

Read Current Data

KEYLESS ACCESS WITH PUSH BUTTON START SYSTEM (DIAGNOSTICS)

8. Read Current Data

A: OPERATION

For operation procedures, refer to the “PC application help for Subaru Select Monitor”.

B: LIST

1. Keyless access system

Items to be displayed	Unit of measure	Content	Note
Driver's unlock touch sensor switch	ON/OFF	Keyless access CM input value	ON when the touch sensor (unlock) built on the back surface of the driver's door outer handle is touched
Passenger's unlock touch sensor switch	ON/OFF	Keyless access CM input value	ON when the touch sensor (unlock) built on the back surface of the passenger's door outer handle is touched
Driver's lock touch sensor SW	ON/OFF	Keyless access CM input value	ON when the touch sensor (lock) built on the surface of the driver's door outer handle is touched
Passenger's lock touch sensor SW	ON/OFF	Keyless access CM input value	ON when the touch sensor (lock) built on the surface of the passenger's door outer handle is touched
Rear Gate Request SW	ON/OFF	Keyless access CM input value	ON when rear lock button is pressed
IGN SW	ON/OFF	Keyless access CM input value	ON when ignition is ON
B/up fuse	Connecting/Not connected	Keyless access CM internal value	When backup fuse is connected/connecting
ACC SW	ON/OFF	Keyless access CM input value	ON when accessory or ignition is ON
Incorrect vehicle ID	Yes/No	Keyless access CM internal value	Yes when the access key is different when keyless access is performed
No response	Yes/No	Keyless access CM internal value	Yes when there is no response from the access key when keyless access is performed
Incorrect response code, format	Yes/No	Keyless access CM internal value	Yes if the response from the access key differs when keyless access is performed
Exhausted battery	Yes/No	Keyless access CM internal value	Yes if the access key battery is depleted
Incorrect response code, ID code	Yes/No	Keyless access CM internal value	Yes if the response from the access key differs when keyless access is performed
Incorrect response code, collation result	Yes/No	Keyless access CM internal value	Yes if the response from the access key differs when keyless access is performed
Incorrect ID code	Yes/No	Keyless access CM internal value	Yes if the response from the access key differs when keyless access is performed
Incorrect rolling code	Yes/No	Keyless access CM internal value	Yes if the response from the access key differs when keyless access is performed
Smart Cancel	Cancel/Normal	Keyless access CM internal value	Cancel in the keyless access function stopped condition
ID Code Box W/H Connection State	Connecting/Not connected	Keyless access CM internal value	Set as “Connecting” while (B573) No. 15 (IDW) terminal is connected to chassis ground.
ID Code Box Existence Judging	ON/OFF/Existence Judging	Keyless access CM internal value	

Read Current Data

KEYLESS ACCESS WITH PUSH BUTTON START SYSTEM (DIAGNOSTICS)

Items to be displayed	Unit of measure	Content	Note
Immobilizer	Set/Unset	Keyless access CM internal value	
Remote engine starter communication ID confirmation	Collation NG/Collation OK	Keyless access CM internal value	OK when ID collation with remote control engine starter succeeds
Remote engine starter code registration confirmation	Collation NG / Collation OK	Keyless access CM internal value	OK when remote control engine starter is already registered
STLC sleep possible status	Possible/Impossible	Steering lock CM internal value	
STLC wake-up transmission status	Transmission/No transmission	Steering lock CM internal value	
Lock side sensor status	ON/OFF	Steering lock CM internal value	ON when steering lock is locked
Unlock side sensor status	ON/OFF	Steering lock CM internal value	ON when steering lock is unlocked
Lock confirmation	Confirmed/Unconfirmed	Steering lock CM internal value	Confirmed when steering lock is locked
Unlock confirmation	Confirmed/Unconfirmed	Steering lock CM internal value	Confirmed when steering lock is unlocked
Sensor initialization	Completed/Not Completed	Steering lock CM internal value	
Motor protection control status	Rejected range/Permitted range	Steering lock CM internal value	
Motor operation prohibition voltage evaluation	ON/OFF	Steering lock CM internal value	
Diagnosis response	Normal/Response	Steering lock CM internal value	
Sensor abnormal	Normal/Abnormal	Steering lock CM internal value	Abnormal when a trouble occurs in steering lock CM
Motor power supply short-circuit abnormal	Normal/Abnormal	Steering lock CM internal value	Abnormal when a trouble occurs in steering lock CM
Motor driver short-circuit abnormal	Normal/Abnormal	Steering lock CM internal value	Abnormal when a trouble occurs in steering lock CM
Lock bar engagement abnormal	Normal/Abnormal	Steering lock CM internal value	ON when the steering lock bar has experienced interference
Push start abnormal	Normal/Abnormal	Steering lock CM internal value	Abnormal when a trouble occurs in steering lock CM
Lock side relay operation	Stopped/Activating	Steering lock CM internal value	
Unlock side relay operation	Stopped/Activating	Steering lock CM internal value	
Motor drive FET drive	Stopped/Activating	Steering lock CM internal value	
Motor reversal protection control	Stopped/Activating	Steering lock CM internal value	
Engine start	Engine start permission/Engine start prohibition	Steering lock CM internal value	Permission when ignition ON
Sensor abnormal (past)	Normal/Abnormal	Steering lock CM internal value	Abnormal when a trouble occurs in steering lock CM
Motor power supply short-circuit abnormal (past)	Normal/Abnormal	Steering lock CM internal value	Abnormal when a trouble occurs in steering lock CM
Motor driver short-circuit abnormal (past)	Normal/Abnormal	Steering lock CM internal value	Abnormal when a trouble occurs in steering lock CM
Steering lock lock/unlock command reception history	ON/OFF	Steering lock CM internal value	ON when steering lock is locked → unlocked, unlocked → locked
Lock bar engagement abnormal (past)	ON/OFF	Steering lock CM internal value	ON when the steering lock bar has experienced interference in the past
Push start abnormal (past)	Normal/Abnormal	Steering lock CM internal value	Abnormal when a trouble occurs in steering lock CM
STLC Abnormal EEPROM access	Normal/Abnormal	Steering lock CM internal value	Abnormal when a trouble occurs in steering lock CM

Read Current Data

KEYLESS ACCESS WITH PUSH BUTTON START SYSTEM (DIAGNOSTICS)

Items to be displayed	Unit of measure	Content	Note
ID code BOX sleep possible status	Impossible/Possible	Keyless access CM internal value (models without ID code box) or ID code box internal value (models with ID code box)	
ID code BOX wake-up transmission status	No transmission/ Transmission	Keyless access CM internal value (models without ID code box) or ID code box internal value (models with ID code box)	
ID code BOX Abnormal EEPROM access (now)	Normal/Abnormal	Keyless access CM internal value (models without ID code box) or ID code box internal value (models with ID code box)	
EGL code reception status	Reception/Not yet received	Keyless access CM internal value (models without ID code box) or ID code box internal value (models with ID code box)	Reception at engine start operation
Engine start permission request reception status	Reception/Not yet received	Keyless access CM internal value (models without ID code box) or ID code box internal value (models with ID code box)	Reception at ignition ON
Provisional injection request reception status	Reception/Not yet received	Keyless access CM internal value (models without ID code box) or ID code box internal value (models with ID code box)	Reception at ignition ON
Code collation result between smart ECM and ID code box	Normal/Abnormal	Keyless access CM internal value (models without ID code box) or ID code box internal value (models with ID code box)	Normal when engine start is allowed
Code collation result between steering locked ECM and ID code box	Normal/Abnormal	Keyless access CM internal value (models without ID code box) or ID code box internal value (models with ID code box)	Normal when steering lock operation allowed
Steering lock unlock request reception status	Reception (keep 10 sec)/Not yet received	Keyless access CM internal value (models without ID code box) or ID code box internal value (models with ID code box)	Reception when steering lock is performing unlock
Steering lock lock request reception status	Reception (keep 10 sec)/Not yet received	Keyless access CM internal value (models without ID code box) or ID code box internal value (models with ID code box)	Reception when steering lock is performing lock
Driver's external transmitter output circuit abnormal	Normal/Abnormal	Keyless access CM internal value	Abnormal when a trouble occurs in transmitter output circuit
Passenger's external transmitter output circuit abnormal	Normal/Abnormal	Keyless access CM internal value	Abnormal when a trouble occurs in transmitter output circuit
Driver's external transmitter output circuit abnormal (past)	Normal/Abnormal	Keyless access CM internal value	Abnormal when a trouble occurs in transmitter output circuit in the past
Passenger's external transmitter output circuit abnormal (past)	Normal/Abnormal	Keyless access CM internal value	Abnormal when a trouble occurs in transmitter output circuit in the past

Read Current Data

KEYLESS ACCESS WITH PUSH BUTTON START SYSTEM (DIAGNOSTICS)

Items to be displayed	Unit of measure	Content	Note
ID code registration mode status	Normal/Regist./Deletion	—	For immobilizer registration
Smart related ECM code registration mode status	On mode/Normal		
ID code collation completion confirmation	Completed/Normal		
ID code registration completion confirmation	Completed/Normal		
Smart related ECM code registration completion confirmation	Completed/Normal		
Registered smart key confirmation status	Confirming/Normal		
Smart related ECM code confirmation status	Confirming/Normal		
ID code registration status	Registering/Normal		
ID code collation status	Normal/Collating the immobilizer/Collating the smart		
All registered keys confirmation status	Confirming/Normal		
Confirmed number of all registered keys	0 — 7		
Number of required registrations (smart)	0 — 7		
Number of collation completed (smart)	0 — 7		
Number of registration completed (smart)	0 — 7	Keyless access CM internal value	Number of recognized keyless access CM
ID Code Box	Connecting/Not connected	Keyless access CM internal value	Connecting with ID code box normal connection
Steering Lock ECM	Connecting/Not connected	Keyless access CM internal value	Connecting with steering lock CM normal connection

Read Current Data

KEYLESS ACCESS WITH PUSH BUTTON START SYSTEM (DIAGNOSTICS)

Items to be displayed	Unit of measure	Content	Note
Driver's lock request SW/touch sensor switch ON edge record	ON/OFF	Keyless access CM internal value	<p>The display is continued when the collation is once established by the combination indicated on the left.</p> <p>NOTE: When confirming the data on the left, confirm after performing Keyless access system check. <Ref. to KPS(diag)-33, Keyless Access System Check.></p>
Passenger's unlock request SW/touch sensor switch ON edge record	ON/OFF	Keyless access CM internal value	
Rear gate lock request SW ON edge history	ON/OFF	Keyless access CM internal value	
Driver's unlock touch sensor switch ON edge record	ON/OFF	Keyless access CM internal value	
Passenger's unlock touch sensor switch ON edge record	ON/OFF	Keyless access CM internal value	
Collation OK result history (driver's external transmitter + interior tuner)	ON/OFF	Keyless access CM internal value	
Collation OK result history (passenger's external transmitter + interior tuner)	ON/OFF	Keyless access CM internal value	
Collation OK result history (front interior transmitter + interior tuner)	ON/OFF	Keyless access CM internal value	
Collation OK result history (rear interior transmitter + interior tuner)	ON/OFF	Keyless access CM internal value	
Collation OK result history (rear gate internal transmitter + interior tuner)	ON/OFF	Keyless access CM internal value	
Collation OK result history (rear gate external transmitter + interior tuner)	ON/OFF	Keyless access CM internal value	
Collation OK result history (immobilizer amplifier + immobilizer amplifier)	ON/OFF	Keyless access CM internal value	
Push start SW 1	ON/OFF	Keyless access CM input value	ON when push button start is pressed
Push start SW 2	ON/OFF	Keyless access CM input value	ON when push button start is pressed
Stop light SW	ON/OFF	Keyless access CM input value	ON when brake pedal is depressed
Steering Unlock Switch	ON/OFF	Keyless access CM input value	OFF when steering locked
Shift P signal(AT only)	ON/OFF	Keyless access CM input value	ON when the shift position is "P"
Neutral SW/Clutch SW	ON/OFF	Keyless access CM output value	ON when the shift position is at "P" or "N"
Shift N signal(AT only)	ON/OFF	Keyless access CM input value	ON when the shift position is "N"
Delivery mode signal(AT only)	ON/OFF	Keyless access CM input value	
IGN2 relay monitor (drive output)	ON/OFF	Keyless access CM output value	ON during IG relay 2 (push button start) drive output
IGN1 relay monitor (drive output)	ON/OFF	Keyless access CM output value	ON during IG relay 1 (push button start) drive output
ACC relay monitor	ON/OFF	Keyless access CM output value	ON during accessory relay (push button start) drive output
IGN2 relay monitor (coil voltage)	ON/OFF	Keyless access CM output value	ON during IG relay 2 (push button start) drive output
IGN1 relay monitor (coil voltage)	ON/OFF	ON during IG relay 1 (push button start) drive output	ON during IG relay 1 (push button start) drive output
IGN latch monitor	ON/OFF	Keyless access CM output value	ON during IG relay 2 (push button start) drive output

Read Current Data

KEYLESS ACCESS WITH PUSH BUTTON START SYSTEM (DIAGNOSTICS)

Items to be displayed	Unit of measure	Content	Note
STSW signal monitor	ON/OFF	Keyless access CM output value	ON when brake pedal (except MT model) or clutch pedal (MT model) is depressed, and push button ignition switch is pressed
ACCR signal	ON/OFF	Keyless access CM input value	ON during starter relay drive output
Vehicle speed signal	Drive status/Stop status	Keyless access CM input value	Set as "Drive status" when vehicle speed is input
Engine Speed	Rotating/Stopped	Keyless access CM input value	Set as "Rotating" while the engine is running
Power supply status	All OFF status	Keyless access CM output value	Displayed when IG relay 1 (push button start), IG relay 2 (push button start), and accessory relay (push button start) are all OFF
	ACC relay ON status	Keyless access CM output value	Displayed when accessory ON
	IGN1 relay ON status	Keyless access CM output value	Displayed when ignition ON
	IGN2 relay ON status	Keyless access CM output value	Displayed when ignition ON
	STSW Condition	Keyless access CM output value	Displayed when brake pedal (except MT model) or clutch pedal (MT model) is depressed, and push button ignition switch is pressed
Vehicle identification	GAS MT/GAS AT/ HEV AT/Auto Start Stop MT/Auto Start Stop AT	Keyless access CM output value	Equipped vehicle is displayed.
IGN1 external circuit abnormal	No/Yes	Keyless access CM output value	
IGN2 external circuit abnormal	No/Yes	Keyless access CM output value	
Start SW trouble	No/Yes	Keyless access CM output value	
P signal mismatch	No/Yes	Keyless access CM output value	Detected when P signals are inconsistent between CAN line and direct line.
Steering lock unlock waiting time out	No/Yes	Keyless access CM output value	
Key collation waiting time out	No/Yes	Keyless access CM output value	

2. Body integrated unit

Refer to the BODY CONTROL SYSTEM (DIAGNOSTICS) for the current data of the body integrated unit.<Ref. to BC(diag)-11, LIST, Read Current Data.>