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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: ADVANCED DRIVER ASSISTANCE SYSTEM: DRIVER MONITOR CAMERA SYSTEM: DATA LIST / ACTIVE TEST; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

DATA LIST / ACTIVE TEST

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

DATA LIST

(a) Read the Data List according to the display on the GTS.

Chassis > Driver Monitor Camera Control > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Total Distance Traveled	The total distance traveled	0 to 16777215	The total distance traveled	-
Total Distance Traveled - Unit	The units used when displaying the total distance traveled	km or mile	Units for total distance traveled	-
Face Detection Status	Face detection condition	Not detected or Detected	Not detected: Face is not detected Detected: Face is detected	-
Sunglasses Detection Status	IR-blocking sunglasses detection condition	Not detected or Detected	Not detected: IR-blocking sunglasses not detected Detected: IR-blocking sunglasses detected	-
Face Mask Detection Status	Mask detection condition	Not detected or Detected	Not detected: Mask is not detected Detected: Mask is detected	-
Glasses Detection Status	Eyeglasses detection condition	Not detected or Detected	Not detected: Eyeglasses are not detected Detected: Eyeglasses are detected	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Face Undetection Factor	Reason why face is not detected	Clean/No Backlight, Unclean/No Backlight, Clean/With Backlight or Unclean/With Backlight	Clean/No Backlight: When there is no dirt and backlight Unclean/No Backlight: When there is dirt but no backlight Clean/With Backlight: When there is no dirt but backlight Unclean/With Backlight: When there is dirt and backlight	-
Voltage A/D Converted Value	Internal voltage value	0.00 to 19.99 V	12 to 14 V	-
Driver Monitor Camera Control Processing Mode	Processing mode for driver monitor camera control	Initial Face Detection, Face in Pursuit, Face in Detection or Face in Re-Pursuit	Initial Face Detection: When performing initial face detection Face in Pursuit: When tracking face Face in Detection: When detecting face Face in Re-Pursuit: When performing facial tracking again	-
Upper Part of the Face Missing Decision	Judgment of upper face cutoff	OFF or ON	OFF: When the driver's upper face is not cutoff ON: When the driver's upper face is cutoff	If "ON", adjust the driver position so that the driver's face is detected correctly
Lower Part of the Face Missing Decision	Judgment of lower face cutoff	OFF or ON	OFF: When the driver's lower face is not cutoff ON: When the driver's lower face is cutoff	If "ON", adjust the driver position so that the driver's face is detected correctly

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Face Direction (Vertical)	Direction of the face (vertical)	-128 to 127 deg	Value according to the viewing angle (vertical) is output	The standard for the output value when the driver is facing forward is 5 to 30 deg
Face Direction (Horizontal)	Viewing angle (horizontal)	-128 to 127 deg	Value according to the viewing angle (horizontal) is output	The standard for the output value when the driver is facing forward is -15 to 15 deg
Face Direction (Tilt Head)	Direction of the face (neck inclination)	-128 to 127 deg	Value according to the direction of the face (neck inclination) is output	The standard for the output value when the driver is facing forward is -15 to 15 deg
Eyes Openness	Opening angle (distance between upper and lower lids) of both eyes	0 to 25.5 mm (0 to 1.0 in.)	Value according to the opening angle (distance between upper and lower lids) of both eyes is output	-
Eyes Openness (1 Frame Before)	Opening angle (distance between upper and lower lids) of both eyes 1 frame prior	0 to 25.5 mm (0 to 1.0 in.)	Value according to the opening angle (distance between upper and lower lids) of both eyes 1 frame prior is output	-
Eyes Openness (2 Frames Before)	Opening angle (distance between upper and lower lids) of both eyes 2 frames prior	0 to 25.5 mm (0 to 1.0 in.)	Value according to the opening angle (distance between upper and lower lids) of both eyes 2 frames prior is output	-
Eyes Open Close Judgement	Results of judging whether both eyes are open/closed	Unable to Judge, Open or Close	Unable to Judge: When judgment is impossible Open: When both eyes are open Close: When both eyes are closed	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Eyes Open Close Judgement (1 Frame Before)	Results of judging whether both eyes are open/closed 1 frame prior	Unable to Judge, Open or Close	Unable to Judge: When judgment is impossible Open: When both eyes are open Close: When both eyes are closed	-
Eyes Open Close Judgement (2 Frames Before)	Results of judging whether both eyes are open/closed 2 frames prior	Unable to Judge, Open or Close	Unable to Judge: When judgment is impossible Open: When both eyes are open Close: When both eyes are closed	-
Eye Direction Angle (Vertical)	Viewing angle (vertical)	-128 to 127 deg	Value according to the viewing angle (vertical) is output	The standard for the output value when the driver is facing forward is 5 to 30 deg
Eye Direction Angle (Horizontal)	Viewing angle (horizontal)	-128 to 127 deg	Value according to the viewing angle (horizontal) is output	The standard for the output value when the driver is facing forward is -15 to 15 deg
Eye Focus Point Position (Horizontal)	Eye focus point position (horizontal direction)	-8 to 7	Value according to the eye focus point position (horizontal) is output	-
Eye Focus Point Position (Vertical)	Eye focus point position (vertical direction)	-8 to 7	Value according to the eye focus point position (vertical) is output	-
Mouth Openness	Opening angle of the driver's mouth	0 to 255 mm (0 to 10.0 in.)	Value according to the mouth opening angle is output	-
Half Opened Eye Condition	Results of detecting eyes half open condition	Not Detected or Detected	Not Detected: When eyes half open is not detected Detected: When eyes half open is detected	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Half Opened Eye Condition (1 Frame Before)	Results of detecting eyes half open condition 1 frame prior	Not Detected or Detected	Not Detected: When eyes half open is not detected Detected: When eyes half open is detected	-
Half Opened Eye Condition (2 Frames Before)	Results of detecting eyes half open condition 2 frames prior	Not Detected or Detected	Not Detected: When eyes half open is not detected Detected: When eyes half open is detected	-
Face Position (X axis)	Position of the face (X axis)	-128 to 127 cm (-4.20 to 4.17 ft.)	Value according to the position of the face (horizontal) is output	-
Face Position (Y axis)	Position of the face (Y axis)	-128 to 127 cm (-4.20 to 4.17 ft.)	Value according to the position of the face (vertical) is output	-
Face Position (Z axis)	Position of the face (Z axis)	0 to 255 cm (0 to 8.36 ft.)	Value according to the position of the face (neck inclination) is output	-
Face Direction Angle Calculation Reliability	Reliability of calculating the angle of the facial direction	Very Low, Low, Middle or High	Very Low: When the reliability is extremely low Low: When the reliability is low Middle: When the reliability is slightly low High: When the reliability is high	-
Eye Direction Angle Calculation Reliability	Reliability of calculating the viewing angle	Very Low, Low, Middle or High	Very Low: When the reliability is extremely low Low: When the reliability is low Middle: When the reliability is slightly	If the driver is wearing eyeglasses and reliability drops, LED light from the driver monitor may be reflected on the eyeglasses resulting in

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			low High: When the reliability is high	incorrect judgment (false warning)
Eye Openness Calculation Reliability	Reliability of calculating the eye opening angle (distance between upper and lower lids)	Very Low, Low, Middle or High	Very Low: When the reliability is extremely low Low: When the reliability is low Middle: When the reliability is slightly low High: When the reliability is high	-
Eye Openness Calculation Reliability (1 Frame Before)	Reliability of calculating the eye opening angle (distance between upper and lower lids) 1 frame prior	Very Low, Low, Middle or High	Very Low: When the reliability is extremely low Low: When the reliability is low Middle: When the reliability is slightly low High: When the reliability is high	-
Eye Openness Calculation Reliability (2 Frames Before)	Reliability of calculating the eye opening angle (distance between upper and lower lids) 2 frames prior	Very Low, Low, Middle or High	Very Low: When the reliability is extremely low Low: When the reliability is low Middle: When the reliability is slightly low High: When the reliability is high	-
Front Gaze Status	Whether the driver is looking forward	0 to 7	0: Not detected 1: Not Front 1 (When driver is looking somewhere other than the front area) 2: Not Front 2 (When driver is looking somewhere other than the front area)	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			3: Not Front 3 (When driver is looking somewhere other than the front area) 4: Front 1 (When driver is looking toward front area) 5: Front 2 (When driver is looking toward front area) 6: Front 3 (When driver is looking toward front area) 7: Front 4 (When driver is looking toward front area)	
Lost Face Warning Level	Determined that driver's face cannot be seen	OFF, ON(Level1), ON(Level2) or ON(Level3)	OFF: Not detected ON (Level1): Status has continued ON (Level2): Status has continued longer than Level 1 ON (Level3): Status has continued longer than Level 2	-
Inattentive Driving Warning Level	Judgment that driver is inattentive	OFF, ON(Level1), ON(Level2) or ON(Level3)	OFF: Not detected ON (Level1): Status has continued ON (Level2): Status has continued longer than Level 1 ON (Level3): Status has continued longer than Level 2	-
Closed Eyes Warning Level	Judgment that driver's eyes are closed	OFF, ON(Level1), ON(Level2) or ON(Level3)	OFF: Not detected ON (Level1): Status has continued ON (Level2): Status has continued longer than Level 1 ON (Level3): Status has continued longer than Level 2	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Careless Driving Warning Level	Judgment that driver is driving carelessly	OFF, ON(Level1), ON(Level2) or ON(Level3)	OFF: Not detected ON (Level1): Status has continued ON (Level2): Status has continued longer than Level 1 ON (Level3): Status has continued longer than Level 2	-
Poor Posture Warning Level	Judgment that driver's posture is poor	OFF, ON(Level1), ON(Level2) or ON(Level3)	OFF: Not detected ON (Level1): Status has continued ON (Level2): Status has continued longer than Level 1 ON (Level3): Status has continued longer than Level 2	-
Driver Abnormality Warning Level	Judgment that the driver's condition is abnormal	OFF, ON(Level1), ON(Level2) or ON(Level3)	OFF: Not detected ON (Level1): Status has continued ON (Level2): Status has continued longer than Level 1 ON (Level3): Status has continued longer than Level 2	-
Face Direction Zero Point Learning Value (Vertical)	Face direction zero point learning value (vertical direction)	-128 to 127 deg	Output judgment of driver's straight-ahead position	-
Face Direction Zero Point Learning Value (Horizontal)	Face direction zero point learning value (horizontal direction)	-128 to 127 deg	Output judgment of driver's straight-ahead position	-
Face Direction Zero Point Learning Value (Tilt Head)	Face direction zero point learning value (tilt head direction)	-128 to 127 deg	Output judgment of driver's straight-ahead position	-
Face Position Zero Point Learning Value (X axis)	Face direction zero point learning value (x direction)	-32768 to 32767 cm (-1074.79 to 1074.76 ft.)	Output judgment of driver's straight-ahead position	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Face Position Zero Point Learning Value (Y axis)	Face direction zero point learning value (y direction)	-32768 to 32767 cm (-1074.79 to 1074.76 ft.)	Output judgment of driver's straight-ahead position	-
Face Position Zero Point Learning Value (Z axis)	Face direction zero point learning value (z direction)	-32768 to 32767 cm (-1074.79 to 1074.76 ft.)	Output judgment of driver's straight-ahead position	-
Camera Module Initialization Failure	Initialization malfunction for driver monitor camera	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Image Sensor Pattern Check Failure	Output pattern malfunction for driver monitor camera	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Camera Communication Failure	Communication malfunction for driver monitor camera	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Vertical Synchronizing signal Failure	Output signal malfunction for driver monitor camera	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
I2C Communication Failure	Communication malfunction for driver monitor camera	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Video Import Failure	Input signal malfunction from driver monitor camera	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Camera Communication Initialization Failure	Communication initialization malfunction for driver monitor camera	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
A/D Conversion Failure	Internal voltage malfunction for driver monitor	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Communication Failure Between Microcomputers (Monitoring -> Processing)	Internal communication malfunction for driver monitor	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
ECU Temperature Monitoring Circuit Failure	Internal temperature malfunction for driver monitor	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Data Flash Control Area Corruption	Storage area malfunction for driver monitor	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Communication Failure Between Microcomputers (Processing -> Monitoring)	Internal communication malfunction for driver monitor	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Processing Microcomputer Stop Failure	Internal ECU malfunction for driver monitor	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Floating Point Register Failure	Internal ECU malfunction for driver monitor	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Deserializer Initialization Failure	Communication malfunction for driver monitor	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Video Stuck Failure	Internal image stuck malfunction for driver monitor	No or Yes	No: Malfunction not detected	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			Yes: Malfunction detected	
LED Failure 1	LED malfunction for driver monitor	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Internal Power Supply Failure System 1	Internal power source malfunction for driver monitor (system 1)	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Internal Power Supply Failure System 2	Internal power source malfunction for driver monitor (system 2)	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Internal Power Supply Failure System 3	Internal power source malfunction for driver monitor (system 3)	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Internal Power Supply Failure System 4	Internal power source malfunction for driver monitor (system 4)	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Internal Power Supply Failure System 5	Internal power source malfunction for driver monitor (system 5)	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Internal Power Supply Failure System 6	Internal power source malfunction for driver monitor (system 6)	No or Yes	No: Malfunction not detected Yes: Malfunction detected	-
Plus Support Driver Classification	Result of Plus Support mode applicability judgment	Normal or Plus Support	Normal: Not a Plus Support user Plus Support: Plus Support user	-
Driver Seat User Number	Which user was detected by personal identification	Nothing, User1, User2, User3 or Guest	Nothing: Not identified	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			User1: Identified as registered user 1 User2: Identified as registered user 2 User3: Identified as registered user 3 Guest: Identified as guest	

