



Application for Certification  
Part 1

2027 ModelYear

Durability Group: VCRXGPGNNF40  
Evaporative Familie(s): VCRXR0213TR1, VCRXR0391TR1

Test Group: VCRXD06.4575

Four Stroke, Otto Cycle, Gasoline Fueled, Ported FI

Ceramic Monolith Pt, Pd, Rh Close Coupled Catalyst

6.4 Liter V-8  
HDV3

Applicable Standards:  
50 State - Tier 3 BIN 230

Vehicles Covered:  
RAM 3500, 4WD/RWD  
RAM 2500, 4WD

Vehicle(s) Run:  
VID 1 config., Vehicle ID L5D280598 (Exh.)  
VID 2 config., Vehicle ID L5DJ25253 (Evap)

For Questions, Darnell Jones 248.512.3923 Gary J. Arvan 248.221.9461  
All testing completed – Unconditional Cert request



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**Section 1 Correspondence and Communication**

For questions dealing with the Part I application for this Test Group contact:

<b><u>Name</u></b>	Gary J. Arvan	Darnell Jones
<b><u>Title</u></b>	Director	Certification Engineer
<b><u>Responsibility</u></b>	Vehicle Safety & Environmental Homologation Programs	Application Submission
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For a complete listing of all Correspondence and Communication Information for FCA US LLC, please see:  
"Common Section Book - Section 1 Correspondence and Communication"



**Section 2 Durability Group Description**

Durability Group Name: VCRXGPGNNF40

For a complete description of the Durability Group Description please see:  
"Common Section Book - Section 2. Durability Group Description"



**Section 3 Evaporative/Refueling Family Description**

Evaporative/Refueling Family Name(s): VCRXR0213TR1  
VCRXR0391TR1

For a complete description of the Evaporative/Refueling Family Description please see:  
"Common Section Book - Section 3. Evaporative/Refueling Family Description "

For ORVR Agency Review Sign Off please see:  
"Common Section Book - Section 16. Agency Approvals"



**Section 4 Durability Procedure Description**

Durability Group: VCRXGPGNNF40

Durability Provision Statement:

Based on FCA US LLC 's good engineering judgement, all the vehicles described in this Application for Certification comply with all applicable intermediate and full useful life standards.

For a complete description of the Durability Procedure please see:

"Common Section Book - Section 16. Durability Procedure Description "

Indicate if aged components were used.

Aged Components were used.

Indicate whether additive or multiplicative DF's were used.

N/A

List all DF's calculated at both full and intermediate useful life

EPA - Reference VERIFY (hard copies of all VERIFY Reports retained in-house)

And applicable standards (test results and vehicle description).

CARB - Reference Cert Review Sheet

Evaporative/Refueling Family:

VCRXR0213TR1

VCRXR0391TR1

For a complete description of the Durability Procedure please see:

"Common Section Book - Section 16. Durability Procedure Description "

Indicate if aged components were used.

Yes - Bench Aging

Indicate whether additive or multiplicative DF's were used.

Additive

List all DF's calculated at both full and intermediate useful life

EPA - Reference VERIFY (hard copies of all VERIFY Reports retained in-house)

And applicable standards (test results and vehicle description).

CARB - Reference Cert Review Sheet



**Section 5   Test Group Description**

Test Group Name:	VCRXD06.4575
Engine displacements covered:	6.4L
Arrangement and number of cylinders:	V-8
Vehicle class(es) covered:	HDV3
Emission standards class:	BIN 230
AB71 Qualified Vehicles:	No



## Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1				
<b>Evaporative/Refueling Family Information</b>							
<b>Evaporative Summary Information Type</b>	New	<b>Submission/Correction Date</b>	03/20/2026 12:20:51 PM				
<b>Integrated ORVR?</b>	Yes	<b>Fuel(s)</b>	Gasoline				
<b>Multiple Fuel Storage</b>	--						
<b>Bladder Fuel Tank?</b>	No						
<b>Fuel Tank Material</b>	Plastic	<b>Fuel Tank Material Description</b>	hdpe/co-ex				
<b>Fill Pipe Seal Type</b>	Liquid seal						
<b>Air Intake System Vapor Storage Device?</b>	Yes	<b>Air Intake System Vapor Storage Device Description</b>	Panel				
<b>Fuel System Vapor Storage Canister?</b>	Yes	<b>Other Vapor Storage</b>	--				
<b>Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)</b>	219	<b>Number of Primary Canisters</b>	1				
<b>Number of Bleed Canisters</b>	0	<b>Bleed Canister Total Working Capacity (grams)</b>	0				
<b>Mfr Evaporative/Refueling Family Comments</b>	This Evaporative Family is being certified with an evaporative FEL of 0.600 grams						
<b>Leak Family Details</b>							
<b>Leak Family Indicator</b>	Yes						
<b>Canister Bleed Test Indicator</b>	Yes	<b>Applicability of Evaporative Canister Bleed Test</b>	50 State				
<b>Evaporative Canister Bleed Test Comments</b>	--						
<b>CARB Fuel Only (Rig) Test Indicator</b>	No	<b>Applicability of CARB Fuel Only (Rig) Test</b>	--				
<b>CARB Fuel Only (Rig) Test Comments</b>	--						
<b>Leak Family Name</b>	<b>Applicability of Leak Family Requirements</b>	<b>Leak Family Standard (inches)</b>	<b>Leak Family Description</b>				
VCRXR0213TR1-LF1	50 State	0.02	--				
<b>Models Covered by this Certificate</b>							
<b>Carline Manufacturer</b>	<b>Division</b>	<b>Carline</b>	<b>Certification Region Code(s)</b>	<b>Drive System</b>	<b>Trans - Type</b>	<b>- # of Gears</b>	<b>Trans - Lockup</b>
FCA US LLC	12 - RAM	930 - 2500 4X2	Federal	2-Wheel Drive, Rear	Automatic	8	Yes
FCA US LLC	12 - RAM	950 - 3500 4X2	Federal	2-Wheel Drive, Rear	Automatic	8	Yes
FCA US LLC	12 - RAM	930 - 2500 4X2	California + CAA Section 177 states	2-Wheel Drive, Rear	Automatic	8	Yes
FCA US LLC	12 - RAM	935 - 2500 4X4	California + CAA Section 177 states	4-Wheel Drive	Automatic	8	Yes
FCA US LLC	12 - RAM	935 - 2500 4X4	Federal	4-Wheel Drive	Automatic	8	Yes
FCA US LLC	12 - RAM	955 - 3500 4X4	Federal	4-Wheel Drive	Automatic	8	Yes
FCA US LLC	12 - RAM	950 - 3500 4X2	California + CAA Section 177 states	2-Wheel Drive, Rear	Automatic	8	Yes
FCA US LLC	12 - RAM	955 - 3500 4X4	California + CAA Section 177 states	4-Wheel Drive	Automatic	8	Yes

## Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
<b>Engine Description</b>			
<b>Hybrid Type</b>	--	<b>Hybrid Description</b>	--
<b>Engine Type</b>	4-Stroke Spark Ignition	<b>Mfr Engine Description</b>	--
<b>Engine Block Arrangement</b>	V-shaped engine	<b>Mfr Engine Block Arrangement Description</b>	--
<b>Camless Valvetrain Indicator</b>	No	<b>Oil Viscosity/Classification</b>	0W-40
<b>Number of Cylinders/Rotors</b>	8	<b>Mechanically Variable Compression Ratio Indicator</b>	N
<b>After Treatment Device(s) (ATD)</b>			
<b>ATD Number</b>	<b>ATD Type</b>	<b>ATD Precious Metal</b>	<b>Substrate Material</b>
1	Three-way catalyst	Platinum + Palladium + Rhodium	Ceramic
2	Three-way catalyst	Platinum + Rhodium	Ceramic
3	Three-way catalyst	Rhodium	Ceramic
<b>Mfr After Treatment Device (ATD) Comments</b>	THREE WAY CATALYST		
<b>Direct Ozone Reduction (DOR) Device</b>	Not Equipped		
<b>Mfr Emission Control Device Comments</b>	--		
<b>Engine Configuration Number 1</b>			
<b>Engine Displacement (liters)</b>	6.4	<b>Engine Rated Horsepower</b>	405
<b>Number of Inlet Valves Per Cylinder</b>	1	<b>Number of Exhaust Valves Per Cylinder</b>	1
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Number of Air Aspiration Devices</b>	0
<b>Air Aspiration Device Configuration</b>	--	<b>Charge Air Cooler Type</b>	N/A
<b>Air Aspiration Drive Method(s)</b>	--		
<b>Cylinder Deactivation</b>	Yes		
<b>Cylinder Deactivation Description</b>	Multiple Displacement Solenoid (MDS)		
<b>Variable Valve Timing</b>	Yes		
<b>Variable Valve Timing System Description</b>	Cam phaser		
<b>Variable Valve Lift?</b>	No		
<b>Variable Valve Lift System Description</b>	--		
<b>Number of Knock Sensors</b>	2	<b>Number of Air/Fuel Sensors</b>	4
<b>Air/Fuel Sensor # 1 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 1 Description</b>	--
<b>Air/Fuel Sensor # 2 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 2 Description</b>	--
<b>Air/Fuel Sensor # 3 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 3 Description</b>	--
<b>Air/Fuel Sensor # 4 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 4 Description</b>	--
<b>Mfr Air/Fuel Sensor Comments</b>	--		
<b>Exhaust Gas Recirculation</b>	Yes	<b>Cooled Exhaust Gas Recirculation</b>	Yes
<b>EGR Type</b>	Electronic/Electric	<b>Exhaust Gas Recirculation Description if 'Other'</b>	--
<b>Closed Loop Air Injection System</b>	No		
<b>Air Injection Type</b>	Not Applicable	<b>Air Injection Type if 'Other'</b>	--
<b>Mfr Engine Configuration Comments</b>	--		

### Certification Summary Information Report

<b>Test Group</b>		VCRXD06.4575			<b>Evaporative/Refueling Family</b>			VCRXR0213TR1		
<b>Official Test Numbers</b>										
<b>Test Group Fuel</b>	<b>FTP</b>	<b>US06</b>	<b>SC03</b>	<b>Cold CO</b>	<b>Highway</b>	<b>EPA City Litmus Value</b>	<b>EPA City Litmus Threshold</b>	<b>EPA Highway Litmus Value</b>	<b>EPA Highway Litmus Threshold</b>	<b>CREE Weighting Factor</b>
Gasoline	SCRX10087858	SCRX10087856	SCRX10087857	--	SCRX10087855	--	228.2	--	286.1	1.0
<b>SFTP LEV-III Official Test Numbers</b>										
<b>Test Group Fuel</b>	<b>FTP</b>		<b>US06</b>		<b>SC03</b>					
Gasoline	SCRX10087858		SCRX10087856		SCRX10087857					

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
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**Emission Data Vehicle Information**

Vehicle ID / Configuration	L5D280598 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	SCRXD06.45W3	Original Evaporative/Refueling Family	SCRXR0391TP1
Original Test Vehicle Model Year	2025		

**Vehicle Model**

Represented Test Vehicle Make	RAM	Represented Test Vehicle Model	3500 4X4
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**Leak Family Details**

Leak Family Identifier	--	Leak Family Name	--
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**Drive Sources and Fuel System Details**

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

Hybrid Indicator	No	Multiple Fuel Combustion	--
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Fuel Cell Indicator	--	Rechargeable Energy Storage System, if 'Other'	--
Rechargeable Energy Storage System	--		
Off-board charge Capable Indicator	--	Odometer Correction Factor	1
Odometer Correction -- Initial	0		
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles	Rated Horsepower	405
Engine Code	AA-3000	Air Aspiration Method, if 'Other'	
Displacement (liters)	6.4	Air Aspiration Device Configuration	--
Air Aspiration Method	Naturally Aspirated	Drive Mode While Testing	2-Wheel Drive, Rear
Number of Air Aspiration Devices	0	Aged Emission Components	150,000 (mi)
Charge Air Cooler Type	--	Equivalent Test Weight (pounds)	11000
Shift Indicator Light Usage	Not equipped	N/V Ratio	30.7
Curb Weight (lbs)	10782		
GVWR (lbs)	14000	# of Transmission Gears	8
Axle Ratio	4.1	Creeper Gear	No
Transmission Type	Automatic		
Transmission Lockup	Yes		

**Dynamometer Coefficients:**

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	98.77	0.1936	0.05339	15.11	0.6962	0.04349	32.3
US06	98.77	0.1936	0.05339	15.11	0.6962	0.04349	N/A

### Certification Summary Information Report

Test Group	VCRXD06.4575	Evaporative/Refueling Family	VCRXR0213TR1
<b>Emission Control Device Comments</b>	--		
<b>Manufacturer Test Vehicle Comments</b>	Callout:25DA-D06.45W3-1		

## Certification Summary Information Report

Test Group	VCRXD06.4575	Evaporative/Refueling Family	VCRXR0213TR1
<b>Test #</b>	<b>SCRX10087858</b>	<b>Test Procedure</b>	<b>25 - California fuel 2-day exhaust (w/can load)</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	09/15/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11350	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000), MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CPG		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4237	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No
<b>Test Results</b>			



## Certification Summary Information Report

Test Group		VCRXD06.4575			Evaporative/Refueling Family					VCRXR0213TR1		
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 HD Class 3 Bin 230	CO	1.26	--	--	--	0	1	1.3	4.2	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	CO-COMP	1.30	--	--	--	0	1	1.3	4.0	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	CO2	999	--	--	--	0	1	999	--	--
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	METHANE	0.035	--	--	--	0	1	0.04	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	METHANE-COMB	0.026	--	--	--	0	1	0.03	0.05	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	N2O	0.004	--	--	--	0	1	0.00	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	N2O-COMB	0.003	--	--	--	0	1	0.00	0.05	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG	0.0797	--	--	--	0	1	0.080	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG+NOX	0.1328	--	--	--	--	--	0.133	0.230	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG+NOX-COMP	0.0590	--	--	--	0	1	0.059	0.350	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NOX	0.0531	--	--	--	0	1	0.053	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	PM	0.0005	--	--	--	0	1	0.000	0.010	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	PM-COMP	0.0008	--	--	--	0	1	0.001	0.007	Pass
CA	150,000 miles	Other	CO	1.26	--	--	--	0	1	1.3	4.2	Pass
CA	150,000 miles	Other	CO-COMP	1.30	--	--	--	0	1	1.3	4.0	Pass
CA	150,000 miles	Other	CO2	999	--	--	--	0	1	999	--	--
CA	150,000 miles	Other	METHANE	0.035	--	--	--	0	1	0.04	999.99	Pass
CA	150,000 miles	Other	METHANE-COMB	0.026	--	--	--	0	1	0.03	0.05	Pass
CA	150,000 miles	Other	N2O	0.004	--	--	--	0	1	0.00	999.99	Pass

## Certification Summary Information Report

Test Group		VCRXD06.4575			Evaporative/Refueling Family					VCRXR0213TR1		
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
CA	150,000 miles	Other	N2O-COMB	0.003	--	--	--	0	1	0.00	0.05	Pass
CA	150,000 miles	Other	NMOG	0.0797	--	--	--	0	1	0.080	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.1328	--	--	--	--	--	0.133	0.230	Pass
CA	150,000 miles	Other	NMOG+NOX-COMP	0.0590	--	--	--	0	1	0.059	0.350	Pass
CA	150,000 miles	Other	NOX	0.0531	--	--	--	0	1	0.053	999.999	Pass
CA	150,000 miles	Other	PM	0.0005	--	--	--	0	1	0.000	0.010	Pass
CA	150,000 miles	Other	PM-COMP	0.0008	--	--	--	0	1	0.001	0.007	Pass

**NOTE: For Non-charge depleting tests, the Rounded Result for CO2 Emission name is a Verify-calculated value.**

**Certification Summary Information Report**

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
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<b>Test #</b>	<b>SCRX10087855</b>	<b>Test Procedure</b>	<b>3 - HWFE</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	09/12/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11350	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000), MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CPG		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4178	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.015137	--
CO (Carbon Monoxide)	0.434739	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	3.9858	--
DT-EER (Drive Trace Energy Economy Rating)	0.3184	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	4.1656	--
MFR FE (Manufacturer Fuel Economy)	16.7	16.7
NOX (Nitrogen Oxide)	0.002796	--
N2O (Nitrous Oxide)	0.001734	--
HC-NM (Non-methane Hydrocarbon)	0.005328	--
NMOG (Non-methane organic gases)	0.005489	--
HC-TOTAL (Total Hydrocarbon)	0.019861	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	522	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	520.77847	--

**Manufacturer Test Comments** 25DA-D06.45W3-1 hwy @ ALVW 150k Auto Fixed cE10

## Certification Summary Information Report

Test Group		VCRXD06.4575			Evaporative/Refueling Family					VCRXR0213TR1		
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 HD Class 3 Bin 230	CO2	999	--	--	--	0	1	999	--	--
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	METHANE	0.015	--	--	--	0	1	0.02	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	N2O	0.002	--	--	--	0	1	0.00	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG	0.0055	--	--	--	0	1	0.006	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG+NOX	0.0083	--	--	--	--	--	0.008	0.230	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NOX	0.0028	--	--	--	0	1	0.003	999.999	Pass
CA	150,000 miles	Other	CO2	999	--	--	--	0	1	999	--	--
CA	150,000 miles	Other	METHANE	0.015	--	--	--	0	1	0.02	999.99	Pass
CA	150,000 miles	Other	N2O	0.002	--	--	--	0	1	0.00	999.99	Pass
CA	150,000 miles	Other	NMOG	0.0055	--	--	--	0	1	0.006	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0083	--	--	--	--	--	0.008	0.230	Pass
CA	150,000 miles	Other	NOX	0.0028	--	--	--	0	1	0.003	999.999	Pass

**NOTE: For Non-charge depleting tests, the Rounded Result for CO2 Emission name is a Verify-calculated value.**

## Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
<b>Test #</b>	<b>SCRX10087856</b>	<b>Test Procedure</b>	<b>16 - Hot 1435 LA92</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	09/12/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11350	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000), MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CPG		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4200	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No
<b>Test Results</b>			
<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated FE Equivalent Value (miles per gallon)</b>	
CO2 BAG 1 (Bag 1 Carbon Dioxide)	1234.26	--	
FE BAG 1 (Bag 1 Fuel Economy)	7.04	7.04	
CO2 BAG 2 (Bag 2 Carbon Dioxide)	830	--	
FE BAG 2 (Bag 2 Fuel Economy)	10.46	10.46	
METHANE (CH4 - Methane)	0.0216432	--	
CO (Carbon Monoxide)	0.7249428	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.2348	--	
DT-EER (Drive Trace Energy Economy Rating)	0.2526	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.315	--	
MFR FE (Manufacturer Fuel Economy)	9.9	9.9	
NOX (Nitrogen Oxide)	0.0113205	--	
HC-NM (Non-methane Hydrocarbon)	0.0055952	--	
NMOG (Non-methane organic gases)	0.0057642	--	
PM (Particulate Matter)	0.0003631	--	
HC-TOTAL (Total Hydrocarbon)	0.0263739	--	
<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CREE/OPT-CREE</b>	
Carbon-Related Exhaust Emissions	880	--	

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
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<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
Carbon dioxide	878.613784	--

**Manufacturer Test Comments**                      25DA-D06.45W3-1 la92 @ ALVW 150k Auto Fixed cE10

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 HD Class 3 Bin 230	CO	0.72	--	--	--	0	1	0.7	999.9	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG	0.0058	--	--	--	0	1	0.006	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG+NOX	0.0171	--	--	--	--	--	0.017	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NOX	0.0113	--	--	--	0	1	0.011	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	PM	0.0004	--	--	--	0	1	0.000	999.999	Pass
CA	150,000 miles	Other	CO	0.72	--	--	--	0	1	0.7	999.9	Pass
CA	150,000 miles	Other	NMOG	0.0058	--	--	--	0	1	0.006	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0171	--	--	--	--	--	0.017	999.999	Pass
CA	150,000 miles	Other	NOX	0.0113	--	--	--	0	1	0.011	999.999	Pass
CA	150,000 miles	Other	PM	0.0004	--	--	--	0	1	0.000	0.005	Pass

## Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
<b>Test #</b>	<b>SCRX10087857</b>	<b>Test Procedure</b>	<b>95 - SC03</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	09/12/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11350	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000), MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CPG		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4218	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

## Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.036318	--
CO (Carbon Monoxide)	1.76852	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.1792	--
DT-EER (Drive Trace Energy Economy Rating)	0.8392	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.6585	--
MFR FE (Manufacturer Fuel Economy)	8.8	8.8
NOX (Nitrogen Oxide)	0.006581	--
HC-NM (Non-methane Hydrocarbon)	0.014022	--
NMOG (Non-methane organic gases)	0.014445	--
PM (Particulate Matter)	0.001255	--
HC-TOTAL (Total Hydrocarbon)	0.049203	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	984	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	981.45799	--

**Manufacturer Test Comments** 25DA-D06.45W3-1 sc03 @ ALVW 150k Auto Fixed cE10

## Certification Summary Information Report

Test Group		VCRXD06.4575			Evaporative/Refueling Family					VCRXR0213TR1		
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 HD Class 3 Bin 230	CO	1.77	--	--	--	0	1	1.8	999.9	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG	0.0144	--	--	--	0	1	0.014	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG+NOX	0.0210	--	--	--	--	--	0.021	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NOX	0.0066	--	--	--	0	1	0.007	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	PM	0.0013	--	--	--	0	1	0.001	999.999	Pass
CA	150,000 miles	Other	CO	1.7685	--	--	--	0	1	1.768	999.999	Pass
CA	150,000 miles	Other	NMOG	0.0144	--	--	--	0	1	0.014	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0210	--	--	--	--	--	0.021	999.999	Pass
CA	150,000 miles	Other	NOX	0.0066	--	--	--	0	1	0.007	999.999	Pass
CA	150,000 miles	Other	PM	0.0013	--	--	--	0	1	0.001	999.999	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1						
<b>Emission Data Vehicle Information</b>									
<b>Vehicle ID / Configuration</b>	L5DJ25253 / 0	<b>Manufacturer Vehicle Configuration Number</b>	0						
<b>Original Test Group Name</b>	SCRXD06.45V1	<b>Original Evaporative/Refueling Family</b>	SCRXR0213TP1						
<b>Original Test Vehicle Model Year</b>	2025								
<b>Vehicle Model</b>									
<b>Represented Test Vehicle Make</b>	RAM	<b>Represented Test Vehicle Model</b>	2500 4X2						
<b>Leak Family Details</b>									
<b>Leak Family Identifier</b>	--	<b>Leak Family Name</b>	--						
<b>Drive Sources and Fuel System Details</b>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Drive Source and Fuel#</th> <th style="width: 33%;">Drive Source</th> <th style="width: 33%;">Fuel</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Combustion Engine</td> <td style="text-align: center;">Gasoline</td> </tr> </tbody> </table>				Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
<b>Hybrid Indicator</b>	No								
<b>Multiple Fuel Storage</b>	--	<b>Multiple Fuel Combustion</b>	--						
<b>Fuel Cell Indicator</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	--						
<b>Rechargeable Energy Storage System</b>	--	<b>Rechargeable Energy Storage System, if 'Other'</b>	--						
<b>Off-board charge Capable Indicator</b>	--								
<b>Odometer Correction -- Initial</b>	0	<b>Odometer Correction Factor</b>	1						
<b>Odometer Correction Sign</b>	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor								
<b>Odometer Correction Units</b>	Miles								
<b>Engine Code</b>	AA-0350	<b>Rated Horsepower</b>	405						
<b>Displacement (liters)</b>	6.4								
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Air Aspiration Method, if 'Other'</b>							
<b>Number of Air Aspiration Devices</b>	0	<b>Air Aspiration Device Configuration</b>	--						
<b>Charge Air Cooler Type</b>	--	<b>Drive Mode While Testing</b>	2-Wheel Drive, Rear						
<b>Shift Indicator Light Usage</b>	Not equipped	<b>Aged Emission Components</b>	4,000 (mi)						
<b>Curb Weight (lbs)</b>	8000	<b>Equivalent Test Weight (pounds)</b>	8000						
<b>GVWR (lbs)</b>	10000	<b>N/V Ratio</b>	28.8						
<b>Axle Ratio</b>	4.1								
<b>Transmission Type</b>	Automatic	<b># of Transmission Gears</b>	8						
<b>Transmission Lockup</b>	Yes	<b>Creeper Gear</b>	No						
<b>Dynamometer Coefficients:</b>									
<b>Target Coefficients</b>			<b>Set Coefficients</b>						
<b>Coefficient Category</b>	<b>A (lbf)</b>	<b>B (lbf/mph)</b>	<b>C (lbf/mph**2)</b>						
<b>City/Highway/Evap</b>	66.54	0.1424	0.04151						
	29.9	0.2878	0.03745						
			<b>EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients</b>						
			23.7						
<b>Emission Control Device Comments</b>	--								

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
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**Manufacturer Test Vehicle Comments**      Callout: 25EV-D06.45V1-1

<b>Test #</b>	<b>SCRX10087430</b>	<b>Test Procedure</b>	<b>23 - 2-day evap</b>
<b>Exhaust Test # for this Evap Test</b>	SCRX10087427	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	07/20/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11327	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	3570	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.2233656	--

**Manufacturer Test Comments**      Callout: 25EV-D06.45V1-1; Cert 2-Day/Evap (E10) Hot\_Soak\_HC\_(g) = 0.03488, Diurnal (g) = 0.17194; 2-DayTotal = (0.03488+0.17194)\*1.08 = 0.2233656 (g)

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	0.2234	0.0057	0.229	0.600	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.2234	0.0057	0.229	0.600	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
<b>Test #</b>	<b>SCRX10087433</b>	<b>Test Procedure</b>	<b>34 - Federal fuel 3-day evap</b>
<b>Exhaust Test # for this Evap Test</b>	SCRX10087429	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	08/02/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11327	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	3746	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.283068	--

**Manufacturer Test Comments**

Callout: 25EV-D06.45V1-1; Cert 3-Day/Evap (E10) Hot\_Soak\_HC\_(g) = 0.06724 , Diurnal (g) = 0.19486; 3DayTotal = (0.06724+0.19486)\*1.08 = 0.283068 (g)

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	0.2831	0.0090	0.292	0.600	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.2831	0.0090	0.292	0.600	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
<b>Test #</b>	<b>SCRX10087432</b>	<b>Test Procedure</b>	<b>32 - Federal Fuel Running Loss</b>
<b>Exhaust Test # for this Evap Test</b>	SCRX10087429	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	08/02/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11327	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	3729	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.0001404	--

**Manufacturer Test Comments**

Callout: 25EV-D06.45V1-1; Cert 3-Day/Evap RL test(E10) RL=(0.00013 \*1.08)=0.0001404

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	0.000	0.000	0.00	0.05	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.000	0.000	0.00	0.05	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
<b>Test #</b>	<b>SCRX10087434</b>	<b>Test Procedure</b>	<b>24 - Federal fuel refueling test (ORVR)</b>
<b>Exhaust Test # for this Evap Test</b>	SCRX10087428	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	07/24/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11327	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	3588	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
<b>HC (Hydrocarbon for Running Loss and ORVR)</b>	0.03348	--

**Manufacturer Test Comments**

Callout: 25EV-D06.45V1-1; Cert ORVR(E10) ORVR = 0.031 \*1.08 = 0.03348 g/gallons

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	0.033	0.000	0.03	0.20	Pass
CA	150,000 miles	Other	HC	0.033	0.000	0.03	0.20	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
<b>Test #</b>	<b>SCRX10087465</b>	<b>Test Procedure</b>	<b>65 - Evap Canister Bleed Test</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	06/09/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Phinia		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	0	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	--	<b>Road Speed Fan Usage</b>	--

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.0071	--

**Manufacturer Test Comments**                      Test run on a rig with aged components (not actual vehicle)

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	0.0071	0.0000	0.007	0.030	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.0071	0.0000	0.007	0.030	Pass

## Certification Summary Information Report

Test Group	VCRXD06.4575	Evaporative/Refueling Family	VCRXR0213TR1
<b>Fuel Properties</b>			
<b>Fuel Batch ID</b>	<b>11350</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline	<b>Fuel Batch Calibration Date</b>	08/26/2024
<b>Fuel Batch Calibration Effective Date</b>	08/26/2024	<b>Fuel Batch Calibration Ineffective Date</b>	--
<b>Carbon Weight Fraction NMHC</b>	0.828	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	--
<b>Fuel Density (grams/cubic ft)</b>	--	<b>Fuel Specific Gravity</b>	0.752
<b>Fuel Ethanol Volume Percent (%)</b>	9.6	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17966
<b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>	--	<b>Fuel Carbon Mass Fraction (E10)</b>	--
<b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b>	0.828	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>11327</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	<b>Fuel Batch Calibration Date</b>	06/08/2024
<b>Fuel Batch Calibration Effective Date</b>	06/08/2024	<b>Fuel Batch Calibration Ineffective Date</b>	--
<b>Carbon Weight Fraction NMHC</b>	0.828	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	--
<b>Fuel Density (grams/cubic ft)</b>	--	<b>Fuel Specific Gravity</b>	0.75
<b>Fuel Ethanol Volume Percent (%)</b>	9.7	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17997
<b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>	--	<b>Fuel Carbon Mass Fraction (E10)</b>	--
<b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b>	0.828	<b>Weight Fraction CO2</b>	--

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1						
<b>Consolidated List of Standards</b>									
<b>Exhaust Standards</b>									
<b>Cert Region</b>	Federal	<b>Cert/In-Use Code</b>	Cert						
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	<b>Standard Level</b>	Federal Tier 3 HD Class 3 Bin 230						
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	California fuel 2-day exhaust (w/can load)						
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>
150,000 miles	CO	--	--	--	--	--	1	0	4.2
150,000 miles	CO-COMP	--	--	--	--	--	1	0	4.0
150,000 miles	CO2	--	--	--	--	--	1	0	999.9
150,000 miles	HCHO	--	--	--	--	--	1	0	0.006
150,000 miles	METHANE	--	--	--	--	--	1	0	999.99
150,000 miles	METHANE-COMB	--	--	--	--	--	1	0	0.05
150,000 miles	N2O	--	--	--	--	--	1	0	999.99
150,000 miles	N2O-COMB	--	--	--	--	--	1	0	0.05
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.230
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	1	0	0.350
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.010
150,000 miles	PM-COMP	--	--	--	--	--	1	0	0.007
<b>Cert Region</b>									
	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Cert						
<b>Vehicle Class</b>	MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>Standard Level</b>	Other						
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	SC03						
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>
150,000 miles	CO	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	999.999

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>Standard Level</b>	Other
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	California 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	--	--	--	--	--	1	0	4.2
150,000 miles	CO-COMP	--	--	--	--	--	1	0	4.0
150,000 miles	CO2	--	--	--	--	--	1	0	999.9
150,000 miles	HCHO	--	--	--	--	--	1	0	0.006
150,000 miles	METHANE	--	--	--	--	--	1	0	999.99
150,000 miles	METHANE-COMB	--	--	--	--	--	1	0	0.05
150,000 miles	N2O	--	--	--	--	--	1	0	999.99
150,000 miles	N2O-COMB	--	--	--	--	--	1	0	0.05
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.230
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	1	0	0.350
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.010
150,000 miles	PM-COMP	--	--	--	--	--	1	0	0.007

<b>Cert Region</b>	Federal	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	<b>Standard Level</b>	Federal Tier 3 HD Class 3 Bin 230
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	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	CO2	--	--	--	--	--	1	0	999.9
150,000 miles	METHANE	--	--	--	--	--	1	0	999.99
150,000 miles	N2O	--	--	--	--	--	1	0	999.99
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.230
150,000 miles	NOX	--	--	--	--	--	1	0	999.999

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>Standard Level</b>	Other
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	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	CO2	--	--	--	--	--	1	0	999.9
150,000 miles	METHANE	--	--	--	--	--	1	0	999.99
150,000 miles	N2O	--	--	--	--	--	1	0	999.99
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.230
150,000 miles	NOX	--	--	--	--	--	1	0	999.999

<b>Cert Region</b>	Federal	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	<b>Standard Level</b>	Federal Tier 3 HD Class 3 Bin 230
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	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	--	--	--	--	--	1	0	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	999.999

<b>Cert Region</b>	Federal	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	<b>Standard Level</b>	Federal Tier 3 HD Class 3 Bin 230
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	Hot 1435 LA92

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	--	--	--	--	--	1	0	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	999.999

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>Standard Level</b>	Other
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	Hot 1435 LA92

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	--	--	--	--	--	1	0	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.005

**Evaporative/Refueling Standards**

<b>Evaporative/Refueling Family</b>	VCRXR0213TR1	<b>Cert Region</b>	California + CAA Section 177 states
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Other
<b>Test Procedure</b>	2-day evap		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.0057

<b>Evaporative/Refueling Family</b>	VCRXR0213TR1	<b>Cert Region</b>	Federal
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Federal Tier 3 Evap
<b>Test Procedure</b>	Federal fuel 3-day evap		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.0090

<b>Evaporative/Refueling Family</b>	VCRXR0213TR1	<b>Cert Region</b>	Federal
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Federal Tier 3 Evap
<b>Test Procedure</b>	Federal Fuel Running Loss		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0.000

## Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575		<b>Evaporative/Refueling Family</b>	VCRXR0213TR1	
<b>Evaporative/Refueling Family</b>	VCRXR0213TR1		<b>Cert Region</b>	California + CAA Section 177 states	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>	Other	
<b>Test Procedure</b>	Federal fuel 3-day evap				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.0090
<b>Evaporative/Refueling Family</b>	VCRXR0213TR1		<b>Cert Region</b>	California + CAA Section 177 states	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>	Other	
<b>Test Procedure</b>	Evap Canister Bleed Test				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.030	0.0000
<b>Evaporative/Refueling Family</b>	VCRXR0213TR1		<b>Cert Region</b>	Federal	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>	Federal Tier 3 Evap	
<b>Test Procedure</b>	Evap Canister Bleed Test				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.030	0.0000
<b>Evaporative/Refueling Family</b>	VCRXR0213TR1		<b>Cert Region</b>	California + CAA Section 177 states	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>	Other	
<b>Test Procedure</b>	Federal fuel refueling test (ORVR)				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC	--	0.20	0.000
<b>Evaporative/Refueling Family</b>	VCRXR0213TR1		<b>Cert Region</b>	Federal	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>	Federal Tier 3 Evap	
<b>Test Procedure</b>	Federal fuel refueling test (ORVR)				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC	--	0.20	0.000
<b>Evaporative/Refueling Family</b>	VCRXR0213TR1		<b>Cert Region</b>	California + CAA Section 177 states	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>	Other	
<b>Test Procedure</b>	Federal Fuel Running Loss				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0.000

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1		
<b>Evaporative/Refueling Family</b>	VCRXR0213TR1	<b>Cert Region</b>	Federal		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Federal Tier 3 Evap		
<b>Test Procedure</b>	2-day evap				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.0057

## Certification Summary Information Report

Test Group	VCRXD06.4575	Evaporative/Refueling Family	VCRXR0213TR1
<b>Glossary</b>			
<b>Useful Life</b>			
4	4,000 miles	120	120,000 miles
50	50,000 miles	150	150,000 miles
100	100,000 miles		
<b>Emission Name</b>			
HC-TOTAL	Total Hydrocarbon	COMB-CREE	Combined Carbon-Related Exhaust Emissions
CO	Carbon Monoxide	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions
CO2	Carbon dioxide	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only
CREE	Carbon-Related Exhaust Emissions	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only
OPT-CREE	Optional Carbon-Related Exhaust Emissions	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only
NOX	Nitrogen Oxide	LEAK-DIA	Effective Leak Diameter (inches)
PM	Particulate Matter	LEAK-GAS CAP	Gas Cap Leakage (cc/min)
PM-COMP	SFTP Composite Particulate Matter	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only
HC-NM	Non-methane Hydrocarbon	KW-HRS	Integrated DC KW-HRS
OMHCE	Organic material Hydrocarbon Equivalent	CH4 BAG 1	Bag 1 Methane
OMNMHCE	Organic material non-methane HC equivalent	CH4 BAG 2	Bag 2 Methane
NMOG	Non-methane organic gases	CH4 BAG 3	Bag 3 Methane
HCHO	Formaldehyde	CH4 BAG 4	Bag 4 Methane
H3C2HO	Acetaldehyde	CO BAG 1	Bag 1 Carbon Monoxide
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	CO BAG 2	Bag 2 Carbon Monoxide
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	CO BAG 3	Bag 3 Carbon Monoxide
CO-COMP	SFTP Composite Carbon Monoxide	CO BAG 4	Bag 4 Carbon Monoxide
ETHANOL	C2H5OH - Ethanol	NMOG BAG 1	Bag 1 Non-methane organic gases
FE BAG 1	Bag 1 Fuel Economy	NMOG BAG 2	Bag 2 Non-methane organic gases
FE BAG 2	Bag 2 Fuel Economy	NMOG BAG 3	Bag 3 Non-methane organic gases
FE BAG 3	Bag 3 Fuel Economy	NMOG BAG 4	Bag 4 Non-methane organic gases
FE BAG 4	Bag 4 Fuel Economy	ACT-DISTANCE BAG 1	Bag 1 Actual Distance
MFR FE	Manufacturer Fuel Economy	ACT-DISTANCE BAG 2	Bag 2 Actual Distance
HC	Hydrocarbon for Running Loss and ORVR	ACT-DISTANCE BAG 3	Bag 3 Actual Distance
METHANE	CH4 - Methane	ACT-DISTANCE BAG 4	Bag 4 Actual Distance
METHANOL	CH3OH - Methanol	HC-TOTAL BAG 1	Bag 1 Total Hydrocarbon
N2O	Nitrous Oxide	HC-TOTAL BAG 2	Bag 2 Total Hydrocarbon
SPITBACK	Spitback Hydrocarbon in grams	HC-TOTAL BAG 3	Bag 3 Total Hydrocarbon
AMP-HRS	Integrated Amp-hours	HC-TOTAL BAG 4	Bag 4 Total Hydrocarbon
START-SOC	System Start State of Charge Watt-hours	WATT-HRS BAG 1	Bag 1 Watt Hours
END-SOC	System End State of Charge Watt-hours	WATT-HRS BAG 2	Bag 2 Watt Hours

## Certification Summary Information Report

Test Group		VCRXD06.4575	Evaporative/Refueling Family		VCRXR0213TR1
ACT-DISTANCE	Actual Distance Driven (miles)		WATT-HRS BAG 3	Bag 3 Watt Hours	
AS-VOLT	Average System Voltage		WATT-HRS BAG 4	Bag 4 Watt Hours	
CO2 BAG 1	Bag 1 Carbon Dioxide		WATT-HRS	Watt Hours	
CO2 BAG 2	Bag 2 Carbon Dioxide		HC-NM BAG 1	Bag 1 Non-methane Hydrocarbon	
CO2 BAG 3	Bag 3 Carbon Dioxide		HC-NM BAG 2	Bag 2 Non-methane Hydrocarbon	
CO2 BAG 4	Bag 4 Carbon Dioxide		HC-NM BAG 3	Bag 3 Non-methane Hydrocarbon	
NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides		HC-NM BAG 4	Bag 4 Non-methane Hydrocarbon	
NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides		N2O BAG 1	Bag 1 Nitrous Oxide	
DT-IWRR	Drive Trace Inertia Work Ratio Rating		N2O BAG 2	Bag 2 Nitrous Oxide	
DT-ASCR	Drive Trace Absolute Speed Change Rating		N2O BAG 3	Bag 3 Nitrous Oxide	
DT-EER	Drive Trace Energy Economy Rating		N2O BAG 4	Bag 4 Nitrous Oxide	
<b>Certification Region</b>					
CA	California + CAA Section 177 states		FA	Federal	
<b>Exhaust Emission Standard Level</b>					
B1	Federal Tier 2 Bin 1		HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340	
B2	Federal Tier 2 Bin 2		HDV2B250	Federal Tier 3 HD Class 2b Bin 250	
B3	Federal Tier 2 Bin 3		HDV2B200	Federal Tier 3 HD Class 2b Bin 200	
B4	Federal Tier 2 Bin 4		HDV2B170	Federal Tier 3 HD Class 2b Bin 170	
B5	Federal Tier 2 Bin 5		HDV2B150	Federal Tier 3 HD Class 2b Bin 150	
B6	Federal Tier 2 Bin 6		HDV2B0	Federal Tier 3 HD Class 2b Bin 0	
B7	Federal Tier 2 Bin 7		HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630	
B8	Federal Tier 2 Bin 8		HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570	
B9	Federal Tier 2 Bin 9		HDV3B400	Federal Tier 3 HD Class 3 Bin 400	
B10	Federal Tier 2 Bin 10		HDV3B270	Federal Tier 3 HD Class 3 Bin 270	
B11	Federal Tier 2 Bin 11		HDV3B230	Federal Tier 3 HD Class 3 Bin 230	
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)		HDV3B200	Federal Tier 3 HD Class 3 Bin 200	
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)		HDV3B0	Federal Tier 3 HD Class 3 Bin 0	
L2	California LEV-II LEV		L4SULEV100	California LEV-IV SULEV100	
L2OP	California LEV-II LEV Optional		L4SULEV125	California LEV-IV SULEV125	
U2	California LEV-II ULEV		L4SULEV15	California LEV-IV SULEV15	
S2	California LEV-II SULEV		L4SULEV150	California LEV-IV SULEV150	
ZEV	California ZEV		L4SULEV170	California LEV-IV SULEV170	
OT	Other		L4SULEV175	California LEV-IV SULEV175	
T1	Federal Tier 1		L4SULEV20	California LEV-IV SULEV20	
PZEV	California PZEV		L4SULEV200	California LEV-IV SULEV200	
L2LEV160	California LEV-II LEV160		L4SULEV230	California LEV-IV SULEV230	
L2ULEV125	California LEV-II ULEV125		L4SULEV25	California LEV-IV SULEV25	
L2SULEV30	California LEV-II SULEV30		L4SULEV30	California LEV-IV SULEV30	
L2LEV395	California LEV-II LEV395		L4SULEV75	California LEV-IV SULEV75	

## Certification Summary Information Report

Test Group	VCRXD06.4575	Evaporative/Refueling Family	VCRXR0213TR1
L2ULEV340	California LEV-II ULEV340	L4SULEV85	California LEV-IV SULEV85
L2LEV630	California LEV-II LEV630	L4ULEV125	California LEV-IV ULEV125
L2ULEV570	California LEV-II ULEV570	L4ULEV200	California LEV-IV ULEV200
L3LEV160	California LEV-III LEV160	L4ULEV250	California LEV-IV ULEV250
L3ULEV125	California LEV-III ULEV125	L4ULEV270	California LEV-IV ULEV270
L3ULEV70	California LEV-III ULEV70	L4ULEV40	California LEV-IV ULEV40
L3ULEV50	California LEV-III ULEV50	L4ULEV400	California LEV-IV ULEV400
L3SULEV30	California LEV-III SULEV30	L4ULEV50	California LEV-IV ULEV50
L3SULEV20	California LEV-III SULEV20	L4ULEV60	California LEV-IV ULEV60
L3LEV395	California LEV-III LEV395	L4ULEV70	California LEV-IV ULEV70
L3ULEV340	California LEV-III ULEV340	T4B170	Federal Tier 4 MDV Bin 170
L3ULEV250	California LEV-III ULEV250	T4B150	Federal Tier 4 MDV Bin 150
L3ULEV200	California LEV-III ULEV200	T4B125	Federal Tier 4 MDV Bin 125
L3SULEV170	California LEV-III SULEV170	T4B100	Federal Tier 4 MDV Bin 100
L3SULEV150	California LEV-III SULEV150	T4B85	Federal Tier 4 MDV Bin 85
L3LEV630	California LEV-III LEV630	T4B75	Federal Tier 4 MDV Bin 75
L3ULEV570	California LEV-III ULEV570	T4B70	Federal Tier 4 Bin 70
L3ULEV400	California LEV-III ULEV400	T4B65	Federal Tier 4 Bin 65
L3ULEV270	California LEV-III ULEV270	T4B60	Federal Tier 4 Bin 60
L3SULEV230	California LEV-III SULEV230	T4B55	Federal Tier 4 Bin 55
L3SULEV200	California LEV-III SULEV200	T4B50	Federal Tier 4 Bin 50
T3B160	Federal Tier 3 Bin 160	T4B45	Federal Tier 4 Bin 45
T3B125	Federal Tier 3 Bin 125	T4B40	Federal Tier 4 Bin 40
T3B110	Federal Tier 3 Transitional Bin 110	T4B35	Federal Tier 4 Bin 35
T3B85	Federal Tier 3 Transitional Bin 85	T4B30	Federal Tier 4 Bin 30
T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover	T4B25	Federal Tier 4 Bin 25
T3B70	Federal Tier 3 Bin 70	T4B20	Federal Tier 4 Bin 20
T3B50	Federal Tier 3 Bin 50	T4B15	Federal Tier 4 Bin 15
T3B30	Federal Tier 3 Bin 30	T4B10	Federal Tier 4 Bin 10
T3B20	Federal Tier 3 Bin 20	T4B5	Federal Tier 4 Bin 5
T3B0	Federal Tier 3 Bin 0	T4B0	Federal Tier 4 Bin 0
HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395		
<b>Transmission Type Code</b>			
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)
<b>Drive System Code</b>			
4	4-Wheel Drive	P	Part-time 4-Wheel Drive

**Certification Summary Information Report**

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0213TR1
F	2-Wheel Drive, Front	A	All Wheel Drive
R	2-Wheel Drive, Rear		
<b>Additional Terms and Acronyms</b>			
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

## Certification Summary Information Report

<b>Manufacturer</b>	FCA US LLC	<b>Manufacturer Code</b>	CRX						
<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1						
<b>Certificate Number</b>	--	<b>CARB Executive Order #</b>	--						
<b>Certificate Issue Date</b>	--	<b>Certificate Revision Date</b>	--						
<b>Certificate Effective Date</b>	--	<b>Conditional Certificate</b>	--						
<b>CSI Revision #</b>	--	<b>CSI Submission/Revision Date</b>	03/20/2026 02:19:38 PM						
<b>Model Year</b>	2027								
<b>Test Group Information</b>									
<b>CSI Type</b>	Update for Correction	<b>Running Change Reference Number</b>	--						
<b>GHG Exempt Status</b>	Not Exempt								
<b>Drive Sources and Fuel(s)</b>									
<b>Drive Source #1:</b>	Combustion Engine								
	<table border="1"> <thead> <tr> <th>Fuel</th><th>Basic Fuel Metering System</th><th>Lean Burn Strategy Indicator</th></tr> </thead> <tbody> <tr> <td>Gasoline</td><td>Multipoint/sequential fuel injection</td><td>No</td></tr> </tbody> </table>			Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator	Gasoline	Multipoint/sequential fuel injection	No
Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator							
Gasoline	Multipoint/sequential fuel injection	No							
<b>Hybrid Indicator</b>	No								
<b>Multiple Fuel Storage</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	--						
<b>Multiple Fuel Combustion</b>	--	<b>Off-board Charge Capable Indicator</b>	--						
<b>Fuel Cell Indicator</b>	--	<b>EPA Vehicle Class</b>	HDV2						
<b>Federal Clean Fuel Vehicle</b>	Yes	<b>Federal Clean Fuel Vehicle Standard</b>	LEV						
<b>Federal Clean Fuel Vehicle ILEV</b>	No	<b>California Partial Zero Emissions Vehicle Indicator</b>	No						
<b>Durability Group Name</b>	VCRXGPGNNF40	<b>Durability Group Equivalency Factor</b>	1.6						
<b>Reduced Fee Test Group</b>	No	<b>Certification Region Code(s)</b>	FA, CA						
<b>Complies with HD GHG 2b/3 regulations?</b>	Yes								
<b>Introduction into Commerce Date</b>	--	<b>CAP2000 Conditional Certificate?</b>	N/A						
<b>Independent Commercial Importer?</b>	--	<b>Alternative Fuel Converter Certificate?</b>	--						
<b>SFTP Federal Composite Compliance Identifier</b>	Tier 3	<b>SFTP Tier 2 Composite CO Option</b>	No						
<b>SFTP LEV-III Composite Compliance Indicator</b>	Yes								
<b>OBD Compliance Type</b>	CARB	<b>OBD Demonstration Vehicle Test Group</b>	VCRXT03.6570						
<b>Test Group OBD Compliance Level</b>	Partial - with deficiencies	<b>Number of Test Group OBD Deficiencies</b>	2						
<b>OBD Deficiencies Comments</b>	SAE J1979-2 Implementation, Adaptive Cruise Control and Parallel Park Systems Default Action								
<b>Mfr Test Group Comments</b>	--								
<b>Mfr Exhaust / Evap Standards Comments</b>	--								

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1				
<b>Evaporative/Refueling Family Information</b>							
<b>Evaporative Summary Information Type</b>	New	<b>Submission/Correction Date</b>	03/20/2026 12:21:40 PM				
<b>Integrated ORVR?</b>	Yes	<b>Fuel(s)</b>	Gasoline				
<b>Multiple Fuel Storage</b>	--						
<b>Bladder Fuel Tank?</b>	No						
<b>Fuel Tank Material</b>	Plastic	<b>Fuel Tank Material Description</b>	hdpe/co-ex				
<b>Fill Pipe Seal Type</b>	Liquid seal						
<b>Air Intake System Vapor Storage Device?</b>	Yes	<b>Air Intake System Vapor Storage Device Description</b>	Panel				
<b>Fuel System Vapor Storage Canister?</b>	Yes	<b>Other Vapor Storage</b>	--				
<b>Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)</b>	394	<b>Number of Primary Canisters</b>	1				
<b>Number of Bleed Canisters</b>	0	<b>Bleed Canister Total Working Capacity (grams)</b>	0				
<b>Mfr Evaporative/Refueling Family Comments</b>	This Evaporative Family is being certified with an evaporative FEL of 0.600 grams						
<b>Leak Family Details</b>							
<b>Leak Family Indicator</b>	Yes						
<b>Canister Bleed Test Indicator</b>	Yes	<b>Applicability of Evaporative Canister Bleed Test</b>	50 State				
<b>Evaporative Canister Bleed Test Comments</b>	--						
<b>CARB Fuel Only (Rig) Test Indicator</b>	No	<b>Applicability of CARB Fuel Only (Rig) Test</b>	--				
<b>CARB Fuel Only (Rig) Test Comments</b>	--						
<b>Leak Family Name</b>	<b>Applicability of Leak Family Requirements</b>	<b>Leak Family Standard (inches)</b>	<b>Leak Family Description</b>				
VCRXR0391TR1-LF1	50 State	0.02	--				
<b>Models Covered by this Certificate</b>							
<b>Carline Manufacturer</b>	<b>Division</b>	<b>Carline</b>	<b>Certification Region Code(s)</b>	<b>Drive System</b>	<b>Trans - Type</b>	<b>- # of Gears</b>	<b>Trans - Lockup</b>
FCA US LLC	12 - RAM	950 - 3500 4X2	Federal	2-Wheel Drive, Rear	Automatic	8	Yes
FCA US LLC	12 - RAM	930 - 2500 4X2	Federal	2-Wheel Drive, Rear	Automatic	8	Yes
FCA US LLC	12 - RAM	935 - 2500 4X4	Federal	4-Wheel Drive	Automatic	8	Yes
FCA US LLC	12 - RAM	950 - 3500 4X2	California + CAA Section 177 states	2-Wheel Drive, Rear	Automatic	8	Yes
FCA US LLC	12 - RAM	955 - 3500 4X4	California + CAA Section 177 states	4-Wheel Drive	Automatic	8	Yes
FCA US LLC	12 - RAM	930 - 2500 4X2	California + CAA Section 177 states	2-Wheel Drive, Rear	Automatic	8	Yes
FCA US LLC	12 - RAM	935 - 2500 4X4	California + CAA Section 177 states	4-Wheel Drive	Automatic	8	Yes
FCA US LLC	12 - RAM	955 - 3500 4X4	Federal	4-Wheel Drive	Automatic	8	Yes

## Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
<b>Engine Description</b>			
<b>Hybrid Type</b>	--	<b>Hybrid Description</b>	--
<b>Engine Type</b>	4-Stroke Spark Ignition	<b>Mfr Engine Description</b>	--
<b>Engine Block Arrangement</b>	V-shaped engine	<b>Mfr Engine Block Arrangement Description</b>	--
<b>Camless Valvetrain Indicator</b>	No	<b>Oil Viscosity/Classification</b>	0W-40
<b>Number of Cylinders/Rotors</b>	8	<b>Mechanically Variable Compression Ratio Indicator</b>	N
<b>After Treatment Device(s) (ATD)</b>			
<b>ATD Number</b>	<b>ATD Type</b>	<b>ATD Precious Metal</b>	<b>Substrate Material</b>
1	Three-way catalyst	Platinum + Palladium + Rhodium	Ceramic
2	Three-way catalyst	Platinum + Rhodium	Ceramic
3	Three-way catalyst	Rhodium	Ceramic
<b>Mfr After Treatment Device (ATD) Comments</b>	THREE WAY CATALYST		
<b>Direct Ozone Reduction (DOR) Device</b>	Not Equipped		
<b>Mfr Emission Control Device Comments</b>	--		
<b>Engine Configuration Number 1</b>			
<b>Engine Displacement (liters)</b>	6.4	<b>Engine Rated Horsepower</b>	405
<b>Number of Inlet Valves Per Cylinder</b>	1	<b>Number of Exhaust Valves Per Cylinder</b>	1
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Number of Air Aspiration Devices</b>	0
<b>Air Aspiration Device Configuration</b>	--	<b>Charge Air Cooler Type</b>	N/A
<b>Air Aspiration Drive Method(s)</b>	--		
<b>Cylinder Deactivation</b>	Yes		
<b>Cylinder Deactivation Description</b>	Multiple Displacement Solenoid (MDS)		
<b>Variable Valve Timing</b>	Yes		
<b>Variable Valve Timing System Description</b>	Cam phaser		
<b>Variable Valve Lift?</b>	No		
<b>Variable Valve Lift System Description</b>	--		
<b>Number of Knock Sensors</b>	2	<b>Number of Air/Fuel Sensors</b>	4
<b>Air/Fuel Sensor # 1 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 1 Description</b>	--
<b>Air/Fuel Sensor # 2 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 2 Description</b>	--
<b>Air/Fuel Sensor # 3 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 3 Description</b>	--
<b>Air/Fuel Sensor # 4 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 4 Description</b>	--
<b>Mfr Air/Fuel Sensor Comments</b>	--		
<b>Exhaust Gas Recirculation</b>	Yes	<b>Cooled Exhaust Gas Recirculation</b>	Yes
<b>EGR Type</b>	Electronic/Electric	<b>Exhaust Gas Recirculation Description if 'Other'</b>	--
<b>Closed Loop Air Injection System</b>	No		
<b>Air Injection Type</b>	Not Applicable	<b>Air Injection Type if 'Other'</b>	--
<b>Mfr Engine Configuration Comments</b>	--		

### Certification Summary Information Report

<b>Test Group</b>		VCRXD06.4575			<b>Evaporative/Refueling Family</b>			VCRXR0391TR1		
<b>Official Test Numbers</b>										
<b>Test Group Fuel</b>	<b>FTP</b>	<b>US06</b>	<b>SC03</b>	<b>Cold CO</b>	<b>Highway</b>	<b>EPA City Litmus Value</b>	<b>EPA City Litmus Threshold</b>	<b>EPA Highway Litmus Value</b>	<b>EPA Highway Litmus Threshold</b>	<b>CREE Weighting Factor</b>
Gasoline	SCRX10087858	SCRX10087856	SCRX10087857	--	SCRX10087855	--	228.2	--	286.1	1.0
<b>SFTP LEV-III Official Test Numbers</b>										
<b>Test Group Fuel</b>	<b>FTP</b>		<b>US06</b>		<b>SC03</b>					
Gasoline	SCRX10087858		SCRX10087856		SCRX10087857					

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
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**Emission Data Vehicle Information**

Vehicle ID / Configuration	L5D280598 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	SCRXD06.45W3	Original Evaporative/Refueling Family	SCRXR0391TP1
Original Test Vehicle Model Year	2025		

**Vehicle Model**

Represented Test Vehicle Make	RAM	Represented Test Vehicle Model	3500 4X4
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**Leak Family Details**

Leak Family Identifier	--	Leak Family Name	--
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**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	1
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles		
Engine Code	AA-3000	Rated Horsepower	405
Displacement (liters)	6.4		
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	0	Air Aspiration Device Configuration	--
Charge Air Cooler Type	--	Drive Mode While Testing	2-Wheel Drive, Rear
Shift Indicator Light Usage	Not equipped	Aged Emission Components	150,000 (mi)
Curb Weight (lbs)	10782	Equivalent Test Weight (pounds)	11000
GVWR (lbs)	14000	N/V Ratio	30.7
Axle Ratio	4.1		
Transmission Type	Automatic	# of Transmission Gears	8
Transmission Lockup	Yes	Creeper Gear	No

**Dynamometer Coefficients:**

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	98.77	0.1936	0.05339	15.11	0.6962	0.04349	32.3
US06	98.77	0.1936	0.05339	15.11	0.6962	0.04349	N/A

### Certification Summary Information Report

Test Group	VCRXD06.4575	Evaporative/Refueling Family	VCRXR0391TR1
<b>Emission Control Device Comments</b>	--		
<b>Manufacturer Test Vehicle Comments</b>	Callout:25DA-D06.45W3-1		

## Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
<b>Test #</b>	<b>SCRX10087858</b>	<b>Test Procedure</b>	<b>25 - California fuel 2-day exhaust (w/can load)</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	09/15/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11350	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000), MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CPG		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4237	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No
<b>Test Results</b>			

## Certification Summary Information Report

Test Group	VCRXD06.4575	Evaporative/Refueling Family	VCRXR0391TR1
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated FE Equivalent Value (miles per gallon)</b>
	CO2 BAG 1 (Bag 1 Carbon Dioxide)	886.54	--
	FE BAG 1 (Bag 1 Fuel Economy)	9.72	9.72
	CO2 BAG 2 (Bag 2 Carbon Dioxide)	878.27	--
	FE BAG 2 (Bag 2 Fuel Economy)	9.89	9.89
	CO2 BAG 3 (Bag 3 Carbon Dioxide)	772.36	--
	FE BAG 3 (Bag 3 Fuel Economy)	11.23	11.23
	METHANE (CH4 - Methane)	0.035271	--
	CO (Carbon Monoxide)	1.262276	--
	METHANE-COMB (Combined CH4 for HD 2b/3 vehicles only)	0.026	--
	N2O-COMB (Combined Nitrous Oxide for HD 2b/3 vehicles only)	0.003	--
	DT-ASCR (Drive Trace Absolute Speed Change Rating)	3.3027	--
	DT-EER (Drive Trace Energy Economy Rating)	2.7344	--
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	5.7387	--
	MFR FE (Manufacturer Fuel Economy)	10.2	10.2
	NOX (Nitrogen Oxide)	0.053093	--
	N2O (Nitrous Oxide)	0.003536	--
	HC-NM (Non-methane Hydrocarbon)	0.072594	--
	NMOG (Non-methane organic gases)	0.079735	--
	PM (Particulate Matter)	0.000494	--
	HC-TOTAL (Total Hydrocarbon)	0.106456	--
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CREE/OPT-CREE</b>
	Carbon-Related Exhaust Emissions	853	999
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
	Carbon dioxide	850.91582	--
<b>Manufacturer Test Comments</b>	25DA-D06.45W3-1 city rerun @ ALVW 150k Auto Fixed cE10		

## Certification Summary Information Report

Test Group		VCRXD06.4575			Evaporative/Refueling Family					VCRXR0391TR1		
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 HD Class 3 Bin 230	CO	1.26	--	--	--	0	1	1.3	4.2	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	CO-COMP	1.30	--	--	--	0	1	1.3	4.0	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	CO2	999	--	--	--	0	1	999	--	--
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	METHANE	0.035	--	--	--	0	1	0.04	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	METHANE-COMB	0.026	--	--	--	0	1	0.03	0.05	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	N2O	0.004	--	--	--	0	1	0.00	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	N2O-COMB	0.003	--	--	--	0	1	0.00	0.05	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG	0.0797	--	--	--	0	1	0.080	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG+NOX	0.1328	--	--	--	--	--	0.133	0.230	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG+NOX-COMP	0.0590	--	--	--	0	1	0.059	0.350	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NOX	0.0531	--	--	--	0	1	0.053	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	PM	0.0005	--	--	--	0	1	0.000	0.010	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	PM-COMP	0.0008	--	--	--	0	1	0.001	0.007	Pass
CA	150,000 miles	Other	CO	1.26	--	--	--	0	1	1.3	4.2	Pass
CA	150,000 miles	Other	CO-COMP	1.30	--	--	--	0	1	1.3	4.0	Pass
CA	150,000 miles	Other	CO2	999	--	--	--	0	1	999	--	--
CA	150,000 miles	Other	METHANE	0.035	--	--	--	0	1	0.04	999.99	Pass
CA	150,000 miles	Other	METHANE-COMB	0.026	--	--	--	0	1	0.03	0.05	Pass
CA	150,000 miles	Other	N2O	0.004	--	--	--	0	1	0.00	999.99	Pass

## Certification Summary Information Report

Test Group		VCRXD06.4575			Evaporative/Refueling Family					VCRXR0391TR1		
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
CA	150,000 miles	Other	N2O-COMB	0.003	--	--	--	0	1	0.00	0.05	Pass
CA	150,000 miles	Other	NMOG	0.0797	--	--	--	0	1	0.080	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.1328	--	--	--	--	--	0.133	0.230	Pass
CA	150,000 miles	Other	NMOG+NOX-COMP	0.0590	--	--	--	0	1	0.059	0.350	Pass
CA	150,000 miles	Other	NOX	0.0531	--	--	--	0	1	0.053	999.999	Pass
CA	150,000 miles	Other	PM	0.0005	--	--	--	0	1	0.000	0.010	Pass
CA	150,000 miles	Other	PM-COMP	0.0008	--	--	--	0	1	0.001	0.007	Pass

**NOTE: For Non-charge depleting tests, the Rounded Result for CO2 Emission name is a Verify-calculated value.**

**Certification Summary Information Report**

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
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<b>Test #</b>	<b>SCRX10087855</b>	<b>Test Procedure</b>	<b>3 - HWFE</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	09/12/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11350	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000), MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CPG		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4178	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.015137	--
CO (Carbon Monoxide)	0.434739	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	3.9858	--
DT-EER (Drive Trace Energy Economy Rating)	0.3184	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	4.1656	--
MFR FE (Manufacturer Fuel Economy)	16.7	16.7
NOX (Nitrogen Oxide)	0.002796	--
N2O (Nitrous Oxide)	0.001734	--
HC-NM (Non-methane Hydrocarbon)	0.005328	--
NMOG (Non-methane organic gases)	0.005489	--
HC-TOTAL (Total Hydrocarbon)	0.019861	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	522	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	520.77847	--

**Manufacturer Test Comments** 25DA-D06.45W3-1 hwy @ ALVW 150k Auto Fixed cE10

## Certification Summary Information Report

Test Group		VCRXD06.4575			Evaporative/Refueling Family					VCRXR0391TR1		
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 HD Class 3 Bin 230	CO2	999	--	--	--	0	1	999	--	--
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	METHANE	0.015	--	--	--	0	1	0.02	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	N2O	0.002	--	--	--	0	1	0.00	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG	0.0055	--	--	--	0	1	0.006	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG+NOX	0.0083	--	--	--	--	--	0.008	0.230	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NOX	0.0028	--	--	--	0	1	0.003	999.999	Pass
CA	150,000 miles	Other	CO2	999	--	--	--	0	1	999	--	--
CA	150,000 miles	Other	METHANE	0.015	--	--	--	0	1	0.02	999.99	Pass
CA	150,000 miles	Other	N2O	0.002	--	--	--	0	1	0.00	999.99	Pass
CA	150,000 miles	Other	NMOG	0.0055	--	--	--	0	1	0.006	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0083	--	--	--	--	--	0.008	0.230	Pass
CA	150,000 miles	Other	NOX	0.0028	--	--	--	0	1	0.003	999.999	Pass

**NOTE: For Non-charge depleting tests, the Rounded Result for CO2 Emission name is a Verify-calculated value.**

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
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<b>Test #</b>	SCRX10087856	<b>Test Procedure</b>	16 - Hot 1435 LA92
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	09/12/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11350	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000), MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CPG		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4200	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	1234.26	--
FE BAG 1 (Bag 1 Fuel Economy)	7.04	7.04
CO2 BAG 2 (Bag 2 Carbon Dioxide)	830	--
FE BAG 2 (Bag 2 Fuel Economy)	10.46	10.46
METHANE (CH4 - Methane)	0.0216432	--
CO (Carbon Monoxide)	0.7249428	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.2348	--
DT-EER (Drive Trace Energy Economy Rating)	0.2526	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.315	--
MFR FE (Manufacturer Fuel Economy)	9.9	9.9
NOX (Nitrogen Oxide)	0.0113205	--
HC-NM (Non-methane Hydrocarbon)	0.0055952	--
NMOG (Non-methane organic gases)	0.0057642	--
PM (Particulate Matter)	0.0003631	--
HC-TOTAL (Total Hydrocarbon)	0.0263739	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	880	--

## Certification Summary Information Report

Test Group		VCRXD06.4575		Evaporative/Refueling Family				VCRXR0391TR1				
Test Result Name		Unrounded Test Result		Verify Calculated CO2								
Carbon dioxide		878.613784		--								
Manufacturer Test Comments		25DA-D06.45W3-1 la92 @ ALVW 150k Auto Fixed cE10										
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 HD Class 3 Bin 230	CO	0.72	--	--	--	0	1	0.7	999.9	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG	0.0058	--	--	--	0	1	0.006	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG+NOX	0.0171	--	--	--	--	--	0.017	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NOX	0.0113	--	--	--	0	1	0.011	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	PM	0.0004	--	--	--	0	1	0.000	999.999	Pass
CA	150,000 miles	Other	CO	0.72	--	--	--	0	1	0.7	999.9	Pass
CA	150,000 miles	Other	NMOG	0.0058	--	--	--	0	1	0.006	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0171	--	--	--	--	--	0.017	999.999	Pass
CA	150,000 miles	Other	NOX	0.0113	--	--	--	0	1	0.011	999.999	Pass
CA	150,000 miles	Other	PM	0.0004	--	--	--	0	1	0.000	0.005	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
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<b>Test #</b>	SCRX10087857	<b>Test Procedure</b>	95 - SC03
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	09/12/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11350	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000), MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CPG		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4218	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.036318	--
CO (Carbon Monoxide)	1.76852	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.1792	--
DT-EER (Drive Trace Energy Economy Rating)	0.8392	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.6585	--
MFR FE (Manufacturer Fuel Economy)	8.8	8.8
NOX (Nitrogen Oxide)	0.006581	--
HC-NM (Non-methane Hydrocarbon)	0.014022	--
NMOG (Non-methane organic gases)	0.014445	--
PM (Particulate Matter)	0.001255	--
HC-TOTAL (Total Hydrocarbon)	0.049203	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	984	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	981.45799	--

**Manufacturer Test Comments**                      25DA-D06.45W3-1 sc03 @ ALVW 150k Auto Fixed cE10

## Certification Summary Information Report

Test Group		VCRXD06.4575			Evaporative/Refueling Family					VCRXR0391TR1		
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 HD Class 3 Bin 230	CO	1.77	--	--	--	0	1	1.8	999.9	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG	0.0144	--	--	--	0	1	0.014	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NMOG+NOX	0.0210	--	--	--	--	--	0.021	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	NOX	0.0066	--	--	--	0	1	0.007	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 230	PM	0.0013	--	--	--	0	1	0.001	999.999	Pass
CA	150,000 miles	Other	CO	1.7685	--	--	--	0	1	1.768	999.999	Pass
CA	150,000 miles	Other	NMOG	0.0144	--	--	--	0	1	0.014	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0210	--	--	--	--	--	0.021	999.999	Pass
CA	150,000 miles	Other	NOX	0.0066	--	--	--	0	1	0.007	999.999	Pass
CA	150,000 miles	Other	PM	0.0013	--	--	--	0	1	0.001	999.999	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
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**Emission Data Vehicle Information**

Vehicle ID / Configuration	L5DJ25253 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	SCRXD06.45V1	Original Evaporative/Refueling Family	SCRXR0213TP1
Original Test Vehicle Model Year	2025		

**Vehicle Model**

Represented Test Vehicle Make	RAM	Represented Test Vehicle Model	2500 4X2
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**Leak Family Details**

Leak Family Identifier	--	Leak Family Name	--
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**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	1
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles		
Engine Code	AA-0350	Rated Horsepower	405
Displacement (liters)	6.4		
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	0	Air Aspiration Device Configuration	--
Charge Air Cooler Type	--	Drive Mode While Testing	2-Wheel Drive, Rear
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	8000	Equivalent Test Weight (pounds)	8000
GVWR (lbs)	10000	N/V Ratio	28.8
Axle Ratio	4.1		
Transmission Type	Automatic	# of Transmission Gears	8
Transmission Lockup	Yes	Creeper Gear	No

**Dynamometer Coefficients:**

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	66.54	0.1424	0.04151	29.9	0.2878	0.03745	23.7

Emission Control Device Comments --

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
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**Manufacturer Test Vehicle Comments**      Callout: 25EV-D06.45V1-1

<b>Test #</b>	<b>SCRX10087430</b>	<b>Test Procedure</b>	<b>23 - 2-day evap</b>
<b>Exhaust Test # for this Evap Test</b>	SCRX10087427	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	07/20/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11327	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	3570	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.2233656	--

**Manufacturer Test Comments**      Callout: 25EV-D06.45V1-1; Cert 2-Day/Evap (E10) Hot\_Soak\_HC\_(g) = 0.03488, Diurnal (g) = 0.17194; 2-DayTotal = (0.03488+0.17194)\*1.08 = 0.2233656 (g)

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	0.2234	0.0057	0.229	0.600	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.2234	0.0057	0.229	0.600	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
<b>Test #</b>	<b>SCRX10087433</b>	<b>Test Procedure</b>	<b>34 - Federal fuel 3-day evap</b>
<b>Exhaust Test # for this Evap Test</b>	SCRX10087429	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	08/02/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11327	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	3746	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.283068	--

**Manufacturer Test Comments**

Callout: 25EV-D06.45V1-1; Cert 3-Day/Evap (E10) Hot\_Soak\_HC\_(g) = 0.06724 , Diurnal (g) = 0.19486; 3DayTotal = (0.06724+0.19486)\*1.08 = 0.283068 (g)

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	0.2831	0.0090	0.292	0.600	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.2831	0.0090	0.292	0.600	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
<b>Test #</b>	<b>SCRX10087432</b>	<b>Test Procedure</b>	<b>32 - Federal Fuel Running Loss</b>
<b>Exhaust Test # for this Evap Test</b>	SCRX10087429	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	08/02/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11327	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	3729	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.0001404	--

**Manufacturer Test Comments**

Callout: 25EV-D06.45V1-1; Cert 3-Day/Evap RL test(E10) RL=(0.00013 \*1.08)=0.0001404

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	0.000	0.000	0.00	0.05	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.000	0.000	0.00	0.05	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
<b>Test #</b>	<b>SCRX10087434</b>	<b>Test Procedure</b>	<b>24 - Federal fuel refueling test (ORVR)</b>
<b>Exhaust Test # for this Evap Test</b>	SCRX10087428	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	07/24/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11327	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	3588	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
<b>HC (Hydrocarbon for Running Loss and ORVR)</b>	0.03348	--

**Manufacturer Test Comments**

Callout: 25EV-D06.45V1-1; Cert ORVR(E10) ORVR = 0.031 \*1.08 = 0.03348 g/gallons

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	0.033	0.000	0.03	0.20	Pass
CA	150,000 miles	Other	HC	0.033	0.000	0.03	0.20	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1						
<b>Test #</b>	<b>SCRX10087466</b>	<b>Test Procedure</b>	<b>65 - Evap Canister Bleed Test</b>						
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)						
<b>Test Date</b>	06/06/2024	<b>Fuel</b>	Gasoline						
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--						
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined						
<b>Verify Test Lab ID</b>	Phinia								
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)								
<b>Test Start Odometer Reading</b>	0	<b>Odometer Units</b>	M						
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--						
<b>State of Charge Delta</b>	--								
<b>Drive Cycle Speed Tolerance Criteria</b>	--	<b>Road Speed Fan Usage</b>	--						
<b>Test Results</b>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Test Result Name</th> <th style="width: 30%;">Unrounded Test Result</th> <th style="width: 35%;">Verify Calculated FE Equivalent Value</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b></td> <td style="text-align: center;">0.0079</td> <td style="text-align: center;">--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value	<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.0079	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value							
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.0079	--							
<b>Manufacturer Test Comments</b>									
Test run on a rig with aged components (not actual vehicle)									
<b>Certification</b>									
<b>Region</b>	<b>Useful Life</b>	<b>Standard Level</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Add DF</b>	<b>Certification Level</b>	<b>Standard</b>	<b>Pass/Fail</b>	
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.0079	0.0000	0.008	0.030	Pass	
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.0079	0.0000	0.008	0.030	Pass	

## Certification Summary Information Report

Test Group	VCRXD06.4575	Evaporative/Refueling Family	VCRXR0391TR1
<b>Fuel Properties</b>			
<b>Fuel Batch ID</b>	<b>11350</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline	<b>Fuel Batch Calibration Date</b>	08/26/2024
<b>Fuel Batch Calibration Effective Date</b>	08/26/2024	<b>Fuel Batch Calibration Ineffective Date</b>	--
<b>Carbon Weight Fraction NMHC</b>	0.828	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	--
<b>Fuel Density (grams/cubic ft)</b>	--	<b>Fuel Specific Gravity</b>	0.752
<b>Fuel Ethanol Volume Percent (%)</b>	9.6	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17966
<b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>	--	<b>Fuel Carbon Mass Fraction (E10)</b>	--
<b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b>	0.828	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>11327</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	<b>Fuel Batch Calibration Date</b>	06/08/2024
<b>Fuel Batch Calibration Effective Date</b>	06/08/2024	<b>Fuel Batch Calibration Ineffective Date</b>	--
<b>Carbon Weight Fraction NMHC</b>	0.828	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	--
<b>Fuel Density (grams/cubic ft)</b>	--	<b>Fuel Specific Gravity</b>	0.75
<b>Fuel Ethanol Volume Percent (%)</b>	9.7	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17997
<b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>	--	<b>Fuel Carbon Mass Fraction (E10)</b>	--
<b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b>	0.828	<b>Weight Fraction CO2</b>	--

**Certification Summary Information Report**

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>					VCRXR0391TR1		
<b>Consolidated List of Standards</b>									
<b>Exhaust Standards</b>									
<b>Cert Region</b>	Federal	<b>Cert/In-Use Code</b>					Cert		
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	<b>Standard Level</b>					Federal Tier 3 HD Class 3 Bin 230		
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>					California fuel 2-day exhaust (w/can load)		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>
150,000 miles	CO	--	--	--	--	--	1	0	4.2
150,000 miles	CO-COMP	--	--	--	--	--	1	0	4.0
150,000 miles	CO2	--	--	--	--	--	1	0	999.9
150,000 miles	HCHO	--	--	--	--	--	1	0	0.006
150,000 miles	METHANE	--	--	--	--	--	1	0	999.99
150,000 miles	METHANE-COMB	--	--	--	--	--	1	0	0.05
150,000 miles	N2O	--	--	--	--	--	1	0	999.99
150,000 miles	N2O-COMB	--	--	--	--	--	1	0	0.05
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.230
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	1	0	0.350
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.010
150,000 miles	PM-COMP	--	--	--	--	--	1	0	0.007
<b>Cert Region</b>									
<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>					Cert		
<b>Vehicle Class</b>	MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>Standard Level</b>					Other		
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>					SC03		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>
150,000 miles	CO	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	999.999

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>Standard Level</b>	Other
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	California 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	--	--	--	--	--	1	0	4.2
150,000 miles	CO-COMP	--	--	--	--	--	1	0	4.0
150,000 miles	CO2	--	--	--	--	--	1	0	999.9
150,000 miles	HCHO	--	--	--	--	--	1	0	0.006
150,000 miles	METHANE	--	--	--	--	--	1	0	999.99
150,000 miles	METHANE-COMB	--	--	--	--	--	1	0	0.05
150,000 miles	N2O	--	--	--	--	--	1	0	999.99
150,000 miles	N2O-COMB	--	--	--	--	--	1	0	0.05
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.230
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	1	0	0.350
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.010
150,000 miles	PM-COMP	--	--	--	--	--	1	0	0.007

<b>Cert Region</b>	Federal	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	<b>Standard Level</b>	Federal Tier 3 HD Class 3 Bin 230
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	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	CO2	--	--	--	--	--	1	0	999.9
150,000 miles	METHANE	--	--	--	--	--	1	0	999.99
150,000 miles	N2O	--	--	--	--	--	1	0	999.99
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.230
150,000 miles	NOX	--	--	--	--	--	1	0	999.999

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>Standard Level</b>	Other
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	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	CO2	--	--	--	--	--	1	0	999.9
150,000 miles	METHANE	--	--	--	--	--	1	0	999.99
150,000 miles	N2O	--	--	--	--	--	1	0	999.99
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.230
150,000 miles	NOX	--	--	--	--	--	1	0	999.999

<b>Cert Region</b>	Federal	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	<b>Standard Level</b>	Federal Tier 3 HD Class 3 Bin 230
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	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	--	--	--	--	--	1	0	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	999.999

<b>Cert Region</b>	Federal	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	<b>Standard Level</b>	Federal Tier 3 HD Class 3 Bin 230
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	Hot 1435 LA92

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	--	--	--	--	--	1	0	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	999.999

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
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<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	MDV7 (Cal. LEV 2/3/4 MDV GVW 10001-14000)	<b>Standard Level</b>	Other
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	Hot 1435 LA92

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	--	--	--	--	--	1	0	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.005

#### Evaporative/Refueling Standards

<b>Evaporative/Refueling Family</b>	VCRXR0391TR1	<b>Cert Region</b>	California + CAA Section 177 states
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Other
<b>Test Procedure</b>	2-day evap		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.0057

<b>Evaporative/Refueling Family</b>	VCRXR0391TR1	<b>Cert Region</b>	California + CAA Section 177 states
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Other
<b>Test Procedure</b>	Evap Canister Bleed Test		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.030	0.0000

<b>Evaporative/Refueling Family</b>	VCRXR0391TR1	<b>Cert Region</b>	Federal
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Federal Tier 3 Evap
<b>Test Procedure</b>	Federal fuel refueling test (ORVR)		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC	--	0.20	0.000

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1		
<b>Evaporative/Refueling Family</b>	VCRXR0391TR1	<b>Cert Region</b>	Federal		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Federal Tier 3 Evap		
<b>Test Procedure</b>	2-day evap				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.0057
<b>Evaporative/Refueling Family</b>	VCRXR0391TR1	<b>Cert Region</b>	California + CAA Section 177 states		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Other		
<b>Test Procedure</b>	Federal Fuel Running Loss				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0.000
<b>Evaporative/Refueling Family</b>	VCRXR0391TR1	<b>Cert Region</b>	Federal		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Federal Tier 3 Evap		
<b>Test Procedure</b>	Federal fuel 3-day evap				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.0090
<b>Evaporative/Refueling Family</b>	VCRXR0391TR1	<b>Cert Region</b>	California + CAA Section 177 states		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Other		
<b>Test Procedure</b>	Federal fuel refueling test (ORVR)				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC	--	0.20	0.000
<b>Evaporative/Refueling Family</b>	VCRXR0391TR1	<b>Cert Region</b>	California + CAA Section 177 states		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Other		
<b>Test Procedure</b>	Federal fuel 3-day evap				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.0090
<b>Evaporative/Refueling Family</b>	VCRXR0391TR1	<b>Cert Region</b>	Federal		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Federal Tier 3 Evap		
<b>Test Procedure</b>	Federal Fuel Running Loss				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0.000

## Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1		
<b>Evaporative/Refueling Family</b>	VCRXR0391TR1	<b>Cert Region</b>	Federal		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Federal Tier 3 Evap		
<b>Test Procedure</b>	Evap Canister Bleed Test				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.030	0.0000

## Certification Summary Information Report

Test Group	VCRXD06.4575	Evaporative/Refueling Family	VCRXR0391TR1
<b>Glossary</b>			
<b>Useful Life</b>			
4	4,000 miles	120	120,000 miles
50	50,000 miles	150	150,000 miles
100	100,000 miles		
<b>Emission Name</b>			
HC-TOTAL	Total Hydrocarbon	COMB-CREE	Combined Carbon-Related Exhaust Emissions
CO	Carbon Monoxide	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions
CO2	Carbon dioxide	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only
CREE	Carbon-Related Exhaust Emissions	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only
OPT-CREE	Optional Carbon-Related Exhaust Emissions	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only
NOX	Nitrogen Oxide	LEAK-DIA	Effective Leak Diameter (inches)
PM	Particulate Matter	LEAK-GAS CAP	Gas Cap Leakage (cc/min)
PM-COMP	SFTP Composite Particulate Matter	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only
HC-NM	Non-methane Hydrocarbon	KW-HRS	Integrated DC KW-HRS
OMHCE	Organic material Hydrocarbon Equivalent	CH4 BAG 1	Bag 1 Methane
OMNMHCE	Organic material non-methane HC equivalent	CH4 BAG 2	Bag 2 Methane
NMOG	Non-methane organic gases	CH4 BAG 3	Bag 3 Methane
HCHO	Formaldehyde	CH4 BAG 4	Bag 4 Methane
H3C2HO	Acetaldehyde	CO BAG 1	Bag 1 Carbon Monoxide
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	CO BAG 2	Bag 2 Carbon Monoxide
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	CO BAG 3	Bag 3 Carbon Monoxide
CO-COMP	SFTP Composite Carbon Monoxide	CO BAG 4	Bag 4 Carbon Monoxide
ETHANOL	C2H5OH - Ethanol	NMOG BAG 1	Bag 1 Non-methane organic gases
FE BAG 1	Bag 1 Fuel Economy	NMOG BAG 2	Bag 2 Non-methane organic gases
FE BAG 2	Bag 2 Fuel Economy	NMOG BAG 3	Bag 3 Non-methane organic gases
FE BAG 3	Bag 3 Fuel Economy	NMOG BAG 4	Bag 4 Non-methane organic gases
FE BAG 4	Bag 4 Fuel Economy	ACT-DISTANCE BAG 1	Bag 1 Actual Distance
MFR FE	Manufacturer Fuel Economy	ACT-DISTANCE BAG 2	Bag 2 Actual Distance
HC	Hydrocarbon for Running Loss and ORVR	ACT-DISTANCE BAG 3	Bag 3 Actual Distance
METHANE	CH4 - Methane	ACT-DISTANCE BAG 4	Bag 4 Actual Distance
METHANOL	CH3OH - Methanol	HC-TOTAL BAG 1	Bag 1 Total Hydrocarbon
N2O	Nitrous Oxide	HC-TOTAL BAG 2	Bag 2 Total Hydrocarbon
SPITBACK	Spitback Hydrocarbon in grams	HC-TOTAL BAG 3	Bag 3 Total Hydrocarbon
AMP-HRS	Integrated Amp-hours	HC-TOTAL BAG 4	Bag 4 Total Hydrocarbon
START-SOC	System Start State of Charge Watt-hours	WATT-HRS BAG 1	Bag 1 Watt Hours
END-SOC	System End State of Charge Watt-hours	WATT-HRS BAG 2	Bag 2 Watt Hours

## Certification Summary Information Report

Test Group		VCRXD06.4575	Evaporative/Refueling Family		VCRXR0391TR1
ACT-DISTANCE	Actual Distance Driven (miles)		WATT-HRS BAG 3	Bag 3 Watt Hours	
AS-VOLT	Average System Voltage		WATT-HRS BAG 4	Bag 4 Watt Hours	
CO2 BAG 1	Bag 1 Carbon Dioxide		WATT-HRS	Watt Hours	
CO2 BAG 2	Bag 2 Carbon Dioxide		HC-NM BAG 1	Bag 1 Non-methane Hydrocarbon	
CO2 BAG 3	Bag 3 Carbon Dioxide		HC-NM BAG 2	Bag 2 Non-methane Hydrocarbon	
CO2 BAG 4	Bag 4 Carbon Dioxide		HC-NM BAG 3	Bag 3 Non-methane Hydrocarbon	
NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides		HC-NM BAG 4	Bag 4 Non-methane Hydrocarbon	
NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides		N2O BAG 1	Bag 1 Nitrous Oxide	
DT-IWRR	Drive Trace Inertia Work Ratio Rating		N2O BAG 2	Bag 2 Nitrous Oxide	
DT-ASCR	Drive Trace Absolute Speed Change Rating		N2O BAG 3	Bag 3 Nitrous Oxide	
DT-EER	Drive Trace Energy Economy Rating		N2O BAG 4	Bag 4 Nitrous Oxide	
<b>Certification Region</b>					
CA	California + CAA Section 177 states		FA	Federal	
<b>Exhaust Emission Standard Level</b>					
B1	Federal Tier 2 Bin 1		HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340	
B2	Federal Tier 2 Bin 2		HDV2B250	Federal Tier 3 HD Class 2b Bin 250	
B3	Federal Tier 2 Bin 3		HDV2B200	Federal Tier 3 HD Class 2b Bin 200	
B4	Federal Tier 2 Bin 4		HDV2B170	Federal Tier 3 HD Class 2b Bin 170	
B5	Federal Tier 2 Bin 5		HDV2B150	Federal Tier 3 HD Class 2b Bin 150	
B6	Federal Tier 2 Bin 6		HDV2B0	Federal Tier 3 HD Class 2b Bin 0	
B7	Federal Tier 2 Bin 7		HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630	
B8	Federal Tier 2 Bin 8		HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570	
B9	Federal Tier 2 Bin 9		HDV3B400	Federal Tier 3 HD Class 3 Bin 400	
B10	Federal Tier 2 Bin 10		HDV3B270	Federal Tier 3 HD Class 3 Bin 270	
B11	Federal Tier 2 Bin 11		HDV3B230	Federal Tier 3 HD Class 3 Bin 230	
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)		HDV3B200	Federal Tier 3 HD Class 3 Bin 200	
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)		HDV3B0	Federal Tier 3 HD Class 3 Bin 0	
L2	California LEV-II LEV		L4SULEV100	California LEV-IV SULEV100	
L2OP	California LEV-II LEV Optional		L4SULEV125	California LEV-IV SULEV125	
U2	California LEV-II ULEV		L4SULEV15	California LEV-IV SULEV15	
S2	California LEV-II SULEV		L4SULEV150	California LEV-IV SULEV150	
ZEV	California ZEV		L4SULEV170	California LEV-IV SULEV170	
OT	Other		L4SULEV175	California LEV-IV SULEV175	
T1	Federal Tier 1		L4SULEV20	California LEV-IV SULEV20	
PZEV	California PZEV		L4SULEV200	California LEV-IV SULEV200	
L2LEV160	California LEV-II LEV160		L4SULEV230	California LEV-IV SULEV230	
L2ULEV125	California LEV-II ULEV125		L4SULEV25	California LEV-IV SULEV25	
L2SULEV30	California LEV-II SULEV30		L4SULEV30	California LEV-IV SULEV30	
L2LEV395	California LEV-II LEV395		L4SULEV75	California LEV-IV SULEV75	

## Certification Summary Information Report

Test Group	VCRXD06.4575	Evaporative/Refueling Family	VCRXR0391TR1
L2ULEV340	California LEV-II ULEV340	L4SULEV85	California LEV-IV SULEV85
L2LEV630	California LEV-II LEV630	L4ULEV125	California LEV-IV ULEV125
L2ULEV570	California LEV-II ULEV570	L4ULEV200	California LEV-IV ULEV200
L3LEV160	California LEV-III LEV160	L4ULEV250	California LEV-IV ULEV250
L3ULEV125	California LEV-III ULEV125	L4ULEV270	California LEV-IV ULEV270
L3ULEV70	California LEV-III ULEV70	L4ULEV40	California LEV-IV ULEV40
L3ULEV50	California LEV-III ULEV50	L4ULEV400	California LEV-IV ULEV400
L3SULEV30	California LEV-III SULEV30	L4ULEV50	California LEV-IV ULEV50
L3SULEV20	California LEV-III SULEV20	L4ULEV60	California LEV-IV ULEV60
L3LEV395	California LEV-III LEV395	L4ULEV70	California LEV-IV ULEV70
L3ULEV340	California LEV-III ULEV340	T4B170	Federal Tier 4 MDV Bin 170
L3ULEV250	California LEV-III ULEV250	T4B150	Federal Tier 4 MDV Bin 150
L3ULEV200	California LEV-III ULEV200	T4B125	Federal Tier 4 MDV Bin 125
L3SULEV170	California LEV-III SULEV170	T4B100	Federal Tier 4 MDV Bin 100
L3SULEV150	California LEV-III SULEV150	T4B85	Federal Tier 4 MDV Bin 85
L3LEV630	California LEV-III LEV630	T4B75	Federal Tier 4 MDV Bin 75
L3ULEV570	California LEV-III ULEV570	T4B70	Federal Tier 4 Bin 70
L3ULEV400	California LEV-III ULEV400	T4B65	Federal Tier 4 Bin 65
L3ULEV270	California LEV-III ULEV270	T4B60	Federal Tier 4 Bin 60
L3SULEV230	California LEV-III SULEV230	T4B55	Federal Tier 4 Bin 55
L3SULEV200	California LEV-III SULEV200	T4B50	Federal Tier 4 Bin 50
T3B160	Federal Tier 3 Bin 160	T4B45	Federal Tier 4 Bin 45
T3B125	Federal Tier 3 Bin 125	T4B40	Federal Tier 4 Bin 40
T3B110	Federal Tier 3 Transitional Bin 110	T4B35	Federal Tier 4 Bin 35
T3B85	Federal Tier 3 Transitional Bin 85	T4B30	Federal Tier 4 Bin 30
T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover	T4B25	Federal Tier 4 Bin 25
T3B70	Federal Tier 3 Bin 70	T4B20	Federal Tier 4 Bin 20
T3B50	Federal Tier 3 Bin 50	T4B15	Federal Tier 4 Bin 15
T3B30	Federal Tier 3 Bin 30	T4B10	Federal Tier 4 Bin 10
T3B20	Federal Tier 3 Bin 20	T4B5	Federal Tier 4 Bin 5
T3B0	Federal Tier 3 Bin 0	T4B0	Federal Tier 4 Bin 0
HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395		
<b>Transmission Type Code</b>			
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)
<b>Drive System Code</b>			
4	4-Wheel Drive	P	Part-time 4-Wheel Drive

**Certification Summary Information Report**

<b>Test Group</b>	VCRXD06.4575	<b>Evaporative/Refueling Family</b>	VCRXR0391TR1
F	2-Wheel Drive, Front	A	All Wheel Drive
R	2-Wheel Drive, Rear		
<b>Additional Terms and Acronyms</b>			
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



**Section 8 Emission Testing Waiver Statements and Attestations**

Below is a list clearly identifying the standards applicable to this Test Group for which emission testing was not performed. All FCA US LLC applicable vehicles will conform with the emission standards which emission data is not being provided, as allowed under 40 CFR 86.1829-01 or 86.1810-01.

HCHO

For the remaining list of attestations please see:

"Common Section Book - Section 14. Request for Certification "



### **Section 9 OBD Description**

FCA US LLC considers this information proprietary and confidential. The description contains engineering detail that would allow competitors to gain insight into FCA US LLC OBD system. The OBD system descriptions for all Test Groups are on file with the US EPA and California Air Resources Board.

OBD Agency Approvals are loaded into EV-CIS and E-FILE for each test group.

OBD Demonstration Compliance Statement: This Test Group meets the full intent of both the Clean Air Act as amended in 1990, section 202(m), and the applicable federal OBD regulations contained in 40 CFR §86.005-74 and 40 CFR §86.1806-01, including a reference to those provisions pertaining to deficiencies in the limited instances where an OBD II system that complies with 1968.2 does not comply with all the requirements of section 1968.1.



**Section 10** **Description of Alternate - Fueled Vehicles**

Not Applicable to this Test Group





<b>EPA COMP CODE</b>	<b>AA-1000</b>	<b>AA-1225</b>	<b>AA-1250</b>	<b>AA-1275</b>	<b>AA-2000</b>	<b>AA-2225</b>	<b>AA-2250</b>	<b>AA-2275</b>	<b>AA-3000</b>
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**Test Group - VCRXD06.4575**

<b>EPA COMP CODE</b>	<b>AA-3225</b>	<b>AA-3250</b>	<b>AA-3275</b>	<b>AA-5500</b>	<b>AA-7000</b>	<b>AA-8500</b>	<b>AA-9500</b>
E10:Powertrain Control Module							
E11:Transmission Control Module							
E17:ABS Control Module							
E4D:Low Temperature Coolant Control Valve							
F01:Fuel Tank							
F15:Fuel Tank Filler Tube							
F40:Throttle Body							
F50:Fuel Injector							
F59:Fuel Pressure Sensor							
F70:Evap. Canister Assembly							
F79:ESIM (Evaporative System Integrity Monitor)							
H10:Catalytic Converter							
I05:Spark Plug							
I10:Ignition Coil							
L01:Heated Oxygen Sensor							
L07:Multiple Displacement System Solenoid							
L12:Accelerator Pedal Position Sensor							

EPA COMP CODE	AA-3225	AA-3250	AA-3275	AA-5500	AA-7000	AA-8500	AA-9500
L15:Camshaft Position Sensor							
L16:Crankshaft Position Sensor							
L20:Knock Sensor							
L28:ABS Speed Sensor							
M04:Intake Air Temperature Sensor							
M07:Oil Temperature Sensor							
M10:Ambient Temperature Sensor							
M11:EGR Temperature Sensor							
N17:Crankshaft Target Wheel							
N34:Secondary Runner Valve Actuator							
N50:Engine Thermostat							
N56:EGR Valve							
N57:EGR Cooler							
N91:Evaporative Canister to Tank Hose							
N97:Vapor Hose Harness							
T05:Transmission Valve Body							
V01:PCV Valve							
V05:MAP Sensor							
V63:Evap. Can. Purge Solenoid							
Z01:VECI Label							

EPA COMP CODE	AA-3225	AA-3250	AA-3275	AA-5500	AA-7000	AA-8500	AA-9500
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Section11-100 Engine Parts List

# FCA US LLC

**Test Group :** VCRXD06.4575

**Durability Group:** VCRXGPGNNF40 **Standard Fed:** HDV3 Bin230+ **Cal:** N/A

Trans. Code	Sales Code	Transfer Case Sales Code/Drive Code	No. of Gears	Over Drive Gear Ratio	Drive Gear Ratio	Engine Sales Code	Torque Code	Torque Size	Conv Clutch Control Type Calib/Special Features
L8	DFX	2R	8	.67	4.71,3.14,2.10,1.67,1.26,1,.84,.67	ESL	N/A		Electronically shifted data on file
L8	DFX	DK1 / 4P DK3 / 4P	8	.67	4.71,3.14,2.10,1.67,1.26,1,.84,.67	ESL	N/A		Electronically shifted data on file
L8	DFX	DK3 / 4P	8	.67	4.71,3.14,2.10,1.67,1.26,1,.84,.67	ESL	N/A		Electronically shifted data on file

Section12-200 Transmission

FCA US LLC

VCRXD06.4575

Durability Group:  
VCRXGPGNNF40

Standard Fed: HDV3 Bin230+ Cal: N/A

Asterisk (\*) Indicates Manufacturer has elected to certify at this higher test weight class as allowed by CFR 86.1831-01

Engine Code AA-1000 Eng Displ: 6.4L (ESL) Evap Family - Evap Code: VCRXR0213TR1-31.0

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LWV TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
D23A91	RAM: 3500 4X2			L8 - RWD DFX		11040	7000	9000*	3.73	26.3	LT275/70R18 TCM	TZN	CRDDF2A	23.63	23.6	61.99000	0.101200	0.043890	68.19000	0.111300	0.048280
							2819	4846	3.73	26.4	LT275/70R18E TCN	TZF	EJ487Q	22.33	24.9	70.85000	0.158600	0.043310	77.94000	0.174500	0.047640
							6455	8748	3.73	26.2	LT285/60R20E TEA	TZF	EJ642Q	20.87	25.1	72.33000	0.180600	0.042790	79.56000	0.198700	0.047070
									3.73	26.4	LT275/70R18E TCP	TZF	EJ496Q	22.21	25.1	71.24000	0.194100	0.042820	78.36000	0.213500	0.047100

Engine Code AA-1225 Eng Displ: 6.4L (ESL) Evap Family - Evap Code: VCRXR0213TR1-31.0

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LWV TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
D28A91	RAM: 3500 4X4			L8 - 4WD DFX / DK1-4P DK3-4P		11040	7500*	9000	3.73	26.3	LT275/70R18 TCM	TZN	CRDDF2A	20.87	24.3	60.88000	0.201900	0.044400	66.97000	0.222100	0.048840
							2978	4792	3.73	26.4	LT275/70R18E TCN	TZF	EJ487Q	21.73	25.6	69.67000	0.259000	0.043820	76.64000	0.284900	0.048200
							6935	8988	3.73	26.4	LT275/70R18E TCP	TZF	EJ496Q	20.87	25.8	70.00000	0.300700	0.043270	77.00000	0.330800	0.047600
									3.73	26.2	LT285/60R20E TEA	TZF	EJ642Q	21.54	25.9	71.35000	0.288800	0.043240	78.48000	0.317700	0.047560

Engine Code AA-1250 Eng Displ: 6.4L (ESL) Evap Family - Evap Code: VCRXR0213TR1-31.0

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LWV TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
D23A91				L8 - RWD DFX		11040	7000	9000*	4.10	28.9	LT275/70R18 TCM	TZN	CRDDF2A	23.63	23.6	61.99000	0.101200	0.043890	68.19000	0.111300	0.048280
							2819	4846	4.10	29	LT275/70R18E TCN	TZF	EJ487Q	22.33	24.9	70.85000	0.158600	0.043310	77.94000	0.174500	0.047640
							6455	8748	4.10	28.8	LT285/60R20E TEA	TZF	EJ642Q	20.87	25.1	72.33000	0.180600	0.042790	79.56000	0.198700	0.047070
									4.10	29	LT275/70R18E TCP	TZF	EJ496Q	22.21	25.1	71.24000	0.194100	0.042820	78.36000	0.213500	0.047100

Engine Code AA-1275 Eng Displ: 6.4L (ESL) Evap Family - Evap Code: VCRXR0213TR1-31.0



DK1-4P  
DK3-4P

**Engine Code AA-2250      Eng Displ: 6.4L (ESL)      Evap Family - Evap Code: VCRXR0213TR1-32.0**

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
D23A92	RAM: 3500 4X2			L8 - RWD DFX		11150	7000	9000	4.10	28.9	LT275/70R18 TCM	TZN	CRDDF2A	23.08	24.1	62.04000	0.097100	0.045650	68.24000	0.106800	0.050220
							2868	4738	4.10	29	LT275/70R18E TCN	TZF	EJ487Q	20.87	25.5	70.81000	0.154100	0.045070	77.89000	0.169500	0.049580
							6628	8889	4.10	29	LT275/70R18E TCP	TZF	EJ496Q	21.74	25.6	71.13000	0.194500	0.044510	78.24000	0.214000	0.048960
									4.10	28.8	LT285/60R20E TEA	TZF	EJ642Q	21.66	25.7	72.48000	0.182600	0.044480	79.73000	0.200900	0.048930
D23A62	RAM: 3500 4X2			L8 - RWD DFX		14000	6500 2974 6415	10000 6311 10207	4.10	30.7	LT235/80R17E TV2	TZN	17NCRDDA2G	20.44	30.3	92.73000	0.131200	0.051050	102.0000	0.144300	0.056160
D23A92	RAM: 3500 4X2			L8 - RWD DFX		14000	7500 3191 7014	10500 6241 10507	4.10	30.7	LT235/80R17E TV2	TZN	17NCRDDA2G	20.87	31.2	95.98000	0.144100	0.052260	105.5800	0.158500	0.057490

**Engine Code AA-2275      Eng Displ: 6.4L (ESL)      Evap Family - Evap Code: VCRXR0213TR1-32.0**

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
D28A62	RAM: 3500 4X4			L8 - 4WD DFX / DK1-4P DK3-4P		11040	7000	9000	4.10	28.9	LT275/70R18 TCM	TZN	CRDDF2A	22.64	24.6	60.96000	0.207700	0.045280	67.06000	0.228500	0.049810
							2746	4710	4.10	29	LT275/70R18E TCN	TZF	EJ487Q	21.45	26.0	69.74000	0.264800	0.044700	76.71000	0.291300	0.049170
							6531	8785	4.10	28.8	LT285/60R20E TEA	TZF	EJ642Q	20.87	26.1	71.26000	0.287000	0.044190	78.39000	0.315700	0.048610
									4.10	29	LT275/70R18E TCP	TZF	EJ496Q	21.34	26.1	70.16000	0.300500	0.044210	77.18000	0.330600	0.048630
D28A92	RAM: 3500 4X4			L8 - 4WD DFX / DK1-4P DK3-4P		11440	7500	9500	4.10	28.9	LT275/70R18 TCM	TZN	CRDDF2A	23.35	25.2	63.41000	0.214500	0.045890	69.75000	0.236000	0.050480
							3078	4815	4.10	29	LT275/70R18E TCN	TZF	EJ487Q	22.09	26.6	72.62000	0.274400	0.045280	79.88000	0.301800	0.049810
							7238	9339	4.10	29	LT275/70R18E TCP	TZF	EJ496Q	21.99	26.7	72.95000	0.311800	0.044770	80.24000	0.343000	0.049250
									4.10	28.8	LT285/60R20E TEA	TZF	EJ642Q	20.87	26.8	74.30000	0.299800	0.044740	81.73000	0.329800	0.049210
D28A62	RAM: 3500 4X4			L8 - 4WD DFX / DK1-4P DK3-4P		14000	7000 3060 6860	10500 6262 10430	4.10	30.7	LT235/80R17E TV2	TZN	17NCRDDA2G	20.90	31.1	92.33000	0.240700	0.051490	101.5600	0.264800	0.056640
D28A92	RAM: 3500 4X4			L8 - 4WD DFX / DK1-4P DK3-4P		14000	8000 3477 7617	11000 6259 10809	4.10	30.7	LT235/80R17E TV2	TZN	17NCRDDA2G	21.41	31.8	94.17000	0.252200	0.052640	103.5900	0.277400	0.057900

**Engine Code AA-3000      Eng Displ: 6.4L (ESL)      Evap Family - Evap Code: VCRXR0391TR1-50.0**

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
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D23A92	RAM: 3500 4X2			L8 - RWD DFX		11150	7000 2868 6628	9000 3.73 4738 3.73 8889 3.73	26.3 26.4 26.4	LT275/70R18 TCM LT275/70R18E TCN LT275/70R18E TCP	TZN TZF TZF	CRDDF2A EJ487Q EJ496Q	23.08 20.87 21.74	24.1 25.5 25.6	62.04000 70.81000 71.13000	0.097100 0.154100 0.194500	0.045650 0.045070 0.044510	68.24000 77.89000 78.24000	0.106800 0.169500 0.214000	0.050220 0.049580 0.048960
D23A92	RAM: 3500 4X2			L8 - RWD DFX		14000	7500 3191 7014	10500 3.73 6241 10507	27.9	LT235/80R17E TV2	TZN	17NCRDDA2G	20.87	31.2	95.98000	0.144100	0.052260	105.5800	0.158500	0.057490

**Engine Code AA-3225      Eng Displ: 6.4L (ESL)      Evap Family - Evap Code: VCRXR0391TR1-50.0**

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
D28A92	RAM: 3500 4X4			L8 - 4WD DFX / DK1-4P DK3-4P		11440	7500 3078 7238	9500 3.73 4815 3.73 9339 3.73	26.3 26.4 26.2	LT275/70R18 TCM LT275/70R18E TCN LT275/70R18E TCP LT285/60R20E TEA	TZN TZF TZF TZF	CRDDF2A EJ487Q EJ496Q EJ642Q	23.35 22.09 21.99 20.87	25.2 26.6 26.7 26.8	63.41000 72.62000 72.95000 74.30000	0.214500 0.274400 0.311800 0.299800	0.045890 0.045280 0.044770 0.044740	69.75000 79.88000 80.24000 81.73000	0.236000 0.301800 0.343000 0.329800	0.050480 0.049810 0.049250 0.049210	
D28A92	RAM: 3500 4X4			L8 - 4WD DFX / DK1-4P DK3-4P		14000	8000 3477 7617	11000 3.73 6259 10809	27.9	LT235/80R17E TV2	TZN	17NCRDDA2G	21.41	31.8	94.17000	0.252200	0.052640	103.5900	0.277400	0.057900	

**Engine Code AA-3250      Eng Displ: 6.4L (ESL)      Evap Family - Evap Code: VCRXR0391TR1-50.0**

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
D23A92	RAM: 3500 4X2			L8 - RWD DFX		11150	7000 2868 6628	9000 4.10 4738 4.10 8889 4.10	28.9 29 29	LT275/70R18 TCM LT275/70R18E TCN LT275/70R18E TCP LT285/60R20E TEA	TZN TZF TZF TZF	CRDDF2A EJ487Q EJ496Q EJ642Q	23.08 20.87 21.74 21.66	24.1 25.5 25.6 25.7	62.04000 70.81000 71.13000 72.48000	0.097100 0.154100 0.194500 0.182600	0.045650 0.045070 0.044510 0.044480	68.24000 77.89000 78.24000 79.73000	0.106800 0.169500 0.214000 0.200900	0.050220 0.049580 0.048960 0.048930	
D23A92	RAM: 3500 4X2			L8 - RWD DFX		14000	7500 3191 7014	10500 4.10 6241 10507	30.7	LT235/80R17E TV2	TZN	17NCRDDA2G	20.87	31.2	95.98000	0.144100	0.052260	105.5800	0.158500	0.057490	

**Engine Code AA-3275      Eng Displ: 6.4L (ESL)      Evap Family - Evap Code: VCRXR0391TR1-50.0**

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
D28A92	RAM: 3500 4X4			L8 - 4WD DFX / DK1-4P DK3-4P		11440	7500 3078 7238	9500 4.10 4815 4.10 9339 4.10	28.9 29 29	LT275/70R18 TCM LT275/70R18E TCN LT275/70R18E TCP LT285/60R20E TEA	TZN TZF TZF TZF	CRDDF2A EJ487Q EJ496Q EJ642Q	23.35 22.09 21.99 20.87	25.2 26.6 26.7 26.8	63.41000 72.62000 72.95000 74.30000	0.214500 0.274400 0.311800 0.299800	0.045890 0.045280 0.044770 0.044740	69.75000 79.88000 80.24000 81.73000	0.236000 0.301800 0.343000 0.329800	0.050480 0.049810 0.049250 0.049210	
D28A92	RAM: 3500 4X4			L8 - 4WD DFX /		14000	8000 3477 7617	11000 4.10 6259 10809	30.7	LT235/80R17E TV2	TZN	17NCRDDA2G	21.41	31.8	94.17000	0.252200	0.052640	103.5900	0.277400	0.057900	

DK1-4P  
DK3-4P

**Engine Code AA-5500      Eng Displ: 6.4L (ESL)      Evap Family - Evap Code: VCRXR0213TR1-32.0**

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LWV TWC Drive Curb	ALWV TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
DJ7A62	RAM: 2500 4X4			L8 - 4WD DFX / DK3-4P		11040	7000	9000	3.73	26.3	LT275/70R18 TCM	TZN	CRDDF2A	22.67	24.6	65.35000	0.111500	0.045340	71.89000	0.122600	0.049870
							2755	4710	3.73	28.7	LT245/70R17E TWD	TZF	02071T	22.32	25.0	68.84000	0.116600	0.044990	75.72000	0.128300	0.049490
							6534	8787	3.73	26.4	LT275/70R18E TCN	TZF	EJ487Q	21.66	25.7	72.73000	0.162200	0.044770	80.00000	0.178400	0.049250
									3.73	26.2	LT285/60R20E TEA	TZF	EJ642Q	21.61	25.8	73.52000	0.182300	0.044250	80.87000	0.200500	0.048680
DJ7A92	RAM: 2500 4X4			L8 - 4WD DFX / DK3-4P		11040	7500	9000	3.73	28.7	LT245/70R17E TWD	TZF	02071T	21.90	25.4	67.73000	0.222800	0.044740	74.50000	0.245100	0.049210
							2931	4553	3.73	26.3	LT275/70R18 TCM	TZN	CRDDF2A	21.95	25.4	64.27000	0.217900	0.046080	70.70000	0.239700	0.050690
							7055	9048	3.73	26.4	LT275/70R18E TCN	TZF	EJ487Q	21.01	26.5	71.62000	0.268500	0.045510	78.78000	0.295400	0.050060
									3.73	26.2	LT285/60R20E TEA	TZF	EJ642Q	20.95	26.6	72.46000	0.288700	0.044990	79.71000	0.317600	0.049490
								3.73	26.4	LT275/70R18E TCP	TZF	EJ496Q	20.93	26.6	71.80000	0.303900	0.045010	78.98000	0.334300	0.049510	

**Engine Code AA-7000      Eng Displ: 6.4L (ESL)      Evap Family - Evap Code: VCRXR0213TR1-32.0**

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LWV TWC Drive Curb	ALWV TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
DJ7A62	RAM: 2500 4X4			L8 - 4WD DFX / DK3-4P		11040	7000	9000	4.10	28.9	LT275/70R18 TCM	TZN	CRDDF2A	22.67	24.6	65.35000	0.111500	0.045340	71.89000	0.122600	0.049870
							2755	4710	4.10	31.5	LT245/70R17E TWD	TZF	02071T	22.32	25.0	68.84000	0.116600	0.044990	75.72000	0.128300	0.049490
							6534	8787	4.10	29	LT275/70R18E TCN	TZF	EJ487Q	21.66	25.7	72.73000	0.162200	0.044770	80.00000	0.178400	0.049250
									4.10	28.8	LT285/60R20E TEA	TZF	EJ642Q	21.61	25.8	73.52000	0.182300	0.044250	80.87000	0.200500	0.048680
DJ7A92	RAM: 2500 4X4			L8 - 4WD DFX / DK3-4P		11040	7500	9000	4.10	31.5	LT245/70R17E TWD	TZF	02071T	21.90	25.4	67.73000	0.222800	0.044740	74.50000	0.245100	0.049210
							2931	4553	4.10	28.9	LT275/70R18 TCM	TZN	CRDDF2A	21.95	25.4	64.27000	0.217900	0.046080	70.70000	0.239700	0.050690
							7055	9048	4.10	29	LT275/70R18E TCN	TZF	EJ487Q	21.01	26.5	71.62000	0.268500	0.045510	78.78000	0.295400	0.050060
									4.10	28.8	LT285/60R20E TEA	TZF	EJ642Q	20.95	26.6	72.46000	0.288700	0.044990	79.71000	0.317600	0.049490
								4.10	29	LT275/70R18E TCP	TZF	EJ496Q	20.93	26.6	71.80000	0.303900	0.045010	78.98000	0.334300	0.049510	

**Engine Code AA-8500      Eng Displ: 6.4L (ESL)      Evap Family - Evap Code: VCRXR0391TR1-50.0**

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LWV TWC Drive Curb	ALWV TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
DJ7A62	RAM: 2500 4X4			L8 - 4WD DFX / DK3-4P		11040	7000	9000	3.73	26.3	LT275/70R18 TCM	TZN	CRDDF2A	22.67	24.6	65.35000	0.111500	0.045340	71.89000	0.122600	0.049870
							2755	4710	3.73	28.7	LT245/70R17E TWD	TZF	02071T	22.32	25.0	68.84000	0.116600	0.044990	75.72000	0.128300	0.049490
							6534	8787	3.73	26.4	LT275/70R18E TCN	TZF	EJ487Q	21.66	25.7	72.73000	0.162200	0.044770	80.00000	0.178400	0.049250
									3.73	26.2	LT285/60R20E TEA	TZF	EJ642Q	21.61	25.8	73.52000	0.182300	0.044250	80.87000	0.200500	0.048680
DJ7A92	RAM: 2500 4X4			L8 - 4WD DFX / DK3-4P		11040	7500	9000	3.73	28.7	LT245/70R17E TWD	TZF	02071T	21.90	25.4	67.73000	0.222800	0.044740	74.50000	0.245100	0.049210
							2931	4553	3.73	26.3	LT275/70R18 TCM	TZN	CRDDF2A	21.95	25.4	64.27000	0.217900	0.046080	70.70000	0.239700	0.050690
							7055	9048	3.73	26.4	LT275/70R18E TCN	TZF	EJ487Q	21.01	26.5	71.62000	0.268500	0.045510	78.78000	0.295400	0.050060
									3.73	26.2	LT285/60R20E TEA	TZF	EJ642Q	20.95	26.6	72.46000	0.288700	0.044990	79.71000	0.317600	0.049490
								3.73	26.4	LT275/70R18E TCP	TZF	EJ496Q	20.93	26.6	71.80000	0.303900	0.045010	78.98000	0.334300	0.049510	

Engine Code AA-9500

Eng Displ: 6.4L (ESL)

Evap Family - Evap Code: VCRXR0391TR1-50.0

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
DJ7A62	RAM: 2500 4X4			L8 - 4WD DFX / DK3-4P		11040	7000	9000	4.10	28.9	LT275/70R18 TCM	TZN	CRDDF2A	22.67	24.6	65.35000	0.111500	0.045340	71.89000	0.122600	0.049870
							2755	4710	4.10	31.5	LT245/70R17E TWD	TZF	02071T	22.32	25.0	68.84000	0.116600	0.044990	75.72000	0.128300	0.049490
							6534	8787	4.10	29	LT275/70R18E TCN	TZF	EJ487Q	21.66	25.7	72.73000	0.162200	0.044770	80.00000	0.178400	0.049250
									4.10	28.8	LT285/60R20E TEA	TZF	EJ642Q	21.61	25.8	73.52000	0.182300	0.044250	80.87000	0.200500	0.048680
DJ7A92	RAM: 2500 4X4			L8 - 4WD DFX / DK3-4P		11040	7500	9000	4.10	31.5	LT245/70R17E TWD	TZF	02071T	21.90	25.4	67.73000	0.222800	0.044740	74.50000	0.245100	0.049210
							2931	4553	4.10	28.9	LT275/70R18 TCM	TZN	CRDDF2A	21.95	25.4	64.27000	0.217900	0.046080	70.70000	0.239700	0.050690
							7055	9048	4.10	29	LT275/70R18E TCN	TZF	EJ487Q	21.01	26.5	71.62000	0.268500	0.045510	78.78000	0.295400	0.050060
									4.10	28.8	LT285/60R20E TEA	TZF	EJ642Q	20.95	26.6	72.46000	0.288700	0.044990	79.71000	0.317600	0.049490
								4.10	29	LT275/70R18E TCP	TZF	EJ496Q	20.93	26.6	71.80000	0.303900	0.045010	78.98000	0.334300	0.049510	

Section12-300 Vehicle

FCA US LLC

**Test Group: VCRXD06.4575 - Engine Code Index**

**Durability Group:** Standard : HDV3 Bin230+ / NA Vehicle Class: HDV2 / N/A  
**VCRXGPGNNE40**

**Engine Code: AA-1000 - D23A91 ESL DFX L8 RWD XBS 3.73 AXLE 31 GAL**

Engine Code	RC/FF #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max	Drive Code	Sales Areas
AA-1000	Original		6.4L/ESL	D2		L8/ Automatic L8 - Lockup/Automatic/8-speed	10750	11040	7000	7000	RWD	NAS

**Engine Code: AA-1225 - D28A91 ESL DFX L8 4WD XBS 3.73 AXLE 31 GAL**

Engine Code	RC/FF #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max	Drive Code	Sales Areas
AA-1225	Original		6.4L/ESL	D2		L8/ Automatic L8 - Lockup/Automatic/8-speed	11040	11040	7500	7500	4WD	NAS

**Engine Code: AA-1250 - D23A91 ESL DFX L8 RWD XBS 4.10 AXLE 31 GAL**

Engine Code	RC/FF #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max	Drive Code	Sales Areas
AA-1250	Original		6.4L/ESL	D2		L8/ Automatic L8 - Lockup/Automatic/8-speed	10750	10750	7000	7000	RWD	NAS

**Engine Code: AA-1275 - D28A91 ESL DFX L8 4WD XBS 4.10 AXLE 31 GAL**

Engine Code	RC/FF #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max	Drive Code	Sales Areas
AA-1275	Original		6.4L/ESL	D2		L8/ Automatic L8 - Lockup/Automatic/8-speed	11040	11040	7500	7500	4WD	NAS

**Engine Code: AA-2000 - D23A6292 ESL DFX L8 RWD XBS 3.73 AXLE 32 GAL**

Engine Code	RC/FF #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max	Drive Code	Sales Areas
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AA-3250	Original		6.4L/ESL	D2		L8/ Automatic L8 - Lockup/Automatic/8-speed	11150	14000	7000	7500	RWD	NAS
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**Engine Code: AA-3275 - D28A92 ESL DFX L8 4WD XBS 4.10 AXLE 50 GAL**

Engine Code	RC/FF #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max	Drive Code	Sales Areas
AA-3275	Original		6.4L/ESL	D2		L8/ Automatic L8 - Lockup/Automatic/8-speed	11440	14000	7500	8000	4WD	NAS

**Engine Code: AA-5500 - DJ7A6292 ESL DFX L8 4WD XBS 32 GAL 3.73**

Engine Code	RC/FF #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max	Drive Code	Sales Areas
AA-5500	Original		6.4L/ESL	DJ		L8/ Automatic L8 - Lockup/Automatic/8-speed	11040	11040	7000	7500	4WD	NAS

**Engine Code: AA-7000 - DJ7A6292 ESL DFX L8 4WD XBS 32 GAL 4.10**

Engine Code	RC/FF #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max	Drive Code	Sales Areas
AA-7000	Original		6.4L/ESL	DJ		L8/ Automatic L8 - Lockup/Automatic/8-speed	11040	11040	7000	7500	4WD	NAS

**Engine Code: AA-8500 - DJ7A92 ESL DFX L8 4WD XBS 50 GAL 3.73**

Engine Code	RC/FF #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max	Drive Code	Sales Areas
AA-8500	Original		6.4L/ESL	DJ		L8/ Automatic L8 - Lockup/Automatic/8-speed	11040	11040	7000	7500	4WD	NAS

**Engine Code: AA-9500 - DJ7A92 ESL DFX L8 4WD XBS 50 GAL 4.10**

Engine Code	RC/FF #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max	Drive Code	Sales Areas
AA-9500	Original		6.4L/ESL	DJ		L8/ Automatic L8 - Lockup/Automatic/8-speed	11040	11040	7000	7500	4WD	NAS

**Test Group: VCRXD06.4575 - No Engine Code Changes**

**Durability Group: VCRXGPGNNF40 Standard Fed: HDV3 Bin230 Cal: N/A**

RC/FF #	Submission Date	Description
No Results Found		

Section12-500 Engine Code Index



## Section 12 Vehicle Parameters

Valves per cylinder                      Engine  
6.4 Liters - 2

### Test Parameters

SIL usage:                                      All - None

Cooling fan configuration:                Models  
All - One fan center front (See Section 12 - 601)

Additional Cooling:                        Models  
All - None

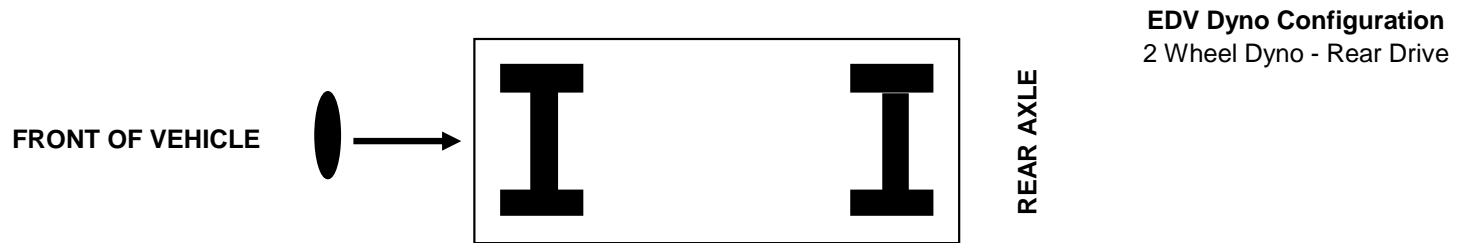
Evaporative Testing Parameters:        Model  
D2 - 219 grams  
D2 - 394 grams  
DJ - 219 grams  
DJ - 394 grams

Fuel temperature Profile:                Models  
D2 - eD2\_32gal  
D2 - eDJ\_50gal  
DJ - eD2\_32gal  
DJ - eDJ\_50gal

Special Test Procedure:                  Models  
All - none

# FAN POSITION DIAGRAM

All vehicles in Test Group



Test Type	Fan Type	Fan Position	Hood Position
EPA75 HWFE CCO	Fixed – 5300 cfm (2.5 m3/s)	10 inches nominal from bumper/front of vehicle (0 -12 inches)	OPEN
US06	Fixed – 15000 cfm, (7.10 m3/s)		
SC03	Road Speed Fan (meeting requirements of 40CFR1066.105(c)(5) – 45 m3/s at 60 mph)	24-36 inches from bumper/front of vehicle (facility dependent)	CLOSED



March 23, 2026

Mr. Joel Dalton  
Certification and Compliance Division  
U.S. Environmental Protection Agency  
2000 Traverwood Drive  
Ann Arbor, Michigan 48105

Dear Mr. Dalton:

**Re: 2027 Model Year Certificate of Conformity Request**

FCA US LLC requests a 2027 MY Certificate of Conformity for the 6.4L Tier 3 Federal and 50 State test group VCRXD06.4575 with evaporative families: VCRXR0213TR1 and VCRXR0391TR1. This test group is being certified to Tier 3 BIN 230 standards. FCA US LLC agrees to meet the Tier 3 BIN 230 standards, and the regulations applicable to such vehicles during the full useful lives of the vehicles in test group VCRXD06.4575. FCA US LLC agrees that the exhaust and evaporative emission standards listed below and in the application for certification apply to both certification and in-use vehicles according to the provisions of 40 CFR, Parts 86 and 88, as applicable. FCA US LLC also elects to follow GHG path 86.1818(f)(1). The FTP emission standards for this test group are as follows:

<u>Emission Standards</u>		<u>City/Hwy NMOG+NOx</u>	<u>CO</u>	<u>HCHO</u>	<u>PM</u>	
Tier 3 BIN 230	150K	0.230	4.2	0.006	0.010	
<u>Evaporative Standards</u>		<u>3-Day</u>	<u>2-Day</u>	<u>R/L</u>	<u>ORVR</u>	<u>Canister Bleed</u>
VCRXR0213TR1	150K	0.600	0.600	0.05	0.2	0.03
VCRXR0391TR1	150K	0.600	0.600	0.05	0.2	0.03

Initial combined CREE for VCRXD06.4575 test group is = 704

The models in this test group are as follows:

**Division / Model**  
RAM 3500, 4WD/RWD  
RAM 2500, 4WD

If there are any questions regarding this submission, please contact Darnell Jones at 248.512.3923 or Gary J. Arvan at 248.221.9461.

Sincerely,  
FCA US LLC

Gary J. Arvan, Director  
Vehicle Safety & Environmental Homologation Programs  
gja/dgj

**VCRXD06.4575 Part 1 Section 14 - 001 (2027)**



March 23, 2026

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

Dear Ms. Lang:

**Re: 2027 Model Year Executive Order Request**

FCA US LLC requests a 2027 MY Executive Order for the 6.4L 50 State test group VCRXD06.4575 with evaporative families: VCRXR0213TR1 and VCRXR0391TR1. This test group is being certified according to an alternate certification path provided in MAC ECCD-2025-08. FCA requests an EO based on the EPA Tier 3 requirements as reflected in the enclosed EPA Certificates of Conformity and EPA Certification Summary Information.

FCA US LLC agrees to meet the Tier 3 BIN 230 emission standards and the regulations applicable to such vehicles during the full useful lives of the vehicles in test group VCRXD06.4575. FCA US LLC agrees that the exhaust and evaporative emission standards listed below and in the application for certification apply to both certification and in-use vehicles according to the provisions of 40 CFR, Parts 86 and 88, as applicable. FCA US LLC also elects to follow GHG path 86.1818(f)(1). The FTP emission standards for this test group are as follows:

<u>Emission Standards</u>		<u>City/Hwy</u> <u>NMOG+NOx</u>	<u>CO</u>	<u>HCHO</u>	<u>PM</u>	
Tier 3 BIN 230	150K	0.230	4.2	0.006	0.010	
<u>Evaporative Standards</u>		<u>3-Day</u>	<u>2-Day</u>	<u>R/L</u>	<u>ORVR</u>	<u>Canister Bleed</u>
VCRXR0213TR1	150K	0.600	0.600	0.05	0.2	0.03
VCRXR0391TR1	150K	0.600	0.600	0.05	0.2	0.03

Initial combined CREE for VCRXD06.4575 test group is = 704

FCA also completed an E-CERT submission for this test group at the direction of CARB. CARB's E-CERT system requires the selection of a California emission standard at the time of submission. FCA selected the LEV III standard for this reason only and not as an acknowledgement of CARB's authority to require compliance with the underlying standards.

If there are any questions regarding this submission, please contact Darnell Jones at 248.512.3923 or Gary J. Arvan at 248.221.9461.

Sincerely,

FCA US LLC

Gary J. Arvan, Director  
Vehicle Safety & Environmental Homologation Programs

c: J. Nguyen  
gja/dgj

# US EPA Fee Form

[Help and EPA Instructions](#)

\* Required Field

## General Information

**Date:** 02/05/2026

Process Code \*

Submit New Fee Filing Form

Manufacturer Code \*

CRX

Manufacturer Name \*

FCA US LLC

Contact Name \*

Pamela J Barylski

Contact Email Address \*

pamela.barylski@stellantis.com

Contact Phone \*

8102798571

Calendar Year complete application submitted to EPA \*

2026

**PLEASE NOTE: These fees apply to complete certification applications received by EPA from January 1, 2026, through December 31, 2026. The applicable fee is determined by the**

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

Engine Family / Evaporative Family / Test Group \*

VCRXD06.4575

### Certificate Request Type (Industry Sector Code)

Certificate Request Type \*

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

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

ICI VIN Number (Required for ICIs Only)

Do you qualify for a Reduced Fee? \*

No

### Payment Information

Amount Owed

\$32,317.00

Payment Type \*

Offline Wire

Comments

EPA Form Number 3520-29

OMB Control No. 2060-0545

Approval expires 7/31/2027

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

The content of this document may contain Sensitive But Unclassified (SBU) data and/or Controlled Unclassified Information (CUI).

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

CARB USE ONLY

Invoice Name	MSF250698
Invoice Date	Jan 15, 2026

COMPANY INFORMATION

Company Name	FCA US LLC
Address	800 Chrysler Drive
City	Auburn Hills
State	MI
Zip	48326
Country	United States
Contact Name	Gary Arvan
Contact Telephone Number	248-221-9461
Contact Email	gary.arvan@stellantis.com
CARB Customer Number	CCAM000028

APPLICATION INFORMATION

Payment Row Number	Product Description or File Name	Model Year/Calendar Year	Unique Application Identifier: Test Group, Engine Family, Trailer Family, Vehicle Family, ZEP Family, if applicable (ID listed in payment row must match the unique identifier given to the certification application)	Category Type	Fee Type	Amount
1	CBI_VCRXD00.0517_APPIPT	Model Year 2027	VCRXD00.0517	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,577.00
2	CBI_VCRXT02.0571_APPIPT	Model Year 2027	VCRXT02.0571	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
3	CBI_VCRXT02.0572_APPIPT1	Model Year 2027	VCRXT02.0572	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
4	CBI_VCRXV03.0574_APPIPT	Model Year 2027	VCRXV03.0574	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
5	CBI_VCRXT03.0572_APPIPT	Model Year 2027	VCRXT03.0572	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
6	CBI_VCRXT03.0573_APPIPT	Model Year 2027	VCRXT03.0573	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
7	CBI_VCRXT03.6561_APPIPT	Model Year 2027	VCRXT03.6561	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
8	CBI_VCRXT03.6543_APPIPT	Model Year 2027	VCRXT03.6543	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
9	CBI_VCRXD03.6576_APPIPT	Model Year 2027	VCRXD03.6576	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00

10	CBI_VCRXD03.6575_APPIPT	Model Year 2027	VCRXD03.6575	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
11	CBI_VCRXT05.7560_APPIPT	Model Year 2027	VCRXT05.7560	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
12	CBI_VCRXT05.7571_APPIPT	Model Year 2027	VCRXT05.7571	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
13	CBI_VCRXT06.2570_APPIPT	Model Year 2027	VCRXT06.2570	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
14	CBI_VCRXT06.2571_APPIPT	Model Year 2027	VCRXT06.2571	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
15	CBI_VCRXT06.4570_APPIPT	Model Year 2027	VCRXT06.4570	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
16	CBI_VCRXT06.4571_APPIPT	Model Year 2027	VCRXT06.4571	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
17	CBI_VCRXD06.4572_APPIPT	Model Year 2027	VCRXD06.4572	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
18	CBI_VCRXD06.4573_APPIPT	Model Year 2027	VCRXD06.4573	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
19	CBI_VCRXD06.4574_APPIPT	Model Year 2027	VCRXD06.4574	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
20	CBI_VCRXD06.4575_APPIPT	Model Year 2027	VCRXD06.4575	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
21	CBI_TCRXT03.6565_APPIPT	Model Year 2026	TCRXT03.6565	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 48,447.00

<b>Total Due</b>	<b>\$ 1,016,895.00</b>
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I, Gary Anwar (Jan 15, 2026 11:23:45 EST), attest that any information provided is true, accurate, and complete.  
 (Responsible Party Signature Here)

## PAM BARYLSKI

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**From:** noreply@salesforce.com on behalf of California Air <mcertfees@arb.ca.gov>  
**Sent:** Friday, January 30, 2026 10:37 AM  
**To:** PAM BARYLSKI  
**Subject:** [EXTERNAL]MS Fee Payment Confirmation for Invoice MSF250698  
**Attachments:** MSF250698 - signed.pdf

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

Dear Gary Arvan

Attached is documentation for your MS Fee payment for Invoice Name MSF250698. Please include a copy of this invoice and email with each application that is listed when submitting your application to the applicable MS Fee program.

1. Payment ID – 25RA0274
2. Date of Payment – 1/29/2026
3. Payment Status - Paid





**2027 50-State (NAS) D2**  
Test Group: VCRXD06.4575

**FCA US LLC**

**VEHICLE EMISSION CONTROL INFORMATION**

CONFORMS TO REGULATIONS: 2027 MY  
NO ADJUSTMENTS NEEDED

U.S. EPA: T3 B230 HDV OBD: CA OBD II FUEL: GASOLINE

CA: N/A OBD: N/A FUEL: N/A  
THIS VEHICLE CONFORMS TO FEDERAL REGULATIONS  
AND IS CERTIFIED FOR SALE IN CALIFORNIA

GROUP: VCRXD06.4575

ENGINE: 6.4L EVAP: VCRXR0213TR1 31, 32 gal  
VCRXR0391TR1 50 gal

EGR / EGRC  
HO2S  
SFI / TWC  
WR - HO2S



**68778 017AA**

VECI label is located on the vehicle per 40 CFR 86.1807-01.

VCRXD06.4575 Part 1 Section 15 - 100 (2027)



# 2027 50-State (NAS) DJ

Test Group: VCRXD06.4575

## FCA US LLC | VEHICLE EMISSION CONTROL INFORMATION

CONFORMS TO REGULATIONS: 2027 MY  
NO ADJUSTMENTS NEEDED

U.S. EPA: T3 B230 HDV OBD: CA OBD II FUEL: GASOLINE

CA: N/A OBD: N/A FUEL: N/A

THIS VEHICLE CONFORMS TO FEDERAL REGULATIONS  
AND IS CERTIFIED FOR SALE IN CALIFORNIA

GROUP: VCRXD06.4575

ENGINE: 6.4L EVAP: VCRXR0213TR1 31, 32 gal  
VCRXR0391TR1 50 gal

EGR / EGRC  
HO2S  
SFI / TWC  
WR – HO2S

68778 018AA



VECI label is located on the vehicle per 40 CFR 86.1807-01.

VCRXD06.4575 Part 1 Section 15 - 101 (2027)