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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: ADVANCED DRIVER ASSISTANCE SYSTEM: FRONT CAMERA SYSTEM: FAIL-SAFE CHART; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

FAIL-SAFE CHART


FAIL-SAFE FUNCTION









- (a) If the system is malfunctioning, the telltale warning message is displayed on the multi-information display and the system is suspended in accordance with the malfunction.

Telltale Status List

INDICATOR STATUS	CONDITIONS
	The advanced driver assistance system is limited/disabled as a advanced driver assistance system related malfunction occurred
	The pre-collision system is limited/disabled as a pre-collision system related malfunction occurred
	The dynamic radar cruise control is limited/disabled as a dynamic radar cruise control related malfunction occurred
	The cruise control is limited/disabled as a cruise control related malfunction occurred
	The lane departure alert is limited/disabled as a lane departure alert related malfunction occurred
	The lane tracing assist is limited/disabled as a lane tracing assist related malfunction occurred
	The proactive driving assist is limited/disabled as a proactive driving assist related malfunction occurred

List of Indicator Lights

INDICATOR STATUS	CONDITIONS
	Pre-collision system related malfunctions or outages

INDICATOR STATUS	CONDITIONS
	Lane tracing assist related malfunction or function cancellation
	Lane departure alert related malfunction or function cancellation
	Lane change assist related malfunction or function cancellation*1
	Dynamic radar cruise control related malfunction or function cancellation
	Cruise control related malfunction or function cancellation
	Automatic high beam related malfunction or function cancellation
	Road sign assist related malfunction or function cancellation*2
	Proactive driving assist related malfunction or function cancellation

*1: w/ Lane Change Assist

*2: w/ Road Sign Assist

WARNING MESSAGE	CAUSE	DTC/ROB NO.	CONDITIONS TO RETURN TO NORMAL
"System Malfunction Visit Your Dealer"	Yaw Rate Sensor Malfunction	X2000	After the malfunction is resolved, turn on the ignition switch again
	Steering Angle Sensor Malfunction	X2001	
	Speed Sensor Malfunction	X2004	
	Front Recognition Camera Optical Axis Not Adjusted	X2014	
	Front Radar Sensor Destination Malfunction	X2020	
	Front Radar Sensor Malfunction	X2021	
	Front Radar Sensor Optical Axis Misalignment Malfunction	X2022	

WARNING MESSAGE	CAUSE	DTC/ROB NO.	CONDITIONS TO RETURN TO NORMAL
	Front Radar Sensor Optical Axis Not Adjusted	X2023	
	Front Side Radar Sensor Malfunction	X2030	
	Front Side Radar Sensor Optical Axis Not Adjusted	X2036	
	Rear Side Radar Sensor Malfunction	X2038	
	Rear Side Radar Sensor Optical Axis Not Adjusted	X203B	
	Acceleration Sensor Malfunction	X204A	
	Meter Speed Tolerance Malfunction	X2084	
	Electric Parking Brake Control Module Malfunction	X2085	
	Communication Error from Steering Switch Control Module to Instrument Panel Cluster Control Module	X20B9	
	Front Recognition Camera => BRK Communication Invalid	X216E	
	Front Recognition Camera => FRD Communication Error	X216F	
	BH System Malfunction	X21BA	
	Lateral Control System Malfunction	X2400	
	Automatic Brake Malfunction (Main)	X2401	
	Powertrain System Malfunction	X2402	
	Automatic Brake Malfunction (Sub)	X2403	
	Driver Brake Malfunction	X2404	
	Parking Brake Malfunction	X2405	
	Brake Hold Malfunction	X2406	
	CXPI Communication Error (CMB)	X2501	
	Drive Monitor ECU Malfunction	X2502	
	ABS Not Operating Condition	X2904	
	ECU Security Key Not Registered	XF01B	

WARNING MESSAGE	CAUSE	DTC/ROB NO.	CONDITIONS TO RETURN TO NORMAL
"System Malfunction Visit Your Dealer"	Camera "A" Heater Control Circuit Short to Ground	C00CA11	After the malfunction is resolved, turn on the ignition switch again
	Camera "A" Heater Control Circuit Short to Battery or Open	C00CA15	
	Control Module Internal Temperature Sensor "A" Circuit Circuit Voltage Out of Range	C10001C	

WARNING MESSAGE	CAUSE	DTC/ROB NO.	CONDITIONS TO RETURN TO NORMAL
	Control Module Internal Temperature Sensor "B" Circuit Voltage Out of Range	C10051C	
	Control Module Internal Temperature Sensor A/B Correlation Signal Compare Failure	C100A62	
	Stop Lamp Relay Actuator Stuck	C138071	
	Steering Touch Sensor Component Internal Failure	C1A7796	
	Front Recognition Camera ADC Internal Electronic Failure	C1A7F49	
	Main Microcomputer in Front Recognition Camera Calibration / Parameter Memory Failure	C1A9346	
	Image Processing Microcomputer in Front Recognition Camera Watchdog / Safety MCU Failure	C1A9447	
	Image Processing Module Malfunction in Front Recognition Camera	C1A9500	
	Front Recognition Camera Optical Axis Misalignment Malfunction	C1AA800	
	Hybrid/EV Powertrain Control Module "A" Unexpected Operation	P0A1D94	

WARNING MESSAGE	CAUSE	DTC/ROB NO.	CONDITIONS TO RETURN TO NORMAL
"System Malfunction Visit Your Dealer"	Lost Communication with ECM/PCM "A" Missing Message	U010087	After the malfunction is resolved, turn on the ignition switch again
	Lost Communication with TCM Missing Message	U010187	
	Lost Communication with Gear Shift Control Module "A" Missing Message	U010387	
	Lost Communication with Steering Angle Sensor Module Missing Message	U012687	
	Lost Communication with Brake System Control Module "A" Missing Message	U012987	
	Lost Communication with Power Steering Control Module "A" Missing Message	U013187	
	Lost Communication with Body Control Module Missing Message	U014087	
	Lost Communication with Instrument Panel Cluster (IPC) Control Module Missing Message	U015587	
	Lost Communication with Navigation Control Module Missing Message	U016387	

WARNING MESSAGE	CAUSE	DTC/ROB NO.	CONDITIONS TO RETURN TO NORMAL
	Lost Communication with Telematic Control Module "A" Missing Message	U019887	
	Lost Communication with Side Obstacle Detection Control Module "A" Missing Message	U023287	
	Lost Communication with Cruise Control Front Distance Range Sensor Single Sensor or Center Missing Message	U023587	
	Lost Communication with Image Processing Sensor E Missing Message	U026987	
	Lost Communication with Hybrid/EV Powertrain Control Module Missing Message	U029387	
	Internal Control Module Software Incompatibility Not Programmed	U030051	
	Internal Control Module Software Incompatibility Invalid / Incompatible Software Component	U030057	
	Software Incompatibility with ECM/PCM Invalid/Incompatible Software Component	U030157	
	Software Incompatibility with Power Steering Control Module Invalid / Incompatible Software Component	U032057	
	Software Incompatibility With Body Control Module Not Programmed	U032251	
	Software Incompatibility With Body Control Module Invalid / Incompatible Software Component	U032257	
	Lost Communication with Electric Parking Brake Module Missing Message	U110687	
	Lost Communication with Intuitive Parking Assist Module Missing Message	U111087	
	Lost Communication with Combination Switch Control Module Missing Message	U111287	
	Lost Communication with Cruise Control Front Distance Range Sensor Front Side "B" Missing Message	U123687	
	Software Incompatibility with Clearance Warning Control Module Invalid / Incompatible Software Component	U130957	
	Instrument Panel Cluster (IPC) Control Module Invalid / Incompatible Software Component	U130D57	
	Software Incompatibility with Navigation Control Module Invalid / Incompatible Software Component	U131457	

WARNING MESSAGE	CAUSE	DTC/ROB NO.	CONDITIONS TO RETURN TO NORMAL
"System Stopped See Owner's Manual"	Brake Control System Malfunction	X2003	After the malfunction is resolved, turn on the ignition switch again
	Front Recognition Camera Outside Guaranteed Operating Voltage	X2017	
	Front Radar Sensor Outside Guaranteed Operating Voltage	X2028	
	Front Side Radar Sensor Optical Axis Misalignment Malfunction	X2031	
	Front Side Radar Sensor Temporary Unavailable	X2035	
	Rear Side Radar Sensor Optical Axis Misalignment Malfunction	X2039	
	Rear Side Radar Sensor Temporary Unavailable	X203A	
	Power Steering Control System for Steering Assist Steering Angle Malfunction	X2082	
	Navigation Function Invalid	X2083	
	Communication Error by ECU Security Key Not Registered (Hybrid/EV Powertrain Control Module)	X2162	
	Communication Error by ECU Security Key Not Registered (TCM)	X2163	
	Communication Error by ECU Security Key Not Registered (MET)	X2164	
	Communication Error by ECU Security Key Not Registered (Power Steering Control Module "A")	X2166	
	Communication Error by ECU Security Key Not Registered (VSC)	X2167	
	IG OFF Status	X21A0	
PDA (DA) Brake Control Invalid Condition	X2351		
Drive Monitor Temporary Not Available	X2503		
"System Stopped Front Camera Low Visibility See Owner's Manual"	Front Recognition Camera Dirt	X2015	Causes of poor visibility, such as dirt or fog on the forward recognition camera, are eliminated
	Front Lighting Control System Inoperative Condition by Front Recognition Camera Adverse Environment	X204E	
"System Stopped Front Camera Out of Temperature Range Wait	Front Recognition Camera Outside Guaranteed Operating Temperature	X2016	When the temperature returns to within the operating range

WARNING MESSAGE	CAUSE	DTC/ROB NO.	CONDITIONS TO RETURN TO NORMAL
until Normal Temperature"	Front Lighting Control System Inoperative Condition by Front Recognition Camera High Temperature	X204D	
"System Stopped Front Radar Sensor Blocked Clean Radar Sensor"	Front Radar Sensor Dirt	X2026	When removing dirt from the millimeter wave radar sensor assembly
"System Stopped Front Radar In Self Calibration See Owner's Manual"	Front Radar Sensor Temporary Unavailable (Horizontal Direction Optical Axis Misalignment)	X2025	When millimeter wave radar sensor assembly axis learning is completed
	Front Radar Sensor Temporary Unavailable (Optical Axis Misalignment)	X2029	
"System Stopped Front Radar Sensor Out of Temperature Range Wait until Normal Temperature"	Front Radar Sensor Outside Guaranteed Operating Temperature	X2027	When the temperature returns to within the operating range

