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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -	]	
Title: ADVANCED DRIVER ASSISTA	NCE SYSTEM: FRONT CAME	RA SYSTEM: FREEZE FRAME DATA;	2023 - 20	)24 MY
Prius Prius Prime [03/2023 - ]				

# **FREEZE FRAME DATA**

# **DESCRIPTION**

(a) When a front camera system DTC is stored, the forward recognition camera stores the current vehicle (ECU or sensor) state as Freeze Frame Data.

# **CHECK FREEZE FRAME DATA**

(a) Select a DTC to display the freeze frame data.

# Chassis > Front Recognition Camera > Trouble Codes

(b) Check the freeze frame data for the output DTC.

#### FREEZE FRAME DATA CHART

#### HINT:

Depending on the specifications of the vehicle, etc., some items may not be displayed or may not be operable.

#### Chassis > Front Recognition Camera

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Total Distance Traveled	-	-	-	Cannot be used
Total Distance Traveled - Unit	-	-	-	Cannot be used
Online Adjustment Progress Status	Online axis adjustment progress of forward recognition camera	0%, 10%, 20%, 40%, 60%, 80% or 100%	The online axis adjustment progress is displayed.	-
Online Adjustment Normal Completion Flag	Online axis adjustment status of forward recognition camera	Not Normal Complete or Normal Complete	The online axis adjustment status is displayed.	-
FOE Confirmation All Target Recognition Process Complete Flag	Axis alignment (One Time Recognition) status of forward recognition camera	Incomplete or Complete	The axis alignment (One Time Recognition) status is displayed.	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Confirmation FOE Origin X	FOE coordinates X when forward recognition camera optical axis confirmation is being performed	0 to 2896 pix	-	-
Confirmation FOE Origin Y	FOE coordinates Y when forward recognition camera optical axis confirmation is being performed	0 to 1876 pix	-	-
Confirmation Roll Angle	Roll angle when forward recognition camera optical axis confirmation is being performed	-5 to 5 deg	-	-
FOE Origin X Gap	Difference between initial FOE coordinates X and FOE coordinates X when forward recognition camera optical axis confirmation is being performed	-5 to 5 deg	-	-
FOE Origin Y Gap	Difference between initial FOE coordinates Y and FOE coordinates Y when forward recognition camera optical axis confirmation is being performed	-5 to 5 deg	-	-
Roll Angle Gap	Difference between initial roll angle and roll angle when forward recognition camera optical axis confirmation is being performed	-5 to 5 deg	-	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Field FOE Origin X gap	Difference between learned FOE coordinates X and FOE coordinates X when forward recognition camera optical axis confirmation is being performed	-5 to 5 deg	-	-
Field FOE Origin Y gap	Difference between learned FOE coordinates Y and FOE coordinates Y when forward recognition camera optical axis confirmation is being performed	-5 to 5 deg	-	-
Field Roll Angle Gap	Difference between learned roll angle and roll angle when forward recognition camera optical axis confirmation is being performed	-5 to 5 deg	-	-
IG Voltage	IG voltage value	0.00 to 21.31 V	11 to 14V	-
Camera Temperature	Temperature of forward recognition camera	-128 to 127°C (-262 to 261°F)	Temperature of forward recognition camera displayed	-
Buzzer (Line) Information	Whether or not a buzzer is installed to the forward recognition camera	Without Buzzer (Line) or With Buzzer (Line)	Without Buzzer (Line): Not installed With Buzzer (Line): Installed	-
Camera Low Temperature Flag Counter	Cumulative number of times forward recognition camera low temperature flag was set	0 to 255	Current number of times forward recognition camera low temperature flag was set	<ul> <li>By clearing vehicle control history (RoB), the count will be reset</li> <li>If the number is 255 or more, 255 is displayed.</li> </ul>

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Camera High Temperature1 Flag Counter	Cumulative number of times forward recognition camera high temperature flag 1 was set	0 to 255	Current number of times forward recognition camera high temperature flag 1 was set	<ul> <li>By clearing vehicle control history (RoB), the count will be reset</li> <li>If the number is 255 or more, 255 is displayed.</li> </ul>
Camera Low Voltage Flag Counter	Cumulative number of times forward recognition camera was outside of the guaranteed operation voltage range (vehicle control history (RoB) (low voltage))	0 to 255	Current number of times forward recognition camera was outside of the guaranteed operation voltage range (vehicle control history (RoB) (low voltage))	<ul> <li>By clearing vehicle control history (RoB), the count will be reset</li> <li>If the number is 255 or more, 255 is displayed.</li> </ul>
Camera High Voltage Flag Counter	Cumulative number of times forward recognition camera was outside of the guaranteed operation voltage range (vehicle control history (RoB) (high voltage))	0 to 255	Current number of times forward recognition camera was outside of the guaranteed operation voltage range (vehicle control history (RoB) (high voltage))	<ul> <li>By clearing vehicle control history (RoB), the count will be reset</li> <li>If the number is 255 or more, 255 is displayed.</li> </ul>
Axis Misalignment Cumulative Count	Cumulative number of forward recognition camera axis misalignment	0 to 255	Displays the cumulative number of forward recognition camera beam axis misalignments.	If the number is 255 or more, 255 is displayed.
Front Recognition Camera Not Adjusted Flag	Status of forward recognition camera optical axis alignment	OFF or ON	OFF: Adjusted ON: Not adjusted	-
FOE Improper Flag	FOE error when forward recognition camera optical axis alignment is being performed	OFF or ON	OFF: Normal ON: Abnormal	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Targets Distance Improper Flag	Target distance error when forward recognition camera optical axis alignment is being performed	OFF or ON	OFF: Normal ON: Abnormal	-
Targets Not Fixed Flag	Target fixing error when forward recognition camera optical axis alignment is being performed	OFF or ON	OFF: Normal ON: Abnormal	-
Numbers of Targets Improper Flag	Abnormal target number error when forward recognition camera optical axis alignment is being performed	OFF or ON	OFF: Normal ON: Abnormal	-
Relative Distance of Targets Improper Flag	Target setting position error when forward recognition camera optical axis alignment is being performed	OFF or ON	OFF: Normal ON: Abnormal	-
Target 1 Improper Flag	Target 1 error when forward recognition camera optical axis alignment is being performed	OFF or ON	OFF: Normal ON: Abnormal	-
Target 2 Improper Flag	Target 2 error when forward recognition camera optical axis alignment is being performed	OFF or ON	OFF: Normal ON: Abnormal	-
Target 3 Improper Flag	Target 3 error when forward recognition camera optical axis alignment is being performed	OFF or ON	OFF: Normal ON: Abnormal	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Recognition Time Exceeded Flag	Excessive recognition time error when forward recognition camera optical axis alignment is being performed	OFF or ON	OFF: Not exceeded ON: Exceeded	-
Improper Roll Angle Flag	Roll angle error when forward recognition camera optical axis alignment is being performed	OFF or ON	OFF: Normal ON: Abnormal	-
Online Adjustment Vehicle Speed Improper Flag	Excessive vehicle speed error when forward recognition camera driving axis alignment is being performed	OFF or ON	OFF: Not exceeded ON: Exceeded	-
Online Adjustment Camera Blockage Flag	Camera dirty state when forward recognition camera driving axis alignment is being performed	OFF or ON	OFF: Not dirty ON: Dirty	-
Online Adjustment Impossible Flag	Recognition invalid state when forward recognition camera driving axis alignment is being performed	OFF or ON	OFF: Recognition valid ON: Recognition invalid	-
Online Adjustment FOE Improper Flag	Outside of FOE range error when forward recognition camera driving axis alignment is being performed	OFF or ON	OFF: Normal ON: Abnormal	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Online Adjustment FOE Writing Incomplete Flag	FOE writing error when forward recognition camera driving axis alignment is being performed	OFF or ON	OFF: Normal ON: Abnormal	-
Online Adjustment Bad Condition Flag	Bad environment state when forward recognition camera driving axis alignment is being performed	OFF or ON	OFF: Environment not bad  ON: Environment bad	-
Camera Low Voltage Flag	Excessive low voltage status of forward recognition camera	OFF or ON	OFF: Low voltage not detected ON: Low voltage detected	If this item indicates "ON", the camera might be temporarily unavailable.
Camera High Voltage Flag	Excessive high voltage status of forward recognition camera	OFF or ON	OFF: High voltage not detected ON: High voltage detected	If this item indicates "ON", the camera might be temporarily unavailable.
Camera Low Temperature Flag	Excessive low temperature status of forward recognition camera	OFF or ON	OFF: Excessive low temperature not detected (approximately -30°C (-22°F) or more)  ON: Excessive low temperature detected (approximately -30°C (-22°F) or less)	<ul> <li>If this item indicates "ON", the camera might be temporarily unavailable.</li> <li>If this item indicates "ON", vehicle control history (RoB) X2016 is stored.</li> <li>If this item indicates "ON", the camera will be temporarily unavailable. If the situation does not improve even after the vehicle is heated, it is possible that the forward recognition camera is malfunctioning.</li> </ul>
Camera High Temperature 1 Flag	Excessive low temperature status of forward recognition camera	OFF or ON	OFF: Excessive high temperature not detected (approximately	If this item indicates "ON", the camera might be temporarily unavailable.  If this item indicates "ON", vehicle control

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			80°C (176°F) or less)	history (RoB) X2016 is stored.
			ON: Excessive high temperature detected (approximately 80°C (176°F) or more)	HINT:  The temperature of the windshield glass may reach 100°C (212°F) or more in summer.  If this item indicates "ON", the camera will be temporarily unavailable. If the situation does not improve even after the vehicle is cooled and left as is for 10 minutes or more, it is possible that the forward recognition camera is malfunctioning.
Camera Optical Axis Misalignment Flag (X+)	Forward recognition camera beam axis misalignment (horizontal/left direction)	OFF or ON	OFF: Camera not misaligned in X+ direction  ON: Camera misaligned in X+ direction	-
Camera Optical Axis Misalignment Flag (X-)	Forward recognition camera beam axis misalignment (horizontal/right direction)	OFF or ON	OFF: Camera not misaligned in X-direction  ON: Camera misaligned in X-direction	-
Camera Optical Axis Misalignment Flag (Y+)	Forward recognition camera beam axis misalignment (vertical/down direction)	OFF or ON	OFF: Camera not misaligned in Y+ direction  ON: Camera misaligned in Y+ direction	-
Camera Optical Axis Misalignment Flag (Y-)	Forward recognition camera beam axis misalignment (vertical/up direction)	OFF or ON	OFF: Camera not misaligned in Y-direction ON: Camera misaligned in Y-direction	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Camera Roll Angle Misalignment Flag	Forward recognition camera beam axis misalignment (roll direction)	OFF or ON	OFF: Camera not misaligned in roll direction  ON: Camera misaligned in roll direction	-
ECU Security Key Registered Incomplete Flag	Security key unregistered status of forward recognition camera ECU	OFF, ON or Not Fixed	Current security key registration status of ECU	-
Camera Low Visibility Flag	Low visibility of the forward recognition camera	No Low Visibility or Under Low Visibility	The current visibility is displayed	-
Blockage Condition Visibility Level	Blockage condition recognized by the forward recognition camera	Level0, Level1, Level2, Level3, Level4, Level5, Level6, Level7 or Level8	The blockage condition is displayed.	-
Fogged Condition Visibility Level	Fogged condition recognized by the forward recognition camera	Level0, Level1, Level2, Level3, Level4, Level5, Level6, Level7 or Level8	The fogged condition is displayed.	-
Bad Weather Condition Visibility Level	Bad weather condition recognized by the forward recognition camera	Level0, Level1, Level2, Level3, Level4, Level5, Level6, Level7 or Level8	The bad weather condition is displayed.	-
Heater Available Flag	Whether a hot-wire heater exists or not	Heater Absent or Heater Present	Heater Absent: w/o Heater Wire Heater Present: w/ Heater Wire	If this item is Heater Absent, a new forward recognition camera with an open in the heater wire circuit may be installed.
Heater Control Allow Flag	Whether heater wire control allowed or not	Not Allowed or Allowed	Not Allowed: Heater wire control not allowed  Allowed: Heater wire control	If this item is Not Allowed, following conditions are expected.  • Vehicle control history (RoB) stored by forward recognition camera

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			allowed	<ul> <li>Air conditioning system is malfunctioning</li> <li>Communication malfunction between forward recognition camera and air conditioning amplifier assembly</li> </ul>
Heater During Control Flag	Heater wire control status	Not Controlled or In Control	Not Controlled: Heater wire not operating In Control: Heater wire operating	This item becomes In Control when Heater Control Allow Flag is Allowed, ambient temperature is 10°C (50°F) or less and area front of forward recognition camera is fogged. (w/ heated windshield defroster: While heated windshield defroster is operating, this item remains Not Controlled)
IGP	IG status	IG-P OFF or IG- P ON	IG-P OFF: IG OFF	-
IGP Flank	IG status	Out of IGP-ON - > OFF or IGP- ON -> OFF	IGP-ON -> OFF	-
PCS Installation Availability	Whether pre- collision system installed or not	Not Installed or Installed	Not Installed: PCS not installed Installed: PCS installed	-
FCTA Installation Availability	Whether front cross traffic alert installed or not	Not Installed or Installed	Not Installed: FCTA not installed Installed: FCTA installed	-
ACC Installation Availability	Whether dynamic radar cruise control installed or not	Not Installed or Installed	Not Installed: ACC not installed  Installed: ACC installed	-
CCS Installation Availability	Whether cruise control installed or not	Not Installed or Installed	Not Installed: CCS not installed Installed: CCS installed	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
LDA Installation Availability	Whether lane departure alert installed or not	Not Installed or Installed	Not Installed: LDA not installed Installed: LDA installed	-
LTA Installation Availability	Whether lane trace assist installed or not	Not Installed or Installed	Not Installed: LTA not installed Installed: LTA installed	-
LCA Installation Availability	Whether lane change assist installed or not	Not Installed or Installed	Not Installed: LCA not installed Installed: LCA installed	-
AHB Installation Availability	Whether automatic high beam installed or not	Not Installed or Installed	Not Installed: AHB not installed Installed: AHB installed	-
RSA Installation Availability	Whether road sign assist installed or not	Not Installed or Installed	Not Installed: RSA not installed Installed: RSA installed	-
TMN Installation Availability	Whether TMN installed or not	Not Installed or Installed	Not Installed: TMN not installed Installed: TMN installed	-
PDA Installation Availability	Whether proactive driving assist installed or not	Not Installed or Installed	Not Installed: PDA not installed Installed: PDA installed	-
ISA Installation Availability	Whether speed limiter system installed or not	Not Installed or Installed	Not Installed: ISA not installed Installed: ISA installed	-
DESA Installation Availability	Whether emergency driving stop system installed or not	Not Installed or Installed	Not Installed: DESA not installed Installed: DESA installed	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Estimate Vehicle Acceleration	Estimated vehicle acceleration value	-32.768 to 32.767 m/s <sup>2</sup>	-	-
Estimated Vehicle Acceleration Condition	Estimated vehicle acceleration condition	Not Fixed, Valid, Invalid or Error	-	-
Mediation Result Longitudinal ID Value	Mediation result longitudinal ID value	0 to 63	-	-
Steering Wheel Information	Steering wheel information	Unused, Left, Right or Default Value	Steering wheel installation location	-
2WD/4WD Information	Vehicle drive information	2WD, 4WD or Default Value	The vehicle drive information is displayed	-
Powertrain Information	Powertrain information	Conventional, SS, HV, PHV, EV, 1MHV, FCV or Default Value	Conventional: Conventional vehicle SS: w/ Stop and start vehicle HV: Hybrid vehicle PHV: PHV vehicle EV: EV vehicle 1MHV: 1MHV vehicle FCV: FCV vehicle Default Value: Vehicle information not confirmed	-
Transmission Information	Transmission information	MT, AT, CVT, MMT, SMT, AT for HV or Default Value	The transmission type is displayed	-
Estimated Speed Unit	Vehicle speed unit	Unconfirmed, unit is kph or unit is mph	-	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Estimated Driving Side	Driving side	Unconfirmed, Right-hand driving estimated or Left-hand driving estimated	-	-
RSA Equipped	Road sign assist function availability	Not Equipped or Equipped	Not Equipped: Road sign assist function not equipped  Equipped: Road sign assist function equipped	-
Navigation Fusion Equipped	Road sign assist navigation fusion function availability	Not Equipped or Equipped	Not Equipped: Road sign assist navigation fusion function not equipped  Equipped: Road sign assist navigation fusion function equipped	-
GNSS Location Information Validation	GNSS location information	Invalid or Valid	-	-
LDA Customize Condition Flag	Lane departure alert customize condition	OFF or ON	Customize setting displayed	-
LDA Control Condition	Lane departure alert control condition	LDA Enabled or LDA Disabled	LDA Enabled	-
LTA Switch Condition Flag	ON/OFF status of LTA switch	OFF or ON	ON/OFF status of LTA switch	-
LTA Control Condition	Lane tracing assist control condition	LTA Enabled or LTA Disabled	LTA Enabled	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Hands-Off Customize Condition Flag	Advanced drive control condition	OFF or ON	Customize setting displayed	-
Hands-Off Control Condition	Advanced drive control status	Hands-Off Enabled or Hands-Off Disabled	Customize setting displayed	-
LCA Customize Condition Flag	Lane change assist customize condition	OFF or ON	Customize setting displayed	-
LCA Control Condition	Lane change assist control condition	LCA Enabled or LCA Disables	LCA Enabled	-
PCS Alarm Sensitivity Output Signal	Pre-collision system alarm sensitivity	Not Displayed, Fast, Standard or Slow	Customize setting displayed	-
PCS Switch OFF Condition Output Signal	Pre-collision system ON/OFF status	Function ON or Function OFF	Function ON: Pre- collision system ON Function OFF: Pre- collision system OFF	-
CTA Switch OFF Condition Output Signal	Front cross traffic alert ON/OFF status	Function ON or Function OFF	Function ON: Front cross traffic alert function ON  Function OFF: Front cross traffic alert function OFF	-
PCS Availability Flag Output Signal	Pre-collision system availability	Enabled or Disabled	Enabled	-
PCS Right Turn/Left Turn Warning Switch OFF Status	PCS right turn/left turn warning function ON/OFF status	Function ON or Function OFF	Function ON: PCS right turn/left turn warning function ON Function OFF: PCS right turn/left turn warning function OFF	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
PCS PBA Invalid Flag	Pre-collision brake assist function status	OFF or ON	OFF: Pre-collision brake assist function valid ON: Pre-collision brake assist function invalid	-
PCS PCW Invalid Flag	PCS warning buzzer function status	OFF or ON	OFF: PCS warning buzzer function valid ON: PCS warning buzzer function invalid	-
PCS PB Invalid Flag	Pre-collision brake function status	OFF or ON	OFF: Pre-collision brake function valid ON: Pre-collision brake function invalid	-
PCS ESA Invalid Flag	Emergency steering assist function status	OFF or ON	OFF: Emergency steering assist function valid ON: Emergency steering assist function invalid	-
PCS AES Invalid Flag	Active steering assist function status	OFF or ON	OFF: Active steering assist function valid ON: Active steering assist function invalid	-
FCTA Invalid Flag	Front cross traffic alert function status	OFF or ON	OFF: Front cross traffic alert function valid ON: Front cross traffic alert function invalid	-
PCS PAS A Invalid Flag	Acceleration suppression at low speed (A control) invalid status	OFF or ON	OFF: Acceleration suppression at low speed (A control) function valid	- ocale=en&siid=1733784057742#RM10000

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			ON: Acceleration suppression at low speed (A control) function invalid	
PCS PKSB Coordination Invalid Flag	PCS PKSB coordination function status	OFF or ON	OFF: PCS PKSB coordination function status valid ON: PCS PKSB coordination function status invalid	-
PCS Indicator Display Output Signal	Indicator status of the pre-collision system function	OFF, Lighting, Blinking (Slow) or Blinking (Fast)	-	-
CTA Alarm Sensitivity Output Signal	Front cross traffic alert function sensitivity status	Not Displayed, Fast, Standard or Slow	Customize setting displayed	-
PCS Alarm Sensitivity (For User1 Storing) Output	PCS warning sensitivity	Not Displayed, Quick, Standard or Slow	Customize setting displayed	-
PCS Alarm Sensitivity (For User2 Storing) Output	PCS warning sensitivity	Not Displayed, Quick, Standard or Slow	Customize setting displayed	-
PCS Alarm Sensitivity (For User3 Storing) Output	PCS warning sensitivity	Not Displayed, Quick, Standard or Slow	Customize setting displayed	-
PCS Alarm Sensitivity (For Guest Storing) Output	PCS warning sensitivity	Not Displayed, Quick, Standard or Slow	Customize setting displayed	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
CTA Alarm Sensitivity (For User1 Storing) Output	Front cross traffic warning sensitivity	Not Displayed, Quick, Standard or Slow	Customize setting displayed	-
CTA Alarm Sensitivity (For User2 Storing) Output	Front cross traffic warning sensitivity	Not Displayed, Quick, Standard or Slow	Customize setting displayed	-
CTA Alarm Sensitivity (For User3 Storing) Output	Front cross traffic warning sensitivity	Not Displayed, Quick, Standard or Slow	Customize setting displayed	-
CTA Alarm Sensitivity (For Guest Storing) Output	Front cross traffic warning sensitivity	Not Displayed, Quick, Standard or Slow	Customize setting displayed	-
PCS Alarm Sensitivity (For Plus Support) Output Signal	PCS warning sensitivity	Not Displayed, Quick, Standard or Slow	Customize setting displayed	Cannot be used
CTA Alarm Sensitivity (For Plus Support) Output Signal	Front cross traffic warning sensitivity	Not Displayed, Quick, Standard or Slow	Customize setting displayed	Cannot be used
Right Turn/Left Turn Warning Switch (Driver1)	Right turn/left turn warning function ON/OFF status	Function ON or Function OFF	Function ON: Right turn/left turn warning function ON Function OFF: Right turn/left turn warning function OFF	-
Right Turn/Left Turn Warning Switch (Driver2)	Right turn/left turn warning function ON/OFF status	Function ON or Function OFF	Function ON: Right turn/left turn warning function ON Function OFF: Right turn/left turn	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			warning function OFF	
Right Turn/Left Turn Warning Switch (Driver3)	Right turn/left turn warning function ON/OFF status	Function ON or Function OFF	Function ON: Right turn/left turn warning function ON Function OFF: Right turn/left turn warning function OFF	-
Right Turn/Left Turn Warning Switch (Guest)	Right turn/left turn warning function ON/OFF status	Function ON or Function OFF	Function ON: Right turn/left turn warning function ON Function OFF: Right turn/left turn warning function OFF	-
Right Turn/Left Turn Warning Switch (Plus Support)	Right turn/left turn warning function ON/OFF status	Function ON or Function OFF	Function ON: Right turn/left turn warning function ON Function OFF: Right turn/left turn warning function OFF	Cannot be used
Current Vehicle Speed	Current vehicle speed	0 to 255 km/h (0 to 158 mph)	Current vehicle speed	-
Memory Vehicle Speed	Cruise control set speed	0 to 255 km/h (0 to 158 mph)	Cruise control set speed	-
Control Mode	Cruise control mode status	Vehicle-to- vehicle Distance Control (All Speed), Vehicle-to- vehicle Distance Control (Hi Speed) or Constant Speed Control	Vehicle-to-vehicle Distance Control (All Speed): Vehicle-to-vehicle distance control (all Speed) mode Vehicle-to-vehicle Distance Control (Hi Speed): Vehicle-to-vehicle	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			distance control (hi speed) mode Constant Speed Control: Constant speed control mode	
Cruise Control Permission Flag	Cruise control permission status	Cruise Control Not Allowed or Cruise Control Allowed	Cruise Control Not Allowed: Cruise control not allowed Cruise Control Allowed: Cruise control allowed	-
Main Switch Recognition Flag	Cruise control main switch status	OFF or ON	OFF: Cruise control main switch OFF ON: Cruise control main switch ON	-
Set Cancel Switch Condition	Set cancel switch operation condition	No Operation or Operation Exists	No Operation: Set cancel switch not operated  Operation Exists: Set cancel switch operated	-
Resume Switch Condition	RES switch operation condition	No Operation or Operation Exists	No Operation: RES switch not operated Operation Exists: RES switch operated	-
Up Switch	+ switch operation condition	No Operation or Operation Exists	No Operation: + switch not operated Operation Exists: + switch operated	-
Down Switch	- switch operation condition	No Operation or Operation Exists	No Operation: - switch not operated Operation Exists: - switch operated	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Cancellation Switch Condition	CANCEL switch operation condition	No Operation or Operation Exists	No Operation: CANCEL switch not operated Operation Exists: CANCEL switch operated	-
ACC Not Available Icon Lighting Request Flag	Cruise control indicator status	OFF or ON	OFF: Off ON: On	-
Forward Vehicle Lateral Position	Lateral position of the vehicle ahead	-40.96 to 40.92 m	-	When the vehicle is not detected, the maximum value is displayed.
Forward Vehicle Distance	Distance to preceding vehicle	0.00 to 327.64 m	-	When the vehicle is not detected, the maximum value is displayed.
Forward Vehicle Relative Speed	Relative speed against preceding vehicle	-51.200 to 51.75 m/s	-	When the vehicle is not detected, 0 is displayed.
Set Vehicle Interval Time	Set distance to preceding vehicle for vehicle-to- vehicle distance control	Set Vehicle Interval Time4, Set Vehicle Interval Time3, Set Vehicle Interval Time2 or Set Vehicle Interval Time1	Set Vehicle Interval Time4: Short Set Vehicle Interval Time3: Middle (short) Set Vehicle Interval Time2: Middle (long) Set Vehicle Interval Time1: Long	-
ACC Control in Operation Flag	Radar cruise control operation status	Cruise Control Not in Operation or Cruise Control in Operation	Cruise Control Not in Operation: Radar cruise control not operating Cruise Control in Operation: Radar cruise control operating	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Acceleration Override	Acceleration pedal operation while cruise control	OFF or ON	OFF: Acceleration override OFF ON: Acceleration override ON	-
ACC Brake Control in Operation	Radar cruise control brake operation	ACC Brake Control in Operation or No ACC Brake Control Operation	ACC Brake Control in Operation: Brake operated  No ACC Brake Control Operation: Brake not operated	-
Brake ON Flag	Brake operation status	OFF or ON	OFF: Brake operation OFF ON: Brake operation ON	-
PDA Sensitivity Condition	Proactive driving assist sensitivity	Not Fixed, Fast, Normal or Late	Customize setting displayed	-
PDA Function ON/OFF Condition	Proactive driving assist operation	OFF or ON	OFF: Proactive driving assist OFF ON: Proactive driving assist ON	-
PDA (OAA) Function ON/OFF State	Displays the status of the proactive driving assist (OAA) function	OFF or ON	OFF: Proactive driving assist (OAA) OFF  ON: Proactive driving assist (OAA) ON	-
PDA (OAA) Installation Availability	Displays whether the vehicle is equipped with the proactive driving assist (OAA) function	Not Equipped or Equipped	Not Equipped: Vehicle not equipped with function Equipped: Vehicle equipped with function	-
PDA Not Available Flag	Proactive driving assist availability	Available or Not Available	Available: Proactive driving assist function valid	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			Not Available: Proactive driving assist function invalid	
PDA (OAA) Not Available (Diagnosis) Flag	Proactive driving assist (OAA) availability	Available or Not Available	Available: Proactive driving assist (OAA) function valid  Not Available: Proactive driving assist (OAA) function invalid	-
PDA (DA) ON/OFF Status	Displays the status of the proactive driving assist (DA) function	OFF or ON	OFF: Proactive driving assist (DA) OFF ON: Proactive driving assist (DA) ON	-
ISA Main Switch Recognition Flag Input Value	Mode switch input value	OFF or ON	OFF: Other than speed limiter selected ON: Speed limiter selected	-
Set Cancellation Switch for Output	Driving assist switch operation status	OFF or ON	OFF: Driving assist switch not operated ON: Driving assist switch operated	-
Cancellation Switch for Output	CANCEL switch operation status	OFF or ON	OFF: CANCEL switch not operated ON: CANCEL switch operated	-
Resume Switch for Output	RES switch operation status	OFF or ON	OFF: RES switch not operated ON: RES switch operated	-
Up Switch for Output	+ switch operation status	OFF or ON	OFF: + switch not operated	- ocale=en&siid=1733784057742#RM10000

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			ON: + switch operated	
Down Switch for Output	- switch operation status	OFF or ON	OFF: - switch not operated ON: - switch operated	-
Kick Down Switch for Output	Kick down switch operation status	OFF or ON	OFF: Kick down switch not operated ON: Kick down switch operated	-
Clutch Switch for Output	Clutch switch operation status	OFF or ON	OFF: Clutch switch not operated ON: Clutch switch operated	-
ASL Main Switch Flag for Output	Speed limiter system ON/OFF status	OFF or ON	OFF: ASL main switch not operated ON: ASL main switch operated	-
ISA in Control Flag	Speed limiter system operation status	Not in Operation or In Operation	Not in Operation: Speed limiter system not operating In Operation: Speed limiter system operating	-
ISA Control Flag for Output	Speed limiter request status	OFF or ON	OFF: Speed limiter not requested ON: Speed limiter requested	-
ISA Limit Applied Flag	Speed limiter system ON/OFF status	OFF or ON	OFF: Speed limiter system OFF ON: Speed limiter system ON	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
ISA Requesting Vertical ID (Upper Limit)	Speed limiter system request status	No Request or Driver Operation	Speed limiter system request status	-
ISA Requesting Vehicle Speed (Upper Limit)	Speed limiter system request vehicle speed	0 to 255 km/h (0 to 158 mph)	Speed limiter system request vehicle speed	-
ISA Request Acceleration (Upper Limit) (Variation No Limit)	Speed limiter system request acceleration	-32.768 to 32.767 m/s <sup>2</sup>	Speed limiter system request acceleration	-
ISA Braking Force and Driving Force Allocation Method Specification (Upper Limit)	Speed limiter system driving force allocation	Engine Only, Engine and Brake 1, Engine and Brake 2 or Brake Only	Speed limiter system driving force allocation	-
ISA Speed Change Priority Request (Upper Limit)	Speed limiter system shift control priority status	No Brake Coordination Down Shifting Request or Brake Coordination Down Shifting Request Exists	Speed limiter system shift control priority status	-
ISA Responsiveness Request (Upper Limit)	Speed limiter system feedback status	No FB, FB Control High Gain, FB Control Medium Gain or FB Control Low Gain	Speed limiter system feedback status	-
ISA Brake Hold Control Prohibited Flag (Upper Limit)	Speed limiter system brake hold prohibition status	Allowed or Not Allowed	Allowed: Speed limiter system brake hold control allowed  Allowed: Speed limiter system brake hold control allowed	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
ISA Stop Control Permission Flag (Upper Limit)	Speed limiter release permission status	Not Allowed or Allowed	Not Allowed: Speed limiter release allowed Allowed: Speed limiter release not allowed	-
ISA Brake Usage Limit Permission Flag (Upper Limit)	Speed limiter system brake usage permission status	Not Allowed or Allowed	Not Allowed: Speed limiter system brake usage not allowed Allowed: Speed limiter system brake usage allowed	-
Driver Acceleration for Output	Acceleration value	-12.8 to 12.7 m/s <sup>2</sup>	Current value is displayed	-
Acceleration Limit for Output	Acceleration value	-12.8 to 12.7 m/s <sup>2</sup>	Current value is displayed	-
Acceleration for Output	Acceleration value	-12.8 to 12.7 m/s <sup>2</sup>	Current value is displayed	-
ISA Memory Limit Vehicle Speed for Output	Set vehicle speed	0 to 255 km/h (0 to 158 mph)	Current value is displayed	-
ISA Current Vehicle Speed for Output	ISA current vehicle speed	0 to 255 km/h (0 to 158 mph)	Current value is displayed	-
RSA Limit Vehicle Speed for Output	RSA limit vehicle speed	0 to 255 km/h (0 to 158 mph)	Current value is displayed	-
Shift Position	Shift position	0 to 255	-	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Fail-Safe Factor B1a	Cumulative number of speed limiter system fail-safe operation	0 to 255	If this item is counted, fail-safe operation may have been performed	-
Fail-Safe Factor B1b	Cumulative number of speed limiter system fail-safe operation	0 to 255	If this item is counted, fail-safe operation may have been performed	-
Fail-Safe Factor B2	Cumulative number of speed limiter system fail-safe operation	0 to 255	If this item is counted, fail-safe operation may have been performed	-
Fail-Safe Factor C1	Cumulative number of speed limiter system fail-safe operation	0 to 255	If this item is counted, fail-safe operation may have been performed	-
Fail-Safe Factor C2	Cumulative number of speed limiter system fail-safe operation	0 to 255	If this item is counted, fail-safe operation may have been performed	-
Fail-Safe Factor D1	Cumulative number of speed limiter system fail-safe operation	0 to 255	If this item is counted, fail-safe operation may have been performed	-
Alert Timing Setting Information	Alert timing setting information	Early Timing or Normal Timing or Late Timing	Customize setting displayed	Cannot be used
Forward Vehicle Start Alert Switch	Forward vehicle start alert ON/OFF status	OFF or ON	Customize setting displayed	Cannot be used

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
TMN (Signal) ON/OFF	TMN (Signal) ON/OFF status	OFF or ON	Customize setting displayed	Cannot be used
PDA (SA) Customize Status	Proactive driving assist customize status	OFF or ON	Customize setting displayed	-
PDA (SA) Control Status	Proactive driving assist control status	Enabled or Disabled	Enabled	-
Export Used Vehicle Mode	Export used vehicle mode status	OFF or ON	Customize setting displayed	-
FCTA Both Side Display	FCTA both side display function ON/OFF status	OFF or ON	OFF: FCTA both side display function OFF  ON: FCTA both side display function ON	The settings can be changed using the customize function using GTS.
PCS Right Turn/Left Turn Warning Function	PCS right turn/left turn warning function ON/OFF status	OFF or ON	OFF: PCS right turn/left turn warning function OFF ON: PCS right turn/left turn warning function ON	Cannot be used
PCS Right Turn/Left Turn Warning Buzzer Sound	PCS right turn/left turn warning buzzer sound ON/OFF status	OFF or ON	OFF: PCS right turn/left turn warning buzzer sound OFF  ON: PCS right turn/left turn warning buzzer sound ON	Cannot be used
Mild Braking in Plus Support Mode	Mild braking in plus support mode ON/OFF status	OFF or ON	OFF: Mild braking in plus support mode OFF  ON: Mild braking in plus support mode ON	Cannot be used

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
PCS Drive Monitor Early Warning Function	PCS drive monitor early warning function ON/OFF status	OFF or ON	Customize setting displayed	-
2 actioned Service Command	2 actioned Service function status	Invalid or Valid	Invalid: Any of the driving assist system is ready with the ignition switch ON  Valid: The driving assist system is not ready with the ignition switch ON (the driving assist system will be set to ready after the driving assist mode select switch is operated)	The settings can be changed using the customize function using GTS.
AHB/AHS Performance Adjustment	Forward recognition camera sensitivity setting	Normal or Special Performance 1	Customize setting displayed	The settings can be changed using the customize function using GTS.



