

## Certification Summary Information Report

<b>Manufacturer</b>	FCA US LLC	<b>Manufacturer Code</b>	CRX
<b>Test Group</b>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
<b>Certificate Number</b>	VCRXD06.4574-018	<b>CARB Executive Order #</b>	--
<b>Certificate Issue Date</b>	04/01/2026	<b>Certificate Revision Date</b>	--
<b>Certificate Effective Date</b>	04/01/2026	<b>Conditional Certificate</b>	No
<b>CSI Revision #</b>	--	<b>CSI Submission/Revision Date</b>	03/19/2026 04:57:36 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		
	<b>Fuel</b>	<b>Basic Fuel Metering System</b>	<b>Lean Burn Strategy Indicator</b>
	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>	VCRXGPGNNF39	<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>	06/29/2026	<b>CAP2000 Conditional Certificate?</b>	No
<b>Independent Commercial Importer?</b>	No	<b>Alternative Fuel Converter Certificate?</b>	No
<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>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0				
<b>Evaporative/Refueling Family Information</b>							
<b>Evaporative Summary Information Type</b>	New	<b>Submission/Correction Date</b>	03/18/2026 05:11:32 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>				
VCRXF0391TR0-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	965 - 3500 Cab Chassis 4X4	Federal	4-Wheel Drive	Automatic	8	Yes
FCA US LLC	12 - RAM	960 - 3500 Cab Chassis 4X2	California + CAA Section 177 states	2-Wheel Drive, Rear	Automatic	8	Yes
FCA US LLC	12 - RAM	965 - 3500 Cab Chassis 4X4	California + CAA Section 177 states	4-Wheel Drive	Automatic	8	Yes
FCA US LLC	12 - RAM	960 - 3500 Cab Chassis 4X2	Federal	2-Wheel Drive, Rear	Automatic	8	Yes
<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				

## Certification Summary Information Report

Test Group	VCRXD06.4574	Evaporative/Refueling Family	VCRXF0391TR0	
<b>After Treatment Device(s) (ATD)</b>				
ATD Number	ATD Type	ATD Precious Metal	Substrate Material	Substrate Construction
1	Three-way catalyst	Platinum + Palladium + Rhodium	Ceramic	Monolith
2	Three-way catalyst	Platinum + Rhodium	Ceramic	Monolith
3	Three-way catalyst	Rhodium	Ceramic	Monolith
<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>	375	
<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>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0								
<b>Engine Configuration Number 2</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>	--										
<b>Official Test Numbers</b>											
<b>Test Group</b>	<b>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	SCRX10088328	SCRX10088330	SCRX10088331	--	SCRX10088329	--	228.2	--	286.1	1	
<b>SFTP LEV-III Official Test Numbers</b>											
<b>Test Group Fuel</b>	<b>FTP</b>	<b>US06</b>	<b>SC03</b>								
Gasoline	SCRX10088328	SCRX10088330	SCRX10088331								

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
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**Emission Data Vehicle Information**

Vehicle ID / Configuration	L5DD81477 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	SCRXD06.45W5	Original Evaporative/Refueling Family	SCRXF0180TP2
Original Test Vehicle Model Year	2025		
<b>Vehicle Model</b>			
Represented Test Vehicle Make	RAM	Represented Test Vehicle Model	3500 Cab Chassis 4X4

**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-1750	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)	11251	Equivalent Test Weight (pounds)	11500
GVWR (lbs)	13500	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	112.96	0.2059	0.09263	20.26	0.4214	0.08603	47.3
US06	112.96	0.2059	0.09263	20.26	0.4214	0.08603	N/A

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
<b>Emission Control Device Comments</b>	--		
<b>Manufacturer Test Vehicle Comments</b>	callout 25DA-D06.45W5-1		

## Certification Summary Information Report

Test Group	VCRXD06.4574	Evaporative/Refueling Family	VCRXF0391TR0
<b>Test #</b>	<b>SCRX10088328</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>	10/29/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11361	<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>	4523	<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		VCRXD06.4574			Evaporative/Refueling Family					VCRXF0391TR0		
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 400	CO	1.22	--	--	--	0	1	1.2	7.3	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	CO-COMP	0.9	--	--	--	0	1	0.9	6.0	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	CO2	999	--	--	--	0	1	999	--	--
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	METHANE	0.028	--	--	--	0	1	0.03	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	METHANE-COMB	0.022	--	--	--	0	1	0.02	0.05	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	N2O	0.003	--	--	--	0	1	0	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	N2O-COMB	0.002	--	--	--	0	1	0	0.05	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	NMOG	0.0781	--	--	--	0	1	0.078	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	NMOG+NOX	0.1317	--	--	--	--	--	0.132	0.400	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	NMOG+NOX-COMP	0.0555	--	--	--	0	1	0.056	0.550	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	NOX	0.0536	--	--	--	0	1	0.054	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	PM	0.0003	--	--	--	0	1	0	0.010	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	PM-COMP	0.0003	--	--	--	0	1	0	0.007	Pass
CA	150,000 miles	Other	CO	1.22	--	--	--	0	1	1.2	7.3	Pass
CA	150,000 miles	Other	CO-COMP	0.9	--	--	--	0	1	0.9	6.0	Pass
CA	150,000 miles	Other	METHANE	0.028	--	--	--	0	1	0.03	999.99	Pass
CA	150,000 miles	Other	METHANE-COMB	0.022	--	--	--	0	1	0.02	0.05	Pass
CA	150,000 miles	Other	N2O	0.003	--	--	--	0	1	0	999.99	Pass
CA	150,000 miles	Other	N2O-COMB	0.002	--	--	--	0	1	0	0.05	Pass

## Certification Summary Information Report

Test Group		VCRXD06.4574			Evaporative/Refueling Family					VCRXF0391TR0		
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	NMOG	0.0781	--	--	--	0	1	0.078	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.1317	--	--	--	--	--	0.132	0.400	Pass
CA	150,000 miles	Other	NMOG+NOX-COMP	0.0555	--	--	--	0	1	0.056	0.550	Pass
CA	150,000 miles	Other	NOX	0.0536	--	--	--	0	1	0.054	999.999	Pass
CA	150,000 miles	Other	PM	0.0003	--	--	--	0	1	0	0.010	Pass
CA	150,000 miles	Other	PM-COMP	0.0003	--	--	--	0	1	0	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>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
<b>Test #</b>	<b>SCRX10088329</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>	10/29/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11361	<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>	4533	<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)	0.013515	--
CO (Carbon Monoxide)	0.209406	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.2408	--
DT-EER (Drive Trace Energy Economy Rating)	-0.044	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.1838	--
MFR FE (Manufacturer Fuel Economy)	13.1	13.1
NOX (Nitrogen Oxide)	0.002354	--
N2O (Nitrous Oxide)	0.001264	--
HC-NM (Non-methane Hydrocarbon)	0.00512	--
NMOG (Non-methane organic gases)	0.005274	--
HC-TOTAL (Total Hydrocarbon)	0.018129	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	669	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	669.1756	--

**Manufacturer Test Comments** 25DA-D06.45W5-1 hwy @ ALVW 150k Auto Fixed E10

## Certification Summary Information Report

Test Group		VCRXD06.4574			Evaporative/Refueling Family					VCRXF0391TR0		
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 400	CO2	999	--	--	--	0	1	999	--	--
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	METHANE	0.014	--	--	--	0	1	0.01	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	N2O	0.001	--	--	--	0	1	0	999.99	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	NMOG	0.0053	--	--	--	0	1	0.005	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	NMOG+NOX	0.0077	--	--	--	--	--	0.008	0.400	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	NOX	0.0024	--	--	--	0	1	0.002	999.999	Pass
CA	150,000 miles	Other	METHANE	0.014	--	--	--	0	1	0.01	999.99	Pass
CA	150,000 miles	Other	N2O	0.001	--	--	--	0	1	0	999.99	Pass
CA	150,000 miles	Other	NMOG	0.0053	--	--	--	0	1	0.005	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0077	--	--	--	--	--	0.008	0.400	Pass
CA	150,000 miles	Other	NOX	0.0024	--	--	--	0	1	0.002	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>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
<b>Test #</b>	<b>SCRX10088330</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>	10/29/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11361	<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>	4559	<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)	1272.51	--
FE BAG 1 (Bag 1 Fuel Economy)	6.88	6.88
CO2 BAG 2 (Bag 2 Carbon Dioxide)	979.69	--
FE BAG 2 (Bag 2 Fuel Economy)	8.93	8.93
METHANE (CH4 - Methane)	0.01793	--
CO (Carbon Monoxide)	0.29737	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.169	--
DT-EER (Drive Trace Energy Economy Rating)	-0.839	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.472	--
MFR FE (Manufacturer Fuel Economy)	8.6	8.6
NOX (Nitrogen Oxide)	0.01204	--
HC-NM (Non-methane Hydrocarbon)	0.00137	--
NMOG (Non-methane organic gases)	0.00143	--
PM (Particulate Matter)	0.000213	--
HC-TOTAL (Total Hydrocarbon)	0.01863	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	1016	--

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
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<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
Carbon dioxide	1015.2	--

**Manufacturer Test Comments**                      25DA-D06.45W5-1 la92 @ ALVW 150k Auto Fixed E10

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	CO	0.3	--	--	--	0	1	0.3	999.9	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	NMOG	0.0014	--	--	--	0	1	0.001	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	NOX	0.012	--	--	--	0	1	0.012	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	PM	0.0002	--	--	--	0	1	0	999.999	Pass
CA	150,000 miles	Other	CO	0.3	--	--	--	0	1	0.3	999.9	Pass
CA	150,000 miles	Other	NMOG	0.0014	--	--	--	0	1	0.001	999.999	Pass
CA	150,000 miles	Other	NOX	0.012	--	--	--	0	1	0.012	999.999	Pass
CA	150,000 miles	Other	PM	0.0002	--	--	--	0	1	0	999.999	Pass

## Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
<b>Test #</b>	<b>SCRX10088331</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>	10/29/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11361	<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>	4577	<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)	0.029102	--
CO (Carbon Monoxide)	1.036974	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.142	--
DT-EER (Drive Trace Energy Economy Rating)	0.5253	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.03	--
MFR FE (Manufacturer Fuel Economy)	8.3	8.3
NOX (Nitrogen Oxide)	0.008233	--
HC-NM (Non-methane Hydrocarbon)	0.00678	--
NMOG (Non-methane organic gases)	0.006985	--
PM (Particulate Matter)	0.000434	--
HC-TOTAL (Total Hydrocarbon)	0.034972	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	1052	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	1049.63628	--

**Manufacturer Test Comments** 25DA-D06.45W5-1 sc03 @ ALVW 150k Auto Fixed E10

## Certification Summary Information Report

Test Group		VCRXD06.4574				Evaporative/Refueling Family				VCRXF0391TR0		
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 400	CO	1.04	--	--	--	0	1	1	999.9	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	NMOG	0.007	--	--	--	0	1	0.007	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	NOX	0.0082	--	--	--	0	1	0.008	999.999	Pass
Fed	150,000 miles	Federal Tier 3 HD Class 3 Bin 400	PM	0.0004	--	--	--	0	1	0	999.999	Pass
CA	150,000 miles	Other	CO	1.037	--	--	--	0	1	1.037	999.999	Pass
CA	150,000 miles	Other	NMOG	0.007	--	--	--	0	1	0.007	999.999	Pass
CA	150,000 miles	Other	NOX	0.0082	--	--	--	0	1	0.008	999.999	Pass
CA	150,000 miles	Other	PM	0.0004	--	--	--	0	1	0	999.999	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
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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 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	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor	
Odometer Correction Sign	Miles		
Odometer Correction Units	Miles	Rated Horsepower	405
Engine Code	AA-0350	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	4,000 (mi)
Charge Air Cooler Type	--	Equivalent Test Weight (pounds)	8000
Shift Indicator Light Usage	Not equipped	N/V Ratio	28.8
Curb Weight (lbs)	8000	# of Transmission Gears	8
GVWR (lbs)	10000	Creeper Gear	No
Axle Ratio	4.1		
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	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>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
<b>Manufacturer Test Vehicle Comments</b>	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	0.6	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.2234	0.0057	0.229	0.6	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
<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	0.009	0.292	0.6	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.2831	0.009	0.292	0.6	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
<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	0	0	0.05	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0	0	0	0.05	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
<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>	--

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.0079	--

**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	0.0079	0	0.008	0.03	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.0079	0	0.008	0.03	Pass

## Certification Summary Information Report

Test Group	VCRXD06.4574	Evaporative/Refueling Family	VCRXF0391TR0
<b>Fuel Properties</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>	--
<b>Fuel Batch ID</b>	<b>11361</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>	10/29/2024
<b>Fuel Batch Calibration Effective Date</b>	10/29/2024	<b>Fuel Batch Calibration Ineffective Date</b>	--
<b>Carbon Weight Fraction NMHC</b>	0.83	<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>	9.8	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17803
<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>	0.83	<b>Weight Fraction CO2</b>	--

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
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#### Consolidated List of Standards

**Exhaust Standards**

<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 400
<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	--	--	--	0	0	1	0	999.9
150,000 miles	NMOG	--	--	--	0	0	1	0	999.999
150,000 miles	NOX	--	--	--	0	0	1	0	999.999
150,000 miles	PM	--	--	--	0	0	1	0	999.999

<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	7.3
150,000 miles	CO-COMP	--	--	--	0	0	1	0	6.0
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	0.400
150,000 miles	NMOG+NOX-COMP	--	--	--	0	0	1	0	0.550
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.010
150,000 miles	PM-COMP	--	--	--	0	0	1	0	0.007

### Certification Summary Information Report

<b>Test Group</b>		VCRXD06.4574			<b>Evaporative/Refueling Family</b>			VCRXF0391TR0		
<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	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	0.400
150,000 miles	NOX	--	--	--	--	--	1	0	999.999

<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		

  

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	0	0	1	0	999.999
150,000 miles	NMOG	--	--	--	0	0	1	0	999.999
150,000 miles	NOX	--	--	--	0	0	1	0	999.999
150,000 miles	PM	--	--	--	0	0	1	0	999.999

### Certification Summary Information Report

<b>Test Group</b>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
<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 400
<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	7.3
150,000 miles	CO-COMP	--	--	--	0	0	1	0	6.0
150,000 miles	CO2	--	--	--	--	--	1	0	999
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	0.400
150,000 miles	NMOG+NOX-COMP	--	--	--	0	0	1	0	0.550
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.010
150,000 miles	PM-COMP	--	--	--	0	0	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 400
<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
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	0.400
150,000 miles	NOX	--	--	--	--	--	1	0	999.999

### Certification Summary Information Report

<b>Test Group</b>		VCRXD06.4574			<b>Evaporative/Refueling Family</b>			VCRXF0391TR0		
<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 400		
<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	--	--	--	0	0	1	0	999.9
150,000 miles	NMOG	--	--	--	0	0	1	0	999.999
150,000 miles	NOX	--	--	--	0	0	1	0	999.999
150,000 miles	PM	--	--	--	0	0	1	0	999.999

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

**Evaporative/Refueling Standards**

<b>Evaporative/Refueling Family</b>		VCRXF0391TR0			<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>		VCRXF0391TR0			<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

### Certification Summary Information Report

<b>Test Group</b>		VCRXD06.4574	<b>Evaporative/Refueling Family</b>		VCRXF0391TR0
<b>Evaporative/Refueling Family</b>		VCRXF0391TR0	<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
<b>Evaporative/Refueling Family</b>		VCRXF0391TR0	<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
<b>Evaporative/Refueling Family</b>		VCRXF0391TR0	<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	0.009
<b>Evaporative/Refueling Family</b>		VCRXF0391TR0	<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	0.009
<b>Evaporative/Refueling Family</b>		VCRXF0391TR0	<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>		VCRXF0391TR0	<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

## Certification Summary Information Report

Test Group	VCRXD06.4574	Evaporative/Refueling Family	VCRXF0391TR0
<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		VCRXD06.4574	Evaporative/Refueling Family		VCRXF0391TR0
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	VCRXD06.4574	Evaporative/Refueling Family	VCRXF0391TR0
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>	VCRXD06.4574	<b>Evaporative/Refueling Family</b>	VCRXF0391TR0
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