

## Certification Summary Information Report

<b>Manufacturer</b>	Mazda Motor Corporation	<b>Manufacturer Code</b>	TKX
<b>Test Group</b>	TTKXV02.OFFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
<b>Certificate Number</b>	TTKXV02.OFFB-011	<b>CARB Executive Order #</b>	--
<b>Certificate Issue Date</b>	11/07/2025	<b>Certificate Revision Date</b>	--
<b>Certificate Effective Date</b>	11/07/2025	<b>Conditional Certificate</b>	No
<b>CSI Revision #</b>	--	<b>CSI Submission/Revision Date</b>	08/07/2025 07:52:33 PM
<b>Model Year</b>	2026		

**Test Group Information**

<b>CSI Type</b>	New	<b>Running Change Reference Number</b>	--
<b>GHG Exempt Status</b>	Not Exempt		

**Drive Sources and Fuel(s)**

**Drive Source #1:** Combustion Engine

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Gasoline	Spark Ignition Direct 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>	LDV
<b>Federal Clean Fuel Vehicle</b>	No	<b>Federal Clean Fuel Vehicle Standard</b>	--
<b>Federal Clean Fuel Vehicle ILEV</b>	--	<b>California Partial Zero Emissions Vehicle Indicator</b>	No
<b>Durability Group Name</b>	TTKXGPGNNWB7	<b>Durability Group Equivalency Factor</b>	1.0
<b>Reduced Fee Test Group</b>	No	<b>Certification Region Code(s)</b>	FA, CA
<b>Complies with HD GHG 2b/3 regulations?</b>	No		
<b>Introduction into Commerce Date</b>	02/19/2026	<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>	--
<b>SFTP LEV-III Composite Compliance Indicator</b>	No		
<b>OBD Compliance Type</b>	CARB	<b>OBD Demonstration Vehicle Test Group</b>	TTKXV02.5CDI
<b>Test Group OBD Compliance Level</b>	Full - no deficiencies	<b>Number of Test Group OBD Deficiencies</b>	0
<b>OBD Deficiencies Comments</b>	The test group:TTKXV02.OFFB is not selected as OBD demonstration vehicle. OBD Demonstration Vehicle Test Group above is required field. Therefore, 2026MY MAZDA CX-30 2.5L-DI w/o cylinder deactivation selected as OBD demonstration vehicle is indicated.		
<b>Mfr Test Group Comments</b>	Durability group equivalency factor = ABC/SRC For Tier3 E10 regular gasoline, the following ratios are applied. NMOG / NMHC = Calculated with the test fuel ( for the FTP test cycle ) NMOG / NMHC = 1.03 ( for the HWY, US06 and SC03 test cycles )		
<b>Mfr Exhaust / Evap Standards Comments</b>	--		

## Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP				
<b>Evaporative/Refueling Family Information</b>							
<b>Evaporative Summary Information Type</b>	New	<b>Submission/Correction Date</b>	08/06/2025 09:15:21 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>	Metal	<b>Fuel Tank Material Description</b>	Steel				
<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>	Carbon HC trap in air induction system, HC absorber				
<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>	95	<b>Number of Primary Canisters</b>	1				
<b>Number of Bleed Canisters</b>	0	<b>Bleed Canister Total Working Capacity (grams)</b>	--				
<b>Mfr Evaporative/Refueling Family Comments</b>	--						
<b>Leak Family Details</b>							
<b>Leak Family Indicator</b>	No						
<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>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>
Mazda Motor Corporation	1 - MAZDA	50 - MX-5	California + CAA Section 177 states	2-Wheel Drive, Rear	Manual	6	No
Mazda Motor Corporation	1 - MAZDA	50 - MX-5	California + CAA Section 177 states	2-Wheel Drive, Rear	Semi-Automatic	6	Yes
Mazda Motor Corporation	1 - MAZDA	50 - MX-5	Federal	2-Wheel Drive, Rear	Manual	6	No
Mazda Motor Corporation	1 - MAZDA	50 - MX-5	Federal	2-Wheel Drive, Rear	Semi-Automatic	6	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>	Inline	<b>Mfr Engine Block Arrangement Description</b>	--				
<b>Camless Valvetrain Indicator</b>	No	<b>Oil Viscosity/Classification</b>	GF-6 0W-20				
<b>Number of Cylinders/Rotors</b>	4	<b>Mechanically Variable Compression Ratio Indicator</b>	N				

## Certification Summary Information Report

Test Group		TTKXV02.0FFB			Evaporative/Refueling Family		TTKXR0095GCP									
<b>After Treatment Device(s) (ATD)</b>																
ATD Number		ATD Type		ATD Precious Metal		Substrate Material		Substrate Construction								
1		Three-way catalyst		Palladium + Rhodium		Ceramic		Monolith								
2		Three-way catalyst		Platinum + Rhodium		Ceramic		Monolith								
<b>Mfr After Treatment Device (ATD) Comments</b>		--														
<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>		2.0			<b>Engine Rated Horsepower</b>		181									
<b>Number of Inlet Valves Per Cylinder</b>		2			<b>Number of Exhaust Valves Per Cylinder</b>		2									
<b>Air Aspiration Method</b>		Naturally Aspirated			<b>Number of Air Aspiration Devices</b>		--									
<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>		No														
<b>Cylinder Deactivation Description</b>		--														
<b>Variable Valve Timing</b>		Yes														
<b>Variable Valve Timing System Description</b>		This technology optimizes the valve timing by using computer control to continuously switch the intake and exhaust valve opening/closing timing according to driving conditions.														
<b>Variable Valve Lift?</b>		No														
<b>Variable Valve Lift System Description</b>		--														
<b>Number of Knock Sensors</b>		1			<b>Number of Air/Fuel Sensors</b>		2									
<b>Air/Fuel Sensor # 1 Type</b>		Heated air fuel			<b>Air/Fuel Sensor # 1 Description</b>		--									
<b>Air/Fuel Sensor # 2 Type</b>		Heated oxygen			<b>Air/Fuel Sensor # 2 Description</b>		--									
<b>Mfr Air/Fuel Sensor Comments</b>		--														
<b>Exhaust Gas Recirculation</b>		Yes			<b>Cooled Exhaust Gas Recirculation</b>		No									
<b>EGR Type</b>		Variable Valve Timing Control			<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>																
Test Group		FTP		US06		SC03		Cold CO		Highway		EPA City Litmus Value	EPA City Litmus Threshold	EPA Highway Litmus Value	EPA Highway Litmus Threshold	CREE Weighting Factor
Gasoline		JTKX10051323		JTKX10051325		JTKX10051326		JTKX10051327		JTKX10051324		29.3	228.2	39	286.1	--

### Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP						
<b>Emission Data Vehicle Information</b>									
<b>Vehicle ID / Configuration</b>	0EBPEPUS1-008 / 0	<b>Manufacturer Vehicle Configuration Number</b>	0						
<b>Original Test Group Name</b>	LTKXV02.0FFA	<b>Original Evaporative/Refueling Family</b>	LTKXR0095GCP						
<b>Original Test Vehicle Model Year</b>	2020								
<b>Vehicle Model</b>									
<b>Represented Test Vehicle Make</b>	MAZDA	<b>Represented Test Vehicle Model</b>	MX-5						
<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>	1.032						
<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>	0PEPUSAAA	<b>Rated Horsepower</b>	181						
<b>Displacement (liters)</b>	2								
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Air Aspiration Method, if 'Other'</b>							
<b>Number of Air Aspiration Devices</b>	--	<b>Air Aspiration Device Configuration</b>	--						
<b>Charge Air Cooler Type</b>	N/A	<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>	2403	<b>Equivalent Test Weight (pounds)</b>	2750						
<b>GVWR (lbs)</b>	2789	<b>N/V Ratio</b>	29.8						
<b>Axle Ratio</b>	3.58								
<b>Transmission Type</b>	Automatic	<b># of Transmission Gears</b>	6						
<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>	32.914	0.11588	0.019952						
	16.195	-0.03255	0.019911						
			<b>EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients</b>						
			11.8						
<b>Emission Control Device Comments</b>	--								

### Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
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**Manufacturer Test Vehicle Comments**      20MY MX-5 ST 2.0L ETW 2750 S6 205/45 R17 0 EM

<b>Test #</b>	<b>LTKX10061947</b>	<b>Test Procedure</b>	<b>38 - CA fuel 3-day evap.</b>
<b>Exhaust Test # for this Evap Test</b>	LTKX10061945	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	10/11/2019	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	1936G3	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	2929	<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 86 (+/- 2 mph, +/- 1 sec)	<b>Road Speed Fan Usage</b>	Yes

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.1974892	--

**Manufacturer Test Comments**      20MY MX-5 ST 2.0L 2WD 2750 S6 205/45 R17 0 3Day-Evap EM

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	0.1975	0.0326	0.23	0.3	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.1975	0.0326	0.23	0.3	Pass

### Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
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<b>Test #</b>	<b>LTKX10061902</b>	<b>Test Procedure</b>	<b>24 - Federal fuel refueling test (ORVR)</b>
<b>Exhaust Test # for this Evap Test</b>	LTKX10061900	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	07/12/2019	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	1902T3	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	2492	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--	<b>Road Speed Fan Usage</b>	No
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 86 (+/- 2 mph, +/- 1 sec)		

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.0392685	--

**Manufacturer Test Comments**                      20MY MX-5 ST 2.0L 2WD 2750 S6 205/45 R17 0 ORVR EM

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	0.039	0	0.04	0.2	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.039	0	0.04	0.2	Pass

### Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
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<b>Test #</b>	<b>LTKX10061946</b>	<b>Test Procedure</b>	<b>37 - California Fuel Running Loss</b>
<b>Exhaust Test # for this Evap Test</b>	LTKX10061945	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	10/11/2019	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	1936G3	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	2911	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--	<b>Road Speed Fan Usage</b>	Yes
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 86 (+/- 2 mph, +/- 1 sec)		

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0	--

**Manufacturer Test Comments**

20MY MX-5 ST 2.0L 2WD 2750 S6 205/45 R17 0 Running Loss EM

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	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0	0	0	0.05	Pass

### Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
<b>Test #</b>	<b>LTKX10061901</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>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	06/10/2019	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	1933G3	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	MAHLE		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4000	<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 86 (+/- 2 mph, +/- 1 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
<b>HC-TOTAL (Total Hydrocarbon)</b>	0.0096	--

**Manufacturer Test Comments**                      20MY MX-5 ST 2.0L 2WD 2750 S6 205/45 R17 0 LEV3 ULEV125 BETP EM

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	0.0096	0	0.01	0.02	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL	0.0096	0	0.01	0.02	Pass

## Certification Summary Information Report

Test Group	TTKXV02.0FFB	Evaporative/Refueling Family	TTKXR0095GCP						
<b>Emission Data Vehicle Information</b>									
Vehicle ID / Configuration	8EBPEU31-020 / 1	Manufacturer Vehicle Configuration Number	1						
Original Test Group Name	JTKXT02.0FBA	Original Evaporative/Refueling Family	JTKXR0120GAL						
Original Test Vehicle Model Year	2018								
<b>Vehicle Model</b>									
Represented Test Vehicle Make	MAZDA	Represented Test Vehicle Model	CX-5						
<b>Leak Family Details</b>									
Leak Family Identifier	--	Leak Family Name	--						
<b>Drive Sources and Fuel System Details</b>									
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>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							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
Odometer Correction -- Initial	0	Odometer Correction Factor	0.991						
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor								
Odometer Correction Units	Miles								
Engine Code	8PEU3AAA	Rated Horsepower	156						
Displacement (liters)	2								
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--						
Charge Air Cooler Type	--	Drive Mode While Testing	2-Wheel Drive, Front						
Shift Indicator Light Usage	Equipped, shifted by survey schedule	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	3322	Equivalent Test Weight (pounds)	3625						
GVWR (lbs)	4286	N/V Ratio	38.9						
Axle Ratio	4.71								
Transmission Type	Manual	# of Transmission Gears	6						
Transmission Lockup	No	Creeper Gear	No						

## Certification Summary Information Report

Test Group		TTKXV02.0FFB			Evaporative/Refueling Family			TTKXR0095GCP
<b>Dynamometer Coefficients:</b>								
		Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)		
City/Highway/Evap	28.132	0.30237	0.022969	11.99	0.09355	0.023316	13.4	
Cold CO	31.258	0.33597	0.025522	7.527	0.04861	0.026141	N/A	
US06	28.132	0.30237	0.022969	11.99	0.09355	0.023316	N/A	
Emission Control Device Comments	--							
Manufacturer Test Vehicle Comments	18MY CX-5 2.0L 2WD ETW 3625 M6 P225/65 R17 1 EM							

## Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
<b>Test #</b>	<b>JTKX10051323</b>	<b>Test Procedure</b>	<b>21 - Federal fuel 2-day exhaust (w/can load)</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>	09/12/2017	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	1707T3	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDV/Passenger Car	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2200	<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 86 (+/- 2 mph, +/- 1 sec)	<b>Road Speed Fan Usage</b>	Yes

## Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	287.514	--
FE BAG 1 (Bag 1 Fuel Economy)	30.1773	30.1773
CO2 BAG 2 (Bag 2 Carbon Dioxide)	297.893	--
FE BAG 2 (Bag 2 Fuel Economy)	29.3279	29.3279
CO2 BAG 3 (Bag 3 Carbon Dioxide)	257.777	--
FE BAG 3 (Bag 3 Fuel Economy)	33.8534	33.8534
METHANE (CH4 - Methane)	0.0059212	--
CO (Carbon Monoxide)	0.2292	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.3775014	--
DT-EER (Drive Trace Energy Economy Rating)	-0.5757559	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.339229	--
MFR FE (Manufacturer Fuel Economy)	30.625	30.625
NOX (Nitrogen Oxide)	0.0303702	--
N2O (Nitrous Oxide)	0.0004306	--
HC-NM (Non-methane Hydrocarbon)	0.007759	--
NMOG (Non-methane organic gases)	0.0085166	--
PM (Particulate Matter)	0.0001824	--
HC-TOTAL (Total Hydrocarbon)	0.013453	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	285.4008058	999

### Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
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<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
Carbon dioxide	284.722	--

**Manufacturer Test Comments**                      18MY CX-5 2.0L 2WD ETW 3625 M6 P225/65 R17 1 EM

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal Tier 3 Bin 125	CREE	999	--	--	--	0	--	999	--	--
Fed	120,000 miles	Federal Tier 3 Bin 125	METHANE	0.0059	--	--	--	0.0204	--	0.026	0.035	Pass
Fed	120,000 miles	Federal Tier 3 Bin 125	N2O	0.0004	--	--	--	0.001	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	CO	0.23	--	--	--	0.07	--	0.3	2.1	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	CO-COMP	0.52	--	--	--	0.07	--	0.5	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0085	--	--	--	0.0234	--	0.032	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0389	--	--	--	--	--	0.062	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX-COMP	0.0659	--	--	--	0	--	0.066	0.120	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0304	--	--	--	0	--	0.03	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0002	--	--	--	0.0001	--	0	0.003	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.23	--	--	--	0.07	--	0.3	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	METHANE	0.0059	--	--	--	0.0204	--	0.026	0.035	Pass
CA	150,000 miles	California LEV-IV ULEV125	N2O	0.0004	--	--	--	0.001	--	0.001	0.010	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0085	--	--	--	0.0234	--	0.032	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0389	--	--	--	--	--	0.062	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0304	--	--	--	0	--	0.03	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0002	--	--	--	0.0001	--	0	0.003	Pass

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

### Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
<b>Test #</b>	<b>JTKX10051327</b>	<b>Test Procedure</b>	<b>11 - Cold CO</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	28 - Cold CO E10 Regular Gasoline (Tier 3)
<b>Test Date</b>	09/14/2017	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	1703CX	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDV/Passenger Car	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2302	<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 86 (+/- 2 mph, +/- 1 sec)	<b>Road Speed Fan Usage</b>	Yes

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
<b>CO2 BAG 1 (Bag 1 Carbon Dioxide)</b>	343.033	--
<b>FE BAG 1 (Bag 1 Fuel Economy)</b>	24.9769	24.9769
<b>CO2 BAG 2 (Bag 2 Carbon Dioxide)</b>	318.344	--
<b>FE BAG 2 (Bag 2 Fuel Economy)</b>	27.1113	27.1113
<b>CO2 BAG 3 (Bag 3 Carbon Dioxide)</b>	269.525	--
<b>FE BAG 3 (Bag 3 Fuel Economy)</b>	31.9251	31.9251
<b>METHANE (CH4 - Methane)</b>	0.0092938	--
<b>CO (Carbon Monoxide)</b>	0.23591	--
<b>DT-ASCR (Drive Trace Absolute Speed Change Rating)</b>	0.5048588	--
<b>DT-EER (Drive Trace Energy Economy Rating)</b>	-0.4874505	--
<b>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</b>	0.2736548	--
<b>MFR FE (Manufacturer Fuel Economy)</b>	27.769	27.769
<b>NOX (Nitrogen Oxide)</b>	0.0247011	--
<b>N2O (Nitrous Oxide)</b>	0.0003897	--
<b>HC-NM (Non-methane Hydrocarbon)</b>	0.0279931	--
<b>NMOG (Non-methane organic gases)</b>	0.0307663	--
<b>HC-TOTAL (Total Hydrocarbon)</b>	0.03716	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
<b>Carbon dioxide</b>	310.051	--

**Manufacturer Test Comments**

18MY CX-5 2.0L 2WD ETW 3625 M6 P225/65 R17 1 EM

### Certification Summary Information Report

Test Group		TTKXV02.0FFB				Evaporative/Refueling Family				TTKXR0095GCP		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	50,000 miles	Federal Tier 3 Bin 125	CO	0.24	--	--	--	0.02	--	0.3	10.0	Pass
Fed	120,000 miles	Federal Tier 3 Bin 125	HC-NM	0.03	--	--	--	0.02	--	0	0.3	Pass
CA	50,000 miles	California LEV-IV ULEV125	CO	0.24	--	--	--	0.02	--	0.3	10.0	Pass
CA	120,000 miles	California LEV-IV ULEV125	HC-NM	0.03	--	--	--	0.02	--	0	0.3	Pass

## Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
<b>Test #</b>	<b>JTKX10051324</b>	<b>Test Procedure</b>	<b>3 - HWFE</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>	09/12/2017	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	1707T3	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDV/Passenger Car	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2213	<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 86 (+/- 2 mph, +/- 1 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)	0.0067225	--
CO (Carbon Monoxide)	0.07157	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.4247138	--
DT-EER (Drive Trace Energy Economy Rating)	-0.1158639	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.017335	--
MFR FE (Manufacturer Fuel Economy)	41.9922	41.9922
NOX (Nitrogen Oxide)	0.0066631	--
N2O (Nitrous Oxide)	0.0000594	--
HC-NM (Non-methane Hydrocarbon)	0.0042152	--
NMOG (Non-methane organic gases)	0.0043416	--
HC-TOTAL (Total Hydrocarbon)	0.010846	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	208.1433726	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	208.111	--

## Manufacturer Test Comments

18MY CX-5 2.0L 2WD ETW 3625 M6 P225/65 R17 1 EM

## Certification Summary Information Report

Test Group		TTKXV02.0FFB				Evaporative/Refueling Family				TTKXR0095GCP		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal Tier 3 Bin 125	CREE	999	--	--	--	0	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0043	--	1.03	--	0.0234	--	0.028	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.011	--	1.03	--	--	--	0.034	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0067	--	--	--	0	--	0.007	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0043	--	1.03	--	0.0234	--	0.028	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.011	--	1.03	--	--	--	0.034	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0067	--	--	--	0	--	0.007	99.999	Pass

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

## Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
<b>Test #</b>	<b>JTKX10051325</b>	<b>Test Procedure</b>	<b>90 - US06</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>	09/12/2017	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	1707T3	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDV/Passenger Car	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2238	<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 86 (+/- 2 mph, +/- 1 sec)	<b>Road Speed Fan Usage</b>	Yes

## Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	436.903	--
FE BAG 1 (Bag 1 Fuel Economy)	19.8855	19.8855
CO2 BAG 2 (Bag 2 Carbon Dioxide)	268.728	--
FE BAG 2 (Bag 2 Fuel Economy)	32.3334	32.3334
METHANE (CH4 - Methane)	0.0149514	--
CO (Carbon Monoxide)	0.91409	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.0312842	--
DT-EER (Drive Trace Energy Economy Rating)	-0.8860384	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.036425	--
MFR FE (Manufacturer Fuel Economy)	28.4159	28.4159
NOX (Nitrogen Oxide)	0.0205012	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0363529	--
NMOG (Non-methane organic gases)	0.0374435	--
PM (Particulate Matter)	0.0004631	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.056854	--
HC-TOTAL (Total Hydrocarbon)	0.0511	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	306.032	--

## Certification Summary Information Report

Test Group		TTKXV02.0FFB		Evaporative/Refueling Family				TTKXR0095GCP				
Manufacturer Test Comments		18MY CX-5 2.0L 2WD ETW 3625 M6 P225/65 R17 1 EM										
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0005	--	--	--	0.0001	--	0.001	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.91	--	--	--	0.07	--	1	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0374	--	1.03	--	0.0234	--	0.061	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0579	--	1.03	--	--	--	0.081	0.150	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0205	--	--	--	0	--	0.02	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0005	--	--	--	0.0001	--	0.001	0.006	Pass

## Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
<b>Test #</b>	<b>JTKX10051326</b>	<b>Test Procedure</b>	<b>95 - SC03</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>	09/12/2017	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	1707T3	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDV/Passenger Car	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2256	<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 86 (+/- 2 mph, +/- 1 sec)	<b>Road Speed Fan Usage</b>	Yes

## Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
<b>METHANE (CH4 - Methane)</b>	0.0054176	--
<b>CO (Carbon Monoxide)</b>	0.30624	--
<b>DT-ASCR (Drive Trace Absolute Speed Change Rating)</b>	-0.0531599	--
<b>DT-EER (Drive Trace Energy Economy Rating)</b>	-0.4100339	--
<b>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</b>	-0.0224975	--
<b>MFR FE (Manufacturer Fuel Economy)</b>	24.8655	24.8655
<b>NOX (Nitrogen Oxide)</b>	0.0322411	--
<b>N2O (Nitrous Oxide)</b>	0.000064	--
<b>HC-NM (Non-methane Hydrocarbon)</b>	0.0020406	--
<b>NMOG (Non-methane organic gases)</b>	0.0021019	--
<b>HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)</b>	0.034282	--
<b>HC-TOTAL (Total Hydrocarbon)</b>	0.007386	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
<b>Carbon dioxide</b>	350.677	--

## Manufacturer Test Comments

18MY CX-5 2.0L 2WD ETW 3625 M6 P225/65 R17 1 EM

## Certification Summary Information Report

Test Group		TTKXV02.0FFB				Evaporative/Refueling Family				TTKXR0095GCP		
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	California LEV-IV ULEV125	CO	0.31	--	--	--	0.07	--	0.4	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0021	--	1.03	--	0.0234	--	0.026	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0343	--	1.03	--	--	--	0.058	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0322	--	--	--	0	--	0.032	99.999	Pass

## Certification Summary Information Report

Test Group	TTKXV02.0FFB	Evaporative/Refueling Family	TTKXR0095GCP
<b>Fuel Properties</b>			
<b>Fuel Batch ID</b>	<b>1707T3</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>	02/29/2016
<b>Fuel Batch Calibration Effective Date</b>	09/11/2017	<b>Fuel Batch Calibration Ineffective Date</b>	03/10/2018
<b>Carbon Weight Fraction NMHC</b>	--	<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>	9.5	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17834
<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>	0.829	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>1902T3</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>	07/06/2016
<b>Fuel Batch Calibration Effective Date</b>	05/06/2019	<b>Fuel Batch Calibration Ineffective Date</b>	11/05/2019
<b>Carbon Weight Fraction NMHC</b>	--	<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>	0.747
<b>Fuel Ethanol Volume Percent (%)</b>	9.7	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17839
<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>	0.827	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>1703CX</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	28 - Cold CO E10 Regular Gasoline (Tier 3)	<b>Fuel Batch Calibration Date</b>	03/24/2016
<b>Fuel Batch Calibration Effective Date</b>	09/11/2017	<b>Fuel Batch Calibration Ineffective Date</b>	03/10/2018
<b>Carbon Weight Fraction NMHC</b>	--	<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>	0.737
<b>Fuel Ethanol Volume Percent (%)</b>	9.7	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17852
<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>	0.825	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>1933G3</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>	05/07/2019
<b>Fuel Batch Calibration Effective Date</b>	07/23/2019	<b>Fuel Batch Calibration Ineffective Date</b>	01/22/2021
<b>Carbon Weight Fraction NMHC</b>	--	<b>Carbon Weight Fraction HC</b>	--

## Certification Summary Information Report

Test Group	TTKXV02.0FFB	Evaporative/Refueling Family	TTKXR0095GCP
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.742
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17849
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.826	Weight Fraction CO2	--
Fuel Batch ID	<b>1936G3</b>	Fuel Calibration Number	<b>1</b>
Test Fuel Type	46 - CARB LEV3 E10 Regular Gasoline	Fuel Batch Calibration Date	04/07/2019
Fuel Batch Calibration Effective Date	08/26/2019	Fuel Batch Calibration Ineffective Date	02/25/2020
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.753
Fuel Ethanol Volume Percent (%)	9.5	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17832
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.829	Weight Fraction CO2	--

### Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP
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#### Consolidated List of Standards

**Exhaust Standards**

<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Both
<b>Vehicle Class</b>	LDV/Passenger Car	<b>Standard Level</b>	California LEV-IV ULEV125
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	US06

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0.07	9.6
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0234	99.999
150,000 miles	NMOG+NOX	--	--	1.03	--	--	--	0	0.150
150,000 miles	NOX	--	--	--	--	--	--	0	99.999
150,000 miles	PM	--	--	--	--	--	--	0.0001	0.006

<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Both
<b>Vehicle Class</b>	LDV/Passenger Car	<b>Standard Level</b>	California LEV-IV ULEV125
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	Federal fuel 2-day exhaust (w/can load)

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0.07	2.1
150,000 miles	METHANE	--	--	--	--	--	--	0.0204	0.035
150,000 miles	N2O	--	--	--	--	--	--	0.001	0.010
150,000 miles	NMOG	--	--	--	--	--	--	0.0234	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.125
150,000 miles	NOX	--	--	--	--	--	--	0	99.999
150,000 miles	PM	--	--	--	--	--	--	0.0001	0.003

### Certification Summary Information Report

<b>Test Group</b>		TTKXV02.0FFB			<b>Evaporative/Refueling Family</b>			TTKXR0095GCP		
<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDV/Passenger Car			<b>Standard Level</b>			Federal Tier 3 Bin 125		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			Federal 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>	
120,000 miles	CREE	--	--	--	--	--	--	0	999.9999	
120,000 miles	METHANE	--	--	--	--	--	--	0.0204	0.035	
120,000 miles	N2O	--	--	--	--	--	--	0.001	0.010	
150,000 miles	CO	--	--	--	--	--	--	0.07	2.1	
150,000 miles	CO-COMP	--	--	--	--	--	--	0.07	4.2	
150,000 miles	NMOG	--	--	--	--	--	--	0.0234	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.125	
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	0	0.120	
150,000 miles	NOX	--	--	--	--	--	--	0	99.999	
150,000 miles	PM	--	--	--	--	--	--	0.0001	0.003	

<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDV/Passenger Car			<b>Standard Level</b>			Federal Tier 3 Bin 125		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			US06		
<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	PM	--	--	--	--	--	--	0.0001	0.006	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDV/Passenger Car			<b>Standard Level</b>			California LEV-IV ULEV125		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			Cold CO		
<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>	
50,000 miles	CO	--	--	--	--	--	--	0.02	10.0	
120,000 miles	HC-NM	--	--	--	--	--	--	0.02	0.3	

### Certification Summary Information Report

<b>Test Group</b>		TTKXV02.0FFB			<b>Evaporative/Refueling Family</b>			TTKXR0095GCP		
<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDV/Passenger Car			<b>Standard Level</b>			Federal Tier 3 Bin 125		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			Cold CO		
<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>	
50,000 miles	CO	--	--	--	--	--	--	0.02	10.0	
120,000 miles	HC-NM	--	--	--	--	--	--	0.02	0.3	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDV/Passenger Car			<b>Standard Level</b>			California LEV-IV ULEV125		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			HWFE		
<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	NMOG	--	--	1.03	--	--	--	0.0234	99.999	
150,000 miles	NMOG+NOX	--	--	1.03	--	--	--	0	0.125	
150,000 miles	NOX	--	--	--	--	--	--	0	99.999	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDV/Passenger Car			<b>Standard Level</b>			California LEV-IV ULEV125		
<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	--	--	--	--	--	--	0.07	2.1	
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0234	99.999	
150,000 miles	NMOG+NOX	--	--	1.03	--	--	--	0	0.125	
150,000 miles	NOX	--	--	--	--	--	--	0	99.999	

### Certification Summary Information Report

<b>Test Group</b>		TTKXV02.0FFB			<b>Evaporative/Refueling Family</b>		TTKXR0095GCP		
<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>		Both		
<b>Vehicle Class</b>		LDV/Passenger Car			<b>Standard Level</b>		Federal Tier 3 Bin 125		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>		HWFE		
<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>
120,000 miles	CREE	--	--	--	--	--	--	0	999.9999
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0234	99.999
150,000 miles	NMOG+NOX	--	--	1.03	--	--	--	0	0.125
150,000 miles	NOX	--	--	--	--	--	--	0	99.999

**Evaporative/Refueling Standards**

<b>Evaporative/Refueling Family</b>		TTKXR0095GCP			<b>Cert Region</b>		California + CAA Section 177 states		
<b>Cert/In-Use Code</b>		Both			<b>Standard Level</b>		California LEV-IV Zero Evap (Option 2)		
<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	--	0.020	0				

<b>Evaporative/Refueling Family</b>		TTKXR0095GCP			<b>Cert Region</b>		Federal		
<b>Cert/In-Use Code</b>		Both			<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	--	0.020	0				

<b>Evaporative/Refueling Family</b>		TTKXR0095GCP			<b>Cert Region</b>		Federal		
<b>Cert/In-Use Code</b>		Both			<b>Standard Level</b>		Federal Tier 3 Evap		
<b>Test Procedure</b>		CA 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	--	0.300	0.0326				

<b>Evaporative/Refueling Family</b>		TTKXR0095GCP			<b>Cert Region</b>		California + CAA Section 177 states		
<b>Cert/In-Use Code</b>		Both			<b>Standard Level</b>		California LEV-IV Zero Evap (Option 2)		
<b>Test Procedure</b>		CA 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	--	0.300	0.0326				

### Certification Summary Information Report

<b>Test Group</b>	TTKXV02.0FFB	<b>Evaporative/Refueling Family</b>	TTKXR0095GCP		
<b>Evaporative/Refueling Family</b>	TTKXR0095GCP	<b>Cert Region</b>	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
<b>Cert/In-Use Code</b>	Both	<b>Standard Level</b>			
<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-TOTAL-EQUIV	--	0.20	0
<b>Evaporative/Refueling Family</b>	TTKXR0095GCP	<b>Cert Region</b>	Federal		
<b>Cert/In-Use Code</b>	Both	<b>Standard Level</b>	Federal Tier 3 Evap		
<b>Test Procedure</b>	California 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
<b>Evaporative/Refueling Family</b>	TTKXR0095GCP	<b>Cert Region</b>	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
<b>Cert/In-Use Code</b>	Both	<b>Standard Level</b>			
<b>Test Procedure</b>	California 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
<b>Evaporative/Refueling Family</b>	TTKXR0095GCP	<b>Cert Region</b>	Federal		
<b>Cert/In-Use Code</b>	Both	<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-TOTAL-EQUIV	--	0.20	0

## Certification Summary Information Report

Test Group	TTKXV02.0FFB	Evaporative/Refueling Family	TTKXR0095GCP
<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	AS-VOLT	Average System Voltage
CO	Carbon Monoxide	CO2 BAG 1	Bag 1 Carbon Dioxide
CO2	Carbon dioxide	CO2 BAG 2	Bag 2 Carbon Dioxide
CREE	Carbon-Related Exhaust Emissions	CO2 BAG 3	Bag 3 Carbon Dioxide
OPT-CREE	Optional Carbon-Related Exhaust Emissions	CO2 BAG 4	Bag 4 Carbon Dioxide
NOX	Nitrogen Oxide	NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides
PM	Particulate Matter	NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides
PM-COMP	SFTP Composite Particulate Matter	DT-IWRR	Drive Trace Inertia Work Ratio Rating
HC-NM	Non-methane Hydrocarbon	DT-ASCR	Drive Trace Absolute Speed Change Rating
OMHCE	Organic material Hydrocarbon Equivalent	DT-EER	Drive Trace Energy Economy Rating
OMNMHCE	Organic material non-methane HC equivalent	COMB-CREE	Combined Carbon-Related Exhaust Emissions
NMOG	Non-methane organic gases	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions
HCHO	Formaldehyde	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only
H3C2HO	Acetaldehyde	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	LEAK-DIA	Effective Leak Diameter (inches)
CO-COMP	SFTP Composite Carbon Monoxide	LEAK-GAS CAP	Gas Cap Leakage (cc/min)
ETHANOL	C2H5OH - Ethanol	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only
FE BAG 1	Bag 1 Fuel Economy	KW-HRS	Integrated DC KW-HRS
FE BAG 2	Bag 2 Fuel Economy	CH4 BAG 1	Bag 1 Methane
FE BAG 3	Bag 3 Fuel Economy	CH4 BAG 2	Bag 2 Methane
FE BAG 4	Bag 4 Fuel Economy	CH4 BAG 3	Bag 3 Methane
MFR FE	Manufacturer Fuel Economy	CH4 BAG 4	Bag 4 Methane
HC	Hydrocarbon for Running Loss and ORVR	CO BAG 1	Bag 1 Carbon Monoxide
METHANE	CH4 - Methane	CO BAG 2	Bag 2 Carbon Monoxide
METHANOL	CH3OH - Methanol	CO BAG 3	Bag 3 Carbon Monoxide
N2O	Nitrous Oxide	CO BAG 4	Bag 4 Carbon Monoxide
SPITBACK	Spitback Hydrocarbon in grams	NMOG BAG 1	Bag 1 Non-methane organic gases
AMP-HRS	Integrated Amp-hours	NMOG BAG 2	Bag 2 Non-methane organic gases
START-SOC	System Start State of Charge Watt-hours	NMOG BAG 3	Bag 3 Non-methane organic gases
END-SOC	System End State of Charge Watt-hours	NMOG BAG 4	Bag 4 Non-methane organic gases
ACT-DISTANCE	Actual Distance Driven (miles)		

## Certification Summary Information Report

Test Group	TTKXV02.0FFB	Evaporative/Refueling Family		TTKXR0095GCP
CA	California + CAA Section 177 states	FA	Federal	
<b>Exhaust Emission Standard Level</b>				
B1	Federal Tier 2 Bin 1	T3B160	Federal Tier 3 Bin 160	
B2	Federal Tier 2 Bin 2	T3B125	Federal Tier 3 Bin 125	
B3	Federal Tier 2 Bin 3	T3B110	Federal Tier 3 Transitional Bin 110	
B4	Federal Tier 2 Bin 4	T3B85	Federal Tier 3 Transitional Bin 85	
B5	Federal Tier 2 Bin 5	T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover	
B6	Federal Tier 2 Bin 6	T3B70	Federal Tier 3 Bin 70	
B7	Federal Tier 2 Bin 7	T3B50	Federal Tier 3 Bin 50	
B8	Federal Tier 2 Bin 8	T3B30	Federal Tier 3 Bin 30	
B9	Federal Tier 2 Bin 9	T3B20	Federal Tier 3 Bin 20	
B10	Federal Tier 2 Bin 10	T3B0	Federal Tier 3 Bin 0	
B11	Federal Tier 2 Bin 11	HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395	
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)	HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340	
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	HDV2B250	Federal Tier 3 HD Class 2b Bin 250	
L2	California LEV-II LEV	HDV2B200	Federal Tier 3 HD Class 2b Bin 200	
L2OP	California LEV-II LEV Optional	HDV2B170	Federal Tier 3 HD Class 2b Bin 170	
U2	California LEV-II ULEV	HDV2B150	Federal Tier 3 HD Class 2b Bin 150	
S2	California LEV-II SULEV	HDV2B0	Federal Tier 3 HD Class 2b Bin 0	
ZEV	California ZEV	HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630	
OT	Other	HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570	
T1	Federal Tier 1	HDV3B400	Federal Tier 3 HD Class 3 Bin 400	
PZEV	California PZEV	HDV3B270	Federal Tier 3 HD Class 3 Bin 270	
L2LEV160	California LEV-II LEV160	HDV3B230	Federal Tier 3 HD Class 3 Bin 230	
L2ULEV125	California LEV-II ULEV125	HDV3B200	Federal Tier 3 HD Class 3 Bin 200	
L2SULEV30	California LEV-II SULEV30	HDV3B0	Federal Tier 3 HD Class 3 Bin 0	
L2LEV395	California LEV-II LEV395	L4SULEV100	California LEV-IV SULEV100	
L2ULEV340	California LEV-II ULEV340	L4SULEV125	California LEV-IV SULEV125	
L2LEV630	California LEV-II LEV630	L4SULEV15	California LEV-IV SULEV15	
L2ULEV570	California LEV-II ULEV570	L4SULEV150	California LEV-IV SULEV150	
L3LEV160	California LEV-III LEV160	L4SULEV170	California LEV-IV SULEV170	
L3ULEV125	California LEV-III ULEV125	L4SULEV175	California LEV-IV SULEV175	
L3ULEV70	California LEV-III ULEV70	L4SULEV20	California LEV-IV SULEV20	
L3ULEV50	California LEV-III ULEV50	L4SULEV200	California LEV-IV SULEV200	
L3SULEV30	California LEV-III SULEV30	L4SULEV230	California LEV-IV SULEV230	
L3SULEV20	California LEV-III SULEV20	L4SULEV25	California LEV-IV SULEV25	
L3LEV395	California LEV-III LEV395	L4SULEV30	California LEV-IV SULEV30	
L3ULEV340	California LEV-III ULEV340	L4SULEV75	California LEV-IV SULEV75	
L3ULEV250	California LEV-III ULEV250	L4SULEV85	California LEV-IV SULEV85	
L3ULEV200	California LEV-III ULEV200	L4ULEV125	California LEV-IV ULEV125	

## Certification Summary Information Report

Test Group		TTKXV02.0FFB	Evaporative/Refueling Family		TTKXR0095GCP
L3SULEV170	California LEV-III SULEV170		L4ULEV200	California LEV-IV ULEV200	
L3SULEV150	California LEV-III SULEV150		L4ULEV250	California LEV-IV ULEV250	
L3LEV630	California LEV-III LEV630		L4ULEV270	California LEV-IV ULEV270	
L3ULEV570	California LEV-III ULEV570		L4ULEV40	California LEV-IV ULEV40	
L3ULEV400	California LEV-III ULEV400		L4ULEV400	California LEV-IV ULEV400	
L3ULEV270	California LEV-III ULEV270		L4ULEV50	California LEV-IV ULEV50	
L3SULEV230	California LEV-III SULEV230		L4ULEV60	California LEV-IV ULEV60	
L3SULEV200	California LEV-III SULEV200		L4ULEV70	California LEV-IV ULEV70	
<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	
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	