000 miles	Federal Tier 3 Bin 160	METHANE	0.0236	--	--	--	0.0042	--	0.028	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 160	N2O	0.0020	--	--	--	0.001	--	0.003	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	CO	0.47	--	--	--	0.365	--	0.8	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	CO-COMP	0.74	--	--	--	--	--	0.7	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG	0.0533	--	1.10	--	0.0155	--	0.069	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG+NOX	0.0608	--	--	--	--	--	0.094	0.160	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG+NOX-COMP	0.0567	--	--	--	--	--	0.057	0.140	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NOX	0.0075	--	--	--	0.0176	--	0.025	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	PM	0.0000	--	--	--	0.000	--	0.000	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	PM-COMP	0.0008	--	--	--	--	--	0.001	0.070	Pass
CA	150,000 miles	California LEV-III LEV160	CO	0.470	--	--	--	0.365	--	0.84	4.20	Pass
CA	150,000 miles	California LEV-III LEV160	CO-COMP	0.739	--	--	--	--	--	0.74	4.20	Pass
CA	150,000 miles	California LEV-III LEV160	NMOG	0.0533	1	1.10	--	0.0155	--	0.069	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	NMOG+NOX	0.0608	--	--	--	--	--	0.094	0.160	Pass
CA	150,000 miles	California LEV-III LEV160	NMOG+NOX-COMP	0.0567	--	--	--	--	--	0.057	0.140	Pass
CA	150,000 miles	California LEV-III LEV160	NOX	0.0075	--	--	--	0.0176	--	0.025	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	PM	0.0000	--	--	--	0.000	--	0.000	0.010	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Test #	**MVGA10065582**	**Test Procedure**	**90 - US06**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	06/11/2020	**Fuel**	Gasoline
Fuel Batch ID	TIEP07	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	EPA Assigned
Verify Test Lab ID	Volksawgen AG		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7959	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	932.3	--
FE BAG 1 (Bag 1 Fuel Economy)	9.3	9.3
CO2 BAG 2 (Bag 2 Carbon Dioxide)	574.7	--
FE BAG 2 (Bag 2 Fuel Economy)	15	15
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0.138	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.75	--
DT-EER (Drive Trace Energy Economy Rating)	-0.62	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.46	--
MFR FE (Manufacturer Fuel Economy)	13.2	13.2
NOX (Nitrogen Oxide)	0.0019	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0021	--
NMOG (Non-methane organic gases)	0.0022	--
PM (Particulate Matter)	0.003	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.004	--
HC-TOTAL (Total Hydrocarbon)	0.0021	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	654	--

Certification Summary Information Report

Test Group MVGAV08.0GLB **Evaporative/Refueling Family** MVGAR0200GCB

Manufacturer Test Comments 4k US06 - Tested as BUGATTI Chiron PC 2 dr. EDV - ETW: 4750

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 160	CO	0.1380	--	--	--	0.365	--	0.503	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG	0.0022	--	1.10	--	0.0155	--	0.018	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NOX	0.0019	--	--	--	0.0176	--	0.020	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	PM	0.0030	--	--	--	0.000	--	0.003	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	CO	0.1380	--	--	--	0.365	--	0.503	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	NMOG	0.0022	--	1.10	--	0.0155	--	0.018	99.999	Pass
CA	150,000 miles	California LEV-III LEV160	NOX	0.0019	--	--	--	0.0176	--	0.020	99.999	Pass

Certification Summary Information Report

Test Group	MVGAV08.0GLB	Evaporative/Refueling Family	MVGAR0200GCB

Fuel Properties

Fuel Batch ID	**TIEP03**	**Fuel Calibration Number**	**21**
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	**Fuel Batch Calibration Date**	07/31/2016
Fuel Batch Calibration Effective Date	05/26/2016	**Fuel Batch Calibration Ineffective Date**	--
Carbon Weight Fraction NMHC	--	**Carbon Weight Fraction HC**	--
Exhaust Carbon Weight Fraction	--	**Fuel Methanol Volume Fraction**	--
Fuel Density (grams/cubic ft)	--	**Fuel Specific Gravity**	0.756
Fuel Ethanol Volume Percent (%)	10	**Fuel Net Heating Value (BTU / lb)**	17491
Fuel Blend Carbon Weight Fraction	0.83	**Weight Fraction CO2**	--

Fuel Batch ID	**TIEP07**	**Fuel Calibration Number**	**1**
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	**Fuel Batch Calibration Date**	12/13/2019
Fuel Batch Calibration Effective Date	05/05/2020	**Fuel Batch Calibration Ineffective Date**	--
Carbon Weight Fraction NMHC	--	**Carbon Weight Fraction HC**	--
Exhaust Carbon Weight Fraction	--	**Fuel Methanol Volume Fraction**	--
Fuel Density (grams/cubic ft)	--	**Fuel Specific Gravity**	0.752
Fuel Ethanol Volume Percent (%)	10	**Fuel Net Heating Value (BTU / lb)**	18014
Fuel Blend Carbon Weight Fraction	0.825	**Weight Fraction CO2**	--

Fuel Batch ID	**WAP420**	**Fuel Calibration Number**	**2**
Test Fuel Type	61 - Tier 2 Cert Gasoline	**Fuel Batch Calibration Date**	07/21/2016
Fuel Batch Calibration Effective Date	04/27/2016	**Fuel Batch Calibration Ineffective Date**	--
Carbon Weight Fraction NMHC	--	**Carbon Weight Fraction HC**	--
Exhaust Carbon Weight Fraction	--	**Fuel Methanol Volume Fraction**	--
Fuel Density (grams/cubic ft)	--	**Fuel Specific Gravity**	0.741
Fuel Ethanol Volume Percent (%)	--	**Fuel Net Heating Value (BTU / lb)**	18405
Fuel Blend Carbon Weight Fraction	0.868	**Weight Fraction CO2**	--

Fuel Batch ID	**COP302**	**Fuel Calibration Number**	**6**
Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)	**Fuel Batch Calibration Date**	07/21/2016
Fuel Batch Calibration Effective Date	02/01/2016	**Fuel Batch Calibration Ineffective Date**	--
Carbon Weight Fraction NMHC	--	**Carbon Weight Fraction HC**	--
Exhaust Carbon Weight Fraction	--	**Fuel Methanol Volume Fraction**	--
Fuel Density (grams/cubic ft)	--	**Fuel Specific Gravity**	0.75
Fuel Ethanol Volume Percent (%)	10	**Fuel Net Heating Value (BTU / lb)**	17670
Fuel Blend Carbon Weight Fraction	0.829	**Weight Fraction CO2**	--

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Consolidated List of Standards

Exhaust Standards

Cert Region	Federal	**Cert/In-Use Code**	Both
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 160
Fuel	Gasoline	**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
120,000 miles	CREE	--	--	--	--	--	--	0.49	999.9999
120,000 miles	METHANE	--	--	--	--	--	--	0.0042	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.001	0.010
150,000 miles	CO	--	--	--	--	--	--	0.365	4.2
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	NMOG	--	--	1.10	--	--	--	0.0155	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.160
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.140
150,000 miles	NOX	--	--	--	--	--	--	0.0176	99.999
150,000 miles	PM	--	--	--	--	--	--	0.000	0.010
150,000 miles	PM-COMP	--	--	--	--	--	--	--	0.070

Cert Region	Federal	**Cert/In-Use Code**	Both
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 160
Fuel	Gasoline	**Test Procedure**	SC03

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	--	--	--	--	--	--	0.365	99.999
150,000 miles	NMOG	--	--	1.10	--	--	--	0.0155	99.999
150,000 miles	NOX	--	--	--	--	--	--	0.0176	99.999
150,000 miles	PM	--	--	--	--	--	--	0.000	99.999

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB
Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Both
Vehicle Class	LDV/Passenger Car	**Standard Level**	California LEV-III LEV160
Fuel	Gasoline	**Test Procedure**	HWFE

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	NMOG	--	--	1.10	--	--	--	0.0155	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.160
150,000 miles	NOX	--	--	--	--	--	--	0.0176	99.999

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Both
Vehicle Class	LDV/Passenger Car	**Standard Level**	California LEV-III LEV160
Fuel	Gasoline	**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	--	--	--	--	--	--	0.365	4.20
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.20
150,000 miles	NMOG	--	1	1.10	--	--	--	0.0155	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.160
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.140
150,000 miles	NOX	--	--	--	--	--	--	0.0176	99.999
150,000 miles	PM	--	--	--	--	--	--	0.000	0.010

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Both
Vehicle Class	LDV/Passenger Car	**Standard Level**	California LEV-III LEV160
Fuel	Gasoline	**Test Procedure**	Fed. fuel 50 F exh.

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
4,000 miles	CO	--	--	--	--	--	--	--	4.2
4,000 miles	NMOG	--	--	1.10	--	--	--	--	99.999
4,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.320
4,000 miles	NOX	--	--	--	--	--	--	--	99.999

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Cert Region	Federal	**Cert/In-Use Code**	Both
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 160
Fuel	Gasoline	**Test Procedure**	HWFE

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	CREE	--	--	--	--	--	--	0.49	999.9999
150,000 miles	NMOG	--	--	1.10	--	--	--	0.0155	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.160
150,000 miles	NOX	--	--	--	--	--	--	0.0176	99.999

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Both
Vehicle Class	LDV/Passenger Car	**Standard Level**	California LEV-III LEV160
Fuel	Gasoline	**Test Procedure**	US06

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	--	--	--	--	--	--	0.365	99.999
150,000 miles	NMOG	--	--	1.10	--	--	--	0.0155	99.999
150,000 miles	NOX	--	--	--	--	--	--	0.0176	99.999

Cert Region	Federal	**Cert/In-Use Code**	Both
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 160
Fuel	Gasoline	**Test Procedure**	US06

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	--	--	--	--	--	--	0.365	99.999
150,000 miles	NMOG	--	--	1.10	--	--	--	0.0155	99.999
150,000 miles	NOX	--	--	--	--	--	--	0.0176	99.999
150,000 miles	PM	--	--	--	--	--	--	0.000	99.999

Certification Summary Information Report

Test Group MVGAV08.0GLB **Evaporative/Refueling Family** MVGAR0200GCB

Cert Region California + CAA Section 177 states **Cert/In-Use Code** Both
Vehicle Class LDV/Passenger Car **Standard Level** California LEV-III LEV160
Fuel Gasoline **Test Procedure** SC03

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	--	--	--	--	--	--	0.365	99.999
150,000 miles	NMOG	--	--	1.10	--	--	--	0.0155	99.999
150,000 miles	NOX	--	--	--	--	--	--	0.0176	99.999

Cert Region Federal **Cert/In-Use Code** Both
Vehicle Class LDV/Passenger Car **Standard Level** Federal Tier 3 Bin 160
Fuel Gasoline **Test Procedure** Cold CO

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	--	0.11	10.0
150,000 miles	HC-NM	--	--	--	--	--	--	0.0155	1.8

Cert Region California + CAA Section 177 states **Cert/In-Use Code** Both
Vehicle Class LDV/Passenger Car **Standard Level** California LEV-III LEV160
Fuel Gasoline **Test Procedure** Cold CO

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	--	0.11	10.0

Evaporative/Refueling Standards

Evaporative/Refueling Family MVGAR0200GCB **Cert Region** Federal
Cert/In-Use Code Both **Standard Level** Federal Tier 3 Evap
Test Procedure Federal Fuel Running Loss

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.050	0.000

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Evaporative/Refueling Family	MVGAR0200GCB	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Both	**Standard Level**	California LEV-III Zero Evap (Option 2)
Test Procedure	Federal fuel 3-day evap		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0.016

Evaporative/Refueling Family	MVGAR0200GCB	**Cert Region**	Federal
Cert/In-Use Code	Both	**Standard Level**	Federal Tier 3 Evap
Test Procedure	Evap Canister Bleed Test		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0

Evaporative/Refueling Family	MVGAR0200GCB	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Both	**Standard Level**	California LEV-III Zero Evap (Option 2)
Test Procedure	2-day evap		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0.013

Evaporative/Refueling Family	MVGAR0200GCB	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Both	**Standard Level**	California LEV-III Zero Evap (Option 2)
Test Procedure	Evap Canister Bleed Test		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0

Evaporative/Refueling Family	MVGAR0200GCB	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Both	**Standard Level**	California LEV-III Zero Evap (Option 2)
Test Procedure	Federal fuel refueling test (ORVR)		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC	--	0.200	0.006

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

Evaporative/Refueling Family MVGAR0200GCB
Cert Region California + CAA Section 177 states
Cert/In-Use Code Both
Standard Level California LEV-III Zero Evap (Option 2)
Test Procedure Federal Fuel Running Loss

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.050	0.000

Evaporative/Refueling Family MVGAR0200GCB
Cert Region Federal
Cert/In-Use Code Both
Standard Level Federal Tier 3 Evap
Test Procedure 2-day evap

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0.013

Evaporative/Refueling Family MVGAR0200GCB
Cert Region Federal
Cert/In-Use Code Both
Standard Level Federal Tier 3 Evap
Test Procedure Federal fuel refueling test (ORVR)

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC	--	0.200	0.006

Evaporative/Refueling Family MVGAR0200GCB
Cert Region Federal
Cert/In-Use Code Both
Standard Level Federal Tier 3 Evap
Test Procedure Federal fuel 3-day evap

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0.016

Certification Summary Information Report

Test Group	MVGAV08.0GLB	Evaporative/Refueling Family	MVGAR0200GCB

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

Certification Region

CA	California + CAA Section 177 states	FA	Federal

Exhaust Emission Standard Level

B1	Federal Tier 2 Bin 1	L3ULEV340	California LEV-III ULEV340
B2	Federal Tier 2 Bin 2	L3ULEV250	California LEV-III ULEV250
B3	Federal Tier 2 Bin 3	L3ULEV200	California LEV-III ULEV200
B4	Federal Tier 2 Bin 4	L3SULEV170	California LEV-III SULEV170
B5	Federal Tier 2 Bin 5	L3SULEV150	California LEV-III SULEV150

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB
B6	Federal Tier 2 Bin 6	L3LEV630	California LEV-III LEV630
B7	Federal Tier 2 Bin 7	L3ULEV570	California LEV-III ULEV570
B8	Federal Tier 2 Bin 8	L3ULEV400	California LEV-III ULEV400
B9	Federal Tier 2 Bin 9	L3ULEV270	California LEV-III ULEV270
B10	Federal Tier 2 Bin 10	L3SULEV230	California LEV-III SULEV230
B11	Federal Tier 2 Bin 11	L3SULEV200	California LEV-III SULEV200
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)	T3B160	Federal Tier 3 Bin 160
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	T3B125	Federal Tier 3 Bin 125
L2	California LEV-II LEV	T3B110	Federal Tier 3 Transitional Bin 110
L2OP	California LEV-II LEV Optional	T3B85	Federal Tier 3 Transitional Bin 85
U2	California LEV-II ULEV	T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover
S2	California LEV-II SULEV	T3B70	Federal Tier 3 Bin 70
ZEV	California ZEV	T3B50	Federal Tier 3 Bin 50
OT	Other	T3B30	Federal Tier 3 Bin 30
T1	Federal Tier 1	T3B20	Federal Tier 3 Bin 20
PZEV	California PZEV	T3B0	Federal Tier 3 Bin 0
L2LEV160	California LEV-II LEV160	HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395
L2ULEV125	California LEV-II ULEV125	HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340
L2SULEV30	California LEV-II SULEV30	HDV2B250	Federal Tier 3 HD Class 2b Bin 250
L2LEV395	California LEV-II LEV395	HDV2B200	Federal Tier 3 HD Class 2b Bin 200
L2ULEV340	California LEV-II ULEV340	HDV2B170	Federal Tier 3 HD Class 2b Bin 170
L2LEV630	California LEV-II LEV630	HDV2B150	Federal Tier 3 HD Class 2b Bin 150
L2ULEV570	California LEV-II ULEV570	HDV2B0	Federal Tier 3 HD Class 2b Bin 0
L3LEV160	California LEV-III LEV160	HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630
L3ULEV125	California LEV-III ULEV125	HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570
L3ULEV70	California LEV-III ULEV70	HDV3B400	Federal Tier 3 HD Class 3 Bin 400
L3ULEV50	California LEV-III ULEV50	HDV3B270	Federal Tier 3 HD Class 3 Bin 270
L3SULEV30	California LEV-III SULEV30	HDV3B230	Federal Tier 3 HD Class 3 Bin 230
L3SULEV20	California LEV-III SULEV20	HDV3B200	Federal Tier 3 HD Class 3 Bin 200
L3LEV395	California LEV-III LEV395	HDV3B0	Federal Tier 3 HD Class 3 Bin 0

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		

Certification Summary Information Report

Test Group	MVGAV08.0GLB	**Evaporative/Refueling Family**	MVGAR0200GCB

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

Emissions Continuity Compliance Statement **NMOG, CO, CO2 and NOx**

In accordance with EPA Guidance Letter CD-14-19 and 40 CFR 86.1809-12 (e) the Volkswagen Group hereby certifies that based on engineering evaluations of emission testing there is no discontinuity in emission performance of NMOG, CO, CO2 and NOx as measured and averaged over the Federal Test Procedure in the temperature range of 20°F to 86°F for vehicles in this test group.

The normal operation of the emission control system consists of:

(i) Cycling back and forth in a narrow window between rich and lean operation as a result of feedback controls targeted to maintain overall engine operation at stoichiometry.

(ii) Small changes in the target air-fuel ratio to optimize vehicle emissions or drivability. This may be called ‘‘closed loop biasing.’’

(iii) Temporary enrichment in response to rapid throttle motion.

(iv) Enrichment during cold-start and warm-up conditions.

(v) Temporary air/fuel mixture modulation for running OBD checks to comply with California OBD regulations contained in 13 CCR §1968.2.

(vi) Infrequent operation modes, e.g. PM trap regeneration, are certified under special provisions of the CFR.

The modulation of the emission control system can cause step changes in emissions and CO2 depending on the driving condition (engine speed and
load).

This modulation is not forming a discontinuity in emissions because it is included in the Federal Test Procedures and is working under the same conditions during on-road operation

91 RON (Knock Sensor): Compliance Statement*:*

In accordance with EPA Guidance Letter CD-14-19 and VPCD-97-01, highway fuel economy test result differences between 91 RON operation and 96 RON operation is within 3% based on the same energy content of the fuel, and there are no emission increases (beyond normal test variability) using 91 RON fuel with comparable fuel specification when tested on the FTP cycle.

A/C Calibrations – Compliance Statement

In accordance with EPA Guidance Letter CD-14-19 and 40 CFR 86.1811-17 (d) (3) there are neither A/C-on specific calibrations nor A/C-on specific "open-loop" or "commanded" air fuel enrichment strategies incorporated into the vehicle design of this Test Group.

Lean Best Torque Compliance Statement

In accordance with EPA Guidance Letter CD-14-19 and 40 CFR 86.1811-17 (d) (1) the air fuel ratio is not richer at any time over the USO6 cycle than the leanest air fuel ratio required to obtain maximum torque plus a tolerance of four percent. Other enrichments, if applicable e.g. for part protection, are described in the AECD description of the test group (section 16.11)

Lean-On Cruise Compliance Statement

In accordance with EPA Guidance Letter CD-14-19 and 40 CFR 86.1811-17 (d) (4) there are no "Lean-on-cruise" calibration strategies incorporated into the vehicle design of this test group.

OBD Compliance Statement

The OBD system meets the full intent of both the EPA Tier 3 Regulations contained in CFR Title 40 Part 86.1806-17 and the California OBD regulations contained in 13 CCR §1968.2.

Leak Free Exhaust System Compliance Statement

In accordance with 40 CFR 86.1844-01(d)(16(i), the Volkswagen Group hereby states that, for vehicles described in this application, as appropriate, it has conducted an engineering analysis of the complete exhaust system to ensure that the exhaust system has been designed:

(A) To facilitate leak-free assembly, installation and operation for the full useful life of the vehicles, and

(B) To facilitate that such repairs as might be necessary on a properly maintained and used vehicle can be performed in such a manner as to maintain leak-free operation, using tools commonly available in a motor vehicle dealership or independent repair shop for the full useful life of the vehicle.

A “leak-free” exhaust system is understood from the engine block to the point in the exhaust system behind the last component of exhaust aftertreatment system (e.g. catalyst). Silencer/muffler and tailpipes are not part of the exhaust aftertreatment system when installed downstream the last component of exhaust aftertreatment.
For installation/mounting of the exhaust system clamps and/or flanges are used with a technical leakage specification ensuring compliance with exhaust emission standards in-use.

High Altitude Exhaust Emissions Compliance Statement

In accordance with 40 CFR 86.1829-15 (c), The Volkswagen Group hereby certifies that, based upon engineering evaluation and high altitude emission tests conducted on similar vehicles, all vehicles of this test group comply with the high altitude exhaust emissions requirements.

Formaldehyde Emissions Compliance Statement

In accordance with 86.1829-15 (d) (4), and based upon good engineering judgment, the Volkswagen Group hereby states that vehicles certified based upon NMHC emissions comply with the applicable formaldehyde emission standards.

High Altitude Evaporative/Refueling Emissions Compliance Statement

In accordance with 40 CFR 86.1829-01 (b) (2) (ii) (B), the Volkswagen Group hereby certifies that, based upon engineering evaluation and high altitude evaporative/refueling tests conducted on similar vehicles, all vehicles of this test group comply with the high altitude evaporative/refueling emissions requirements.

Spitback Compliance Statement

In accordance 40 CFR 86.1829-15 (e) (5) the Volkswagen Group hereby certifies that the vehicle inherently meets the Fuel Dispensing Spitback Standard as part of compliance with the refueling emission standard. This certification applies to the full useful life of the vehicle. Testing is therefore not required.

Evaporative Leak Test Compliance Statement

In accordance with 40 CFR 86.1829-15 (e) (5), The Volkswagen Group hereby certifies that, based upon engineering evaluation all vehicles in the evaporative/refueling emission family comply with the evaporative emission standard for the supplemental two-diurnal test sequence.

Emissions Continuity Compliance Statement N_2O, CH_4, HCHO

In accordance with EPA Guidance Letter CD-14-19 and 40 CFR 86.1809-12 (e) the Volkswagen Group hereby certifies that based on engineering evaluations of emission testing there is no discontinuity in emission performance of N2O, CH4, HCHO as measured and averaged over the Federal Test Procedure in the temperature range of 20°F to 86°F for vehicles in this test group.

The normal operation of the emission control system consists of:

(i) Cycling back and forth in a narrow window between rich and lean operation as a result of feedback controls targeted to maintain overall
engine operation at stoichiometry.

(ii) Small changes in the target air-fuel ratio to optimize vehicle emissions or drivability. This may be called ‘‘closed loop biasing.’’

(iii) Temporary enrichment in response to rapid throttle motion.

(iv) Enrichment during cold-start and warm-up conditions.

(v) Temporary air/fuel mixture modulation for running OBD checks to comply with California OBD regulations contained in 13 CCR §1968.2.

vi) Infrequent operation modes, e.g. PM trap regeneration, are certified under special provisions of the CFR.

The modulation of the emission control system can cause step changes in emissions and CO2 depending on the driving condition (engine speed and load). This modulation is not forming a discontinuity in emissions because it is included in the Federal Test Procedures and is working under the same conditions during on-road operation.

9.0 OBD System Description

9.1 Summary Table

Refer to Section 16 (included in OBD A – P application)

9.2 California Air Resources Board OBD System Approval Letter.

Refer to Section 16

10. Description of Alternate Fueled Vehicles

Not applicable

11. Auxiliary Emission Control Devices (AECD) Descriptions

Refer to Section K of the A-P OBD Application

12.0 List of Certified Vehicles

Durability Group	MVGAGPGNNEAN
Test Group	MVGAV08.0GLB
Evap Family	MVGAR0200GCB
Emission Control System:	SFI/AIR/4WU-TWC/2TWC/4TC/2CAC/4WR-HO2S/4HO2S

Engine Displacement:	8.0 liter
Valves per Cylinder:	16
Sales Area:	50 states
MMS [1]:	Two ME(D) 17
SIL:	N/A

Engine Code	Carline	Vehicle Class	Engine Code Characteristics			HP @RPM	Torque @RPM	Trans. / OD	ETW	Curb Weight [lbs]	Fuel Tank Capacity [l]	Canister working capacity [g]	Tire size	N/V Ratio	Start/ Stop [Y/N]
			Cat. Code	Com-pression ratio	Idle [rpm]										
DALA	Bugatti Chiron	LDV	TEX1347, TEX0504	8.3 ± 0.25	650± 100	1500 @6700	1600 Nm @2200 to 5500	L7	4750	4414	100	200	285/30 Z R20 // 355/25 Z R21	24.31	N

*184 lbf×ft = 250 Nm; 1Nm = 0.737561 lbs×ft

12.1 Transmissions

Transmission Code	Transmission Code Characteristic														
	Drivetrain	Gear Count	Lock-Up rpm		Gearbox Ratios										
			Gear	min/max	Axle	Gear 1	Gear 2	Gear 3	Gear 4	Gear 5	Gear 6	Gear 7	Gear 8	N/V	Tire Size
DL-1600-7A AQQ	4WD	L7	3/4/ 5/6/7	1100-6000	2.466 // 2.582	3.176	2.235	1.680	1.290	1.057	0.878	0.784	n.a.	24.31	285/30 Z R20 // 355/25 Z R21

1) Code number that describes if the ratio of the top gear of the transmission is less than 1. The value is 2 when this is true.

12.2 Test conditions

Carline	ETW	Road Track Coefficients						TRL50	TCDT	Fuel Tank Cap.	Fan Pos.	Shift Sched. I.D.	Test Fuel	DF Source
		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]	40% / 100% [l]				
Bugatti Chiron	4750	64.453	0.5000	0.023174	286.7	1.3820	0.0398	19.7	14.7	40 / 100	1	automatic	Tier 3	MGLB

Engine Starting procedure:
Press the brake pedal and move the selector lever into the P or N position.
Push “Start” button to start engine.

ESP/ABS Deactivation procedure
Dyno Mode must be activated.
Refer to Section 16.4 for Dyno Mode activation procedure.

Fan Position during dyno testing:
FTP / HWY / US06 = Road speed modulated fan in front up position.

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

14. Request for Certificate

14.1 Statement of Compliance

The Volkswagen Group states that any element of design, system, or emission control device installed on, or incorporated in the Volkswagen Group's new motor vehicles or new motor vehicle engines for the purpose of complying with standards prescribed under section 202 of the Clean Air Act, will not, to the best of the Volkswagen Group's information and belief, cause the emission into the ambient air of pollutants in the operation of its motor vehicles or motor vehicle engines which cause or contribute to an unreasonable risk to public health or welfare except as specifically permitted by the standards prescribed under section 202 of the Clean Air Act. The Volkswagen Group further states that any element of design, system, or emission control device installed or incorporated in the Volkswagen Group's new motor vehicles or new motor vehicle engines, for the purpose of complying with standards prescribed under section 202 of the Clean Air Act, will not, to the best of the Volkswagen Group's information and belief, cause or contribute to an unreasonable risk to public safety.
The term pollutant means:
a. Diesel particulates
b. Nickel
c. MMT combustion products
d. Ammonia
e. Sulfates
f. Hydrogen sulfide
g. Hydrogen cyanide
h. Ruthenium combustion products
i. Nitrosamines

or any other pollutant which VW/AUDI has identified which can reasonably be expected to be emitted from these vehicles.

All vehicles have been tested in accordance with good engineering practice to ascertain that such test vehicles meet the requirement of this section for the useful life of the vehicle.

The test vehicles with respect to which data are submitted are in all material respects as described in the application for certification have been tested in accordance with the applicable test procedures utilizing the fuels and equipment described in the application for certification they meet the requirement of such tests and on the basis of such tests, they conform to the requirements of the regulations in 40 CFR. Part 86. Subpart S.

The vehicles for which certification is requested conform to the requirements in 86.1810-01 (a) and the description of tests performed to ascertain compliance with the general standards in 86.1810-01 (a) and the data derived from such tests are available.

The testing described under 86.1824-01 has been designed and conducted in accordance with good engineering practice to assure that the vehicles covered by a certificate issued under 86.1848-01 will meet the evaporative emission standards in 86.1811-01 for the useful life of thevehicle.

14.2. Durability Statement

Based on the Volkswagen Group's good engineering judgment, all the vehicles described in this Application for Certification comply with all applicable intermediate and full useful life standards

15. Other Information

Revision Index

Sec. / Pg. No.	Date:	Comment:	R/C No.
Part 1			
All	9/16/2020	Initial Application Created	-
Part 2			

15.2 Running Change (RC) / Field Fix (FF) Log

Running Change / Field Fix Log for test group only.

Model Year: 2021
Test Group: MVGAV08.0GLB
Evaporative Family: MVGAR0200GCB

RC / FF Number	Description of Change / Reason	Date

VOLKSWAGEN

GROUP OF AMERICA

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

Tony D'Ambrosi Name
Sr. Manager Title
EEO Department
(248) 754-4396 Phone
(248) 754-4207 Fax
tony.dambrosi@vw.com E-Mail

September 16, 2020 Date

Subject: MY 2021 Volkswagen Group Light Duty Vehicle Initial Application for Certification for Test Group MVGAV08.0GLB with Evaporative Family MVGAR0200GCB.

Dear Mr. Snyder,

We submit, with this letter, the model year 2021 Part 1 Application for Emissions Certification for the following Test Group:

Test Group	Standards	Sales Area
MVGAV08.0GLB	Tier 3 Bin 160	Federal
	LEVIII LEV160	California

Copies of the Certification Fee filing form and OBD approval letter are contained in sections 15 and 16 of the included electronic application.

All vehicles within this test group comply with all applicable regulations contained in 40 CFR Part 86 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) 754-4229 or (248) 754-4219.

Sincerely,

D'Ambrosi Anthony
VWPKI
5406C07D40F4331C

Digitally signed by D'Ambrosi Anthony VWPKI
5406C07D40F4331C
Date: 2020.09.16 08:14:48 -04'00'

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

Enclosure(s)

15.3 ORVR Safety Application for Carry-Over ORVR Systems

The information provided below is in accordance with EPA Dear Manufacturer Letter CCD-05-03 - Attachment A.

Name of current ORVR/Evaporative Family: MVGAR0200GCB

1.) Name of most recent previously certified ORVR/Evaporative Family from which the current family is being carried over:

LVGAR0200GCB

2.) Substantial Changes:

N/A

3.) List of changes that have been implemented:

a) None

4.) Statement of No In-Use Problems:

Volkswagen has issued no defect reports, service notifications, emissions or safety recalls, campaigns, instructions or bulletins to dealers or field personnel and there are no changes in production procedure or components related to the ORVR system except as listed below.

US EPA Fee Form

General Information

Date:	06/05/2020
Process Code:	Submit New Filing Fee Form
Manufacturer Code:	VGA
Manufacturer Name:	Volkswagen Group of America

Manufacturer Contact

Name:	Greg Allen
Email Address:	Gregory.Allen@vw.com
Phone:	2487544209
Calendar Year complete application submitted to EPA:	2020
Engine Family / Evaporative Family / Test Group:	MVGAV08.0GLB

Certificate Request Type (Industry Sector Code)

- (●) 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 (RF)?	
What is the total number of vehicles, engines, or units covered?:	
What is the aggregate total retail value of the vehicles, engines or units covered?:	

Payment Information

Amount Owed:	27,347.00
Payment Type:	Offline ACH

Comments:

MY2021 Certification Fee for MVGAV08.0GLB

Tracking ID: 26P4N4OV

EPA Form Number 3520-29

OMB Control No. 2060-0545

Approval expires 12/31/2019

The public reporting and recordkeeping burden for this collection of information is estimated to average 20 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.

EPA Form Number 3520-29

OMB Control No. 2060-0545

Approval expires 12/31/2019

The public reporting and recordkeeping burden for this collection of information is estimated to average 20 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. Allen Lyons, Division Chief
Emissions Certification and Compliance Division
(ECCD)
State of California
Air Resources Board Laboratory
9528 Telstar Avenue
El Monte, CA 91731

Tony D'Ambrosi Name
Sr. Manager Title
EEO Department
(248) 754-4396 Phone
(248) 754-4207 Fax
tony.dambrosi@vw.com E-Mail

September 16, 2020 Date

Subject: MY 2021 Volkswagen Group Light Duty Vehicle Initial Application for Certification for Test Group MVGAV08.0GLB with Evaporative Family MVGAR0200GCB.

Dear Mr. Lyons,

We submit, with this letter, the model year 2021 Part 1 Application for Emissions Certification for the following Test Group:

Test Group	Standards	Sales Area
MVGAV08.0GLB	Tier 3 Bin 160	Federal
	LEVIII LEV160	California

The EPA Certificate of Conformity for the test group will be uploaded to the Document Management System upon its receipt.

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) 754-4229 or (248) 754-4219.

Sincerely,

D'Ambrosi Anthony
VWPKI
5406C07D40F4331C

Digitally signed by D'Ambrosi Anthony VWPKI
5406C07D40F4331C
Date: 2020.09.16 08:15:39 -04'00'

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

Enclosure(s)

17.0 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.

Labeling Durability Statement

The labeling required pursuant to 40 CFR 86.082-35 and Section 1965, Chapter 3, Title 13 of the California Administrative code and described in Section 7 of this application will conform with the requirements specified in the California Motor Vehicle Tune-Up Label Specifications and is designed to comply with the durability requirements of those specifications.

Drivability Statement

Vehicles for which certification is requested have drivability and performance characteristics which satisfy our customary drivability and performance requirements for vehicles sold in the United States.

ASM Compliance Statement

Certification Compliance with the Accelerated Simulation Mode (ASM) Loaded Mode Inspection Maintenance (I/M) Standards Based on engineering evaluation and in accordance with MAC # 99-05 the Volkswagen Group states, that the vehicles included in this Test Group comply with the applicable ASM I/M standards by meeting the California OBD regulations contained in 13 CCR §1968.2.

17.2 Fill Pipe Specifications

Please refer to the Section 16

17.3 Evaporative Emission Deterioration Program

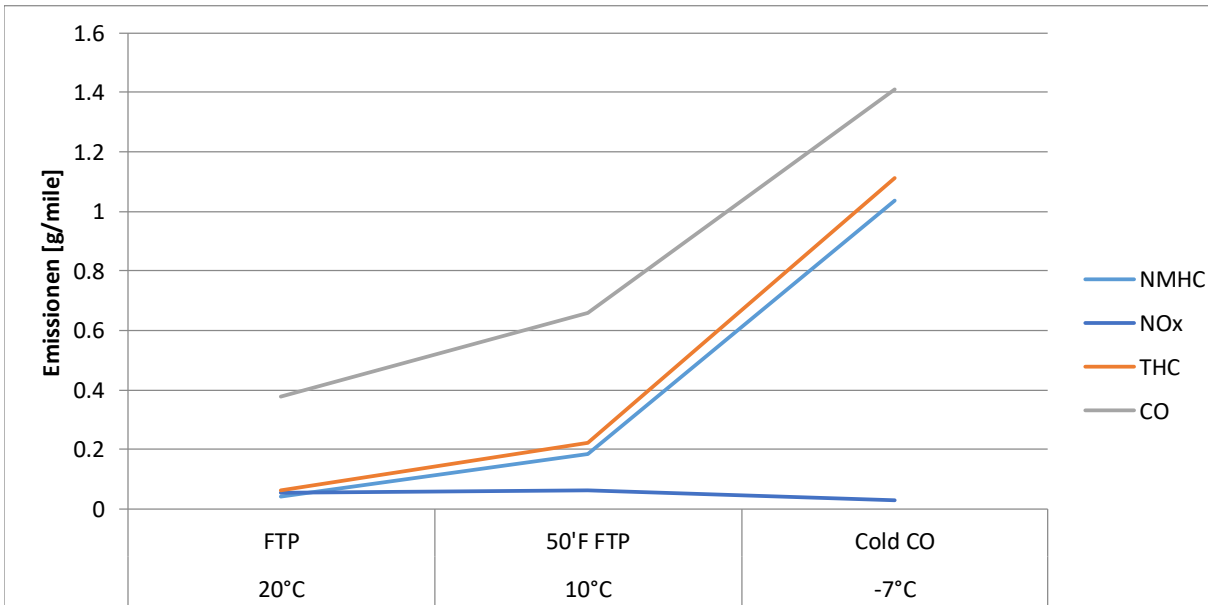
Please refer to Common Section Application

17.4 Assembly line NMOG / NMHC Factor

F_{NMOG}: **1.04** (no RAF applied) (E0 fuel)
F_{NMOG}: **1.10** (no RAF applied) (E10 fuel)
According to ARB regulations

F_{HCHO} (Indolene): **0.03**
F_{HCHO} (Phase II): **0.06**
Compliance covered by statement according to regulations (see Section 8)

17.5 Continuity of Emissions



E.O.# _____

2021 AIR RESOURCES BOARD SUPPLEMENTAL CERTIFICATION SUMMARY SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDUM-DUTY VEHICLES

Manufacturer: BG Durability Group: MVGAGPGNNGLB Test Group: MVGAV08.0GLB

Evap Fam: 1) MVGAR0200GCB 2) _____ 3) _____

Evaporative Emission T.P.: CA __ Fed. X R/L Test Proc: SHED X Pt Source ___

Zero-Evap NMOG Credit: Yes__ No X

Exh Std: CA Tier-1____ TLEV____ LEVII____ LEVIII X ; US EPA: Tier 3 BIN 160

DDV Basis: 100K___ 120K___ 150K X SFTP: Yes X No____

Veh Type: LEV1: PC__ LDT1___ LDT__ MDV1___ MDV2____ MDV3___ MDV4___

LEV3: PC/LDT X MDV GVWR <= 10K____ MDV GVWR > 10K____

Fuel Type(s): Dedicated___ Flex-Fuel__ Dual-Fuel___ Bi-Fuel___ Gasoline X Diesel___

CNG___ LNG___ LPG___ M85___ E85___Other (specify)__

Exh Emiss Test Fuel(s): Indo__ CBG___ CNG___ LPG___ M85___ Other X(specify) E10

Diesel: 13 CCR 2282___ 40 CFR 86.113-90___ 40 CFR 86.113-94___ Other (specify)__

Durability Service Accum: Whole Veh Full Mi___ Whole Veh Accel Mi X Bench___ Other___

EDV Std Compliance: DF X Aged Parts___ Other ___

Exh ECS (use abbreviations per SAE J1930): ECS 1) SFI/AIR/4WUWC/2TWC/4TC/2CAC/4HO2S(2/ORVR

ECS 2) _____

EGR Type: n.a. AIR Type: n.a.

Displ. (L): 8.0L Engine Configuration: V-Shaped Valves per Cylinder: 4

Rated HP: 1) 1500 HP @ 6700 RPM

Engine: Front __ Mid. ___ Rear __x__ Drive: FWD __ RWD ___ 4WD-FT __ 4WD-PT__x__

All Eng Codes in Test Group: **CA**____ **49S**_____ **50S**__X__

NMOG Test Procedure: Std____ Equiv__X__ RAF: NMOG n.a. CH4 n.a.

Mfr's NMOG Fleet Avg (g/mi): ____ Ratio(NMOG w/o RAF): NMOG/NMHC 1.1 HCHO/NMHC 0.03

OBD2 Compliance: Full__X__ Partial_____ Partial w/o fines____

Test Veh.:

DDV (Evap) MY ID	DDV(Exhaust) MY ID	EDV Evap MY ID	EDV Exhaust MY ID
2021 n.a. assigned	2021 n.a. assigned	2017 BG7446020	2017 BG7445008 2021 BG744 PT50

Evap Fam #)	ECS #)	Displ. (Liters)	Engine Code (also list CA/49ST/50ST)	Vehicle Make / Models	Trans. (M5, A4, etc.)
1	1	8.0	DALA 50 ST	Bugatti Chiron	DL-1600-7A

Date Issued:					
Revisions:					

Section 17		Pg. 2		California ARB Information	Engine Code:	R.CH.-NO.:	Revision Date:
Part 1		Test Group:	MVGAV08.0GLB		all		

CERTIFICATION REVIEW SHEET
EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

E.O.#
Page 1 of 1

EDV Fuel Type: G
Manufacturer: Bugatti
Exhaust Std: Lev3 LEV160

Test Group: MVGAV08.0GLB

Evaporative Family: MVGAR0200GCB

PROJECTED EMISSIONS
(g/mi, except g/test for evap., g/gal Refuel.)

Data Vehicle ID	Cfg.	Engine Code (Displ)	Disp	Trans.	TW/ x ETW	DPA/ x RLHP	MPG City	MPG Hwy	Test Location (Exhaust)	Test Fuel	@UL	NMOG	NOx	NMOG +NOx	CO	HCHO	PM	CO2	20°F CO	3-day D+HS @ 150k	R/L @ 150k	2-day D+HS @ 150k	ORVR @k
																			Evaporative Values include D.F.'s				
BG744 5008	0	DALA	7.993	AMS7	4750	19.6	-	18.0	--	-	50K	--	--	...	--	---	---	...	1.52	-			
							-		...	...	150k	--	--	-	-	--	-	-	...	-	-	-	-
BG744-PT50 CHIRON	0	DALA	7.993	AMS7	4750	19.7	10.2	-	Mfr	T3 E10 Prem. 9RVP	50K	--	--	...	--	---	---	...	-	-			
							-		...	...	150k	--	--	0.0940	0.80	-	0.000	851	...	-	-	-	-
BG744 6020	0	DALA	7.993	AMS7	4750	19.6	-	-	--	-	50K	--	--	...	--	---	---	...	-	Evap Fuel: GASOLINE-TIER3 E10 PREM			
							-		...	...	150k	--	--	-	-	--	-	-	...	0.434	0.000	0.339	0.030
							-	-	--	-	50K	--	--	...	--	---	---	...	-	-			
							-		...	...	150k	--	--	-	-	--	-	-	...	-	-	-	-
Standards @50K (If applicable):									...	...	50K	-	-	...	-	-	-	...	10.0	...	...	...	...
Standards (@ Full Useful Life: for PC,LDT, MDV)(150K for Evap.):									...	...	150k	-	-	0.160	4.2	0.004	0.010	...	...	0.300	0.05	0.339	0.20
Deterioration Factors (DF's) @50K (if applicable):									...	...	50K	0.0049	0.005	...	0.110	0.0001	-	...	0.110	...	...	...	...
DF @ F.U.L (for PC,LDT and MDV):									...	...	150k	0.0155	0.018	0.0335	0.365	0.0004	0.0000	...	...	0.016	0.000	0.013	0.006
Regeneration Updward Adjustment Factor (If applicable):									...	...	All	-	-	-	-	-	-	...	-				
HWY emissions @ 50k (includes DF's and RAF's; [CO2 is raw value only]									Mfr	T3 E10 Prem. 9RVP	50K	...	-	...	...	...	...	492					
HWY emissions @ FUL (includes DF's and RAF's):									Mfr	T3 E10 Prem. 9RVP	150k	...	-	0.0031	...	...	...	...					
HWY Standards @ 50k (LEV/ULEV/SULEV):									...	...	50k	...	--	...	...	...							
HWY Standards @ FUL (LEV/ULEV/SULEV):									...	...	150k	...	--	--	...	...							
50°F FTP LEV/ULEV/SULEV emissions (without RAF and DFs):									Mfr	T3 E10 Prem. 9RVP	4k	0.2046	0.061	0.2660	0.658	0.0000							
50°F FTP Standards (LEV/ULEV/SULEV):									...	...	4k	0.000	0.00	0.320	4.20	0.030							

Evaporative DF Summary:

	3-day D+HS	R/L	2-day D+HS	ORVR
Bench	-	-	-	-
Vehicle	-	-	-	-
Overall	0.016	0.000	0.013	0.006

SFTP Test Results:

Test Procedure / Standard	Fuel	Test Location	HC-NM+NOx @ 4k	NMOG+NOx @150k	CO @ 150k (Lev3)	PM @150k	CO2
US06:	T3 E10 Prem. 9RV	Mfr	-	0.0057	-	0.0030	654
US06 Standard:	---		--	---	--	--	---
SC03:	T3 E10 Prem. 9RV	Mfr	-	0.0057	-	-	852
SC03 Standard:	---		--	---	--	-	---
SFTP Composite:	---		---	0.0553	0.70	---	---
SFTP BIN:	---		---	0.140	4.2	---	---

Remarks:
HCHO Compliance by Statement (see common section); Reported Values calculated using HCHO/NMHC ratio.
In-use HCHO/NMHC Ratio = 0.03 for Indolene, 0.06 for RFG (see common section)
NMOG to NMHC Ratios: 1.00 (Diesel), 1.04 (Indolene), 1.10 (E10); Test Group value =
See Section 12 for Dynomometer Coefficients
Projected Values include deterioration factors (DF's) and Regen. Adj. Factors (RAF's)
The NMOG values include Reactivity Adjustment Factor(s) (RAF) of: N/A

"

Application Processed by: _____ Date: _____ Reviewed by: _____ Date: _____

Form Version: CRS_Template2.31 12/6/2018

Bugatti Automobiles S.A.S, a member of the Volkswagen Group

Application for Emissions Certification

2021 **Model Year**

Durability Group: MVGAGPGNNGLB
Evap. Family: MVGAR0200GCB

Test Group: MVGAV08.0GLB

Certificate Number: MVGAV08.0GLB-XXX

Durability Group Description: Four Stroke, Otto Cycle, Gasoline Fueled, Sequential Port Fuel Injection,
Catalyst Codes: TEX1347, TEX0504

Test group Description: 8.0l SFI/AIR/4WU-TWC/2TWC/4TC/2CAC/4WR-HO2S/4HO2S

Applicable Exhaust Standards: 50-State: Federal: Tier 3 BIN 160
California: LEV III LEV 160

Applicable Evaporative Standards: 50-State: Federal: Tier 3
California: LEVIII

Carlines Covered: Bugatti Chiron

Vehicles Tested:

VID	Config.	Test Type / #	Test Type / #
BG744 5008	0	FTP / MVGA10065581	HFET / HVGA10044875
BG744 5008	0	Cold CO / HVGA10044869	50˚F FTP / HVGA10044877
BG744 5008	0	US06 / MVGA10065582	SC03 / HVGA10044873
BG744 6020	0	3-Day / HVGA10044887	2-Day / HVGA10044885
BG744 6020	0	Running Loss / HVGA10044888	ORVR / HVGA10044886
BG744 6020	0	BETP / HVGA10044892	

Issue Date: 09-16-2020

For Questions, Contact:
EEO Office, Auburn Hills, Michigan

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Section 21	Vehicle Emission Control Information Label. Part Numbers	
Section 22	Calibration Information	
Section 23	Vehicle Description	See section 12
Section 24	Final US Sales	See section 16
Section 25	Service Manuals. Service Bulletins	Information provided directly at the time of distribution to the dealers.
	Owner's Manuals and Warranty Booklets	Provided under separate cover.

21. Vehicle Emission Control Information Label

Bugatti **Vehicle Emission Control Information**					
Conforms to regulations:		2021 MY			
U.S. EPA:	T3B160	LDV	OBD:	CA II	Fuel: Gasoline
California:	LEV160	PC	OBD:	CA II	Fuel: Gasoline
No adjustments needed.		SFI/AIR/4WU-TWC/2TWC/4TC/2CAC/4WR-HO2S/4HO2S			
Group: MVGAV08.0GLB Evap: MVGAR0200GCB		5B0.010.714.K			

21.1 Emission Parts List

Part	Part Number
Engine Control Module (2)	5B4.906.012
Transmission Control Module	01C.927.156.C/D
Emission Control Label	5B0.010.714.K
Air Cleaner (2)	5B4.133.843.A
Pressure Sensor for Flow Check (2)	07C.906.051
Run-Up Valve (2)	07E.145.710
Charge Air Cooler (2)	07E.145.785.A / 07E.145.788.A
Boost Pressure Sensor (4)	038.906.051.T
Air Temperature Sensor(2)	06B.905.379.G
Throttle Unit (2)	07E.133.062
Fuel Pump (4)	5B4.906.059
Fuel Pump Control Unit	5B4.906.093
Fuel Tank Pressure Sensor (2)	5WA.201.733
Fuel Pressure Sensor (4)	06H.906.051.G
Injection Valves (32)	07E.906.031.E (16) / 031.H (8) / 031.J (8)
Carbon Canister	5B4.201.591.B
EVAP Frequency Valve (2)	03H.906.517
Crankcase active Oil Seperator (2)	07E.103.464.B / C
Spark Plug (16)	07P.905.601 (NGK SILZKER8A8E)
Ignition Coil (Ignition Transformer) (16)	07E.905.115.P
Ion-Current System: Control Unit	5B4.905.367
Turbo Charger (4)	07E.145.689.B / 690.A / 703.A / 704.A
Turbo Charger waste gate solenoid (4)	06F.906.283.F
Control Motor Exhaust Flap (2)	07E.145.613.A
Heated Oxygen Sensor front (4)	07E.906.262.A (2) / 262.C / 262.E
Heated Oxygen Sensor rear (4)	07E.906.262.B (2) / 262.D / 262.F
Catalyst Assembly (4)	07E.251.091.G / 092.G, 5B4.251.151.D / 152.D
Air Pump (2)	079.959.231.G
Air Valve (4)	079.131.101.AP (3) / 06A.131.101.D
Air Control Solenoid (4)	079.906.283.D
Engine Coolant Temperature Sensor (2)	079.919.525.B
Engine Coolant Thermostat	07E.121.113.H

21.2 Engine Control Module (ECM) Information

Model	Engine Code	SW-Part number	Cal ID	CVN	Comments
Chiron	DALA	5B4.909.000.N 2101	5B4000N 2101ATKB (Master) 5B4000N 2101ATFB (Slave)	876911F5	Initial

21.3 Transmission Control Module (TCM) Information

Model	Trans Code	SW-Part number	Cal ID	CVN	Comments
Chiron	DALA	01C.927.156.C 6001	01C.927.156.C 6001	41125AC	Initial

21.4 Bugatti Ion Current Control Unit (BIS) Information

Model	Trans Code	SW-Part number	Cal ID	CVN	Comments
Chiron	DALA	5B4.909.101.B/2102	ION905g2102	4A4CEAC	Initial

22. Calibration Information

Please refer to Section 16.11 for detailed AECD descriptions